Applied Systems

Product catalogue 2019

High performance and reliability for comfort and process applications

Our promise...

... is to ensure that customers can depend on Daikin for the ultimate in comfort, so that they are free to focus on their own working and home lives.

We promise to dedicate ourselves to technological excellence, a design focus and the highest quality standards so that our customers can trust and rely on the comfort we deliver.
Our promise to the planet is absolute. Our products are at the forefront of low energy-usage and we will innovate to further reduce the environmental impact of HVAC-R (Heating, Ventilation, Air conditioning, Refrigeration) solutions. We lead where others follow.

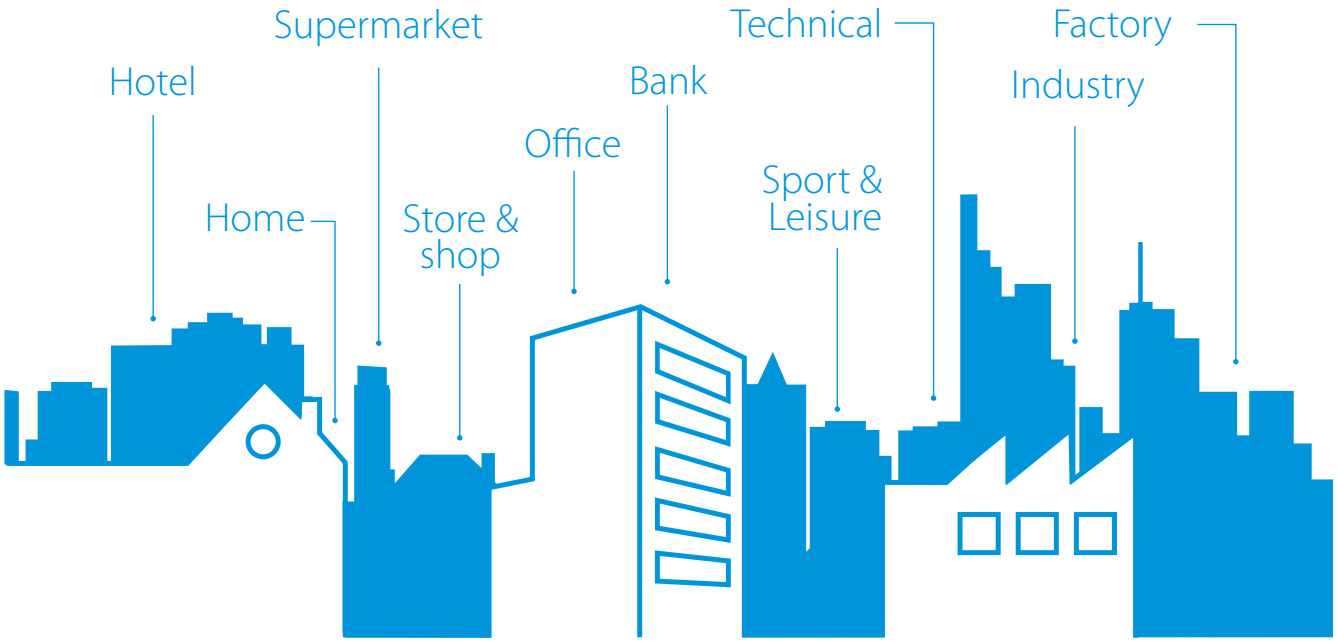
We will continue our global leadership in HVAC-R solutions as our specialist expertise in all market sectors combined with 90 years' experience enable us to deliver added value in long-lasting relationships based on trust, respect and credibility.

We promise to continue our forward-thinking ethos, treating challenges as opportunities to produce ever-better solutions. We will drive innovation and go the extra distance for our customers and our company.
We will be smart and ready to do things differently.

We will deliver on these core values of our brand and enjoy sustainable success with continued growth.

Table of content

Daikin world



Forged under severe conditions around the world, Daikin chillers, fan coil units & air handling units provide high quality, operation efficiency and energy savings. Various applications are possible including air conditioning applications, industry-type process cooling and heating, and large-scale district cooling and heating.

A partner of choice

Daikin is Europe's leading manufacturer and global n°1 of highly energy-efficient heating, cooling, ventilation and refrigeration solutions for residential, commercial and industrial applications. Daikin is a leader in using technologies that help preserve the environment, such as those that conserve energy and deliver high reliability to its customers. Daikin's flexible applied systems deliver high efficiency for commercial, institutional and industrial buildings.

The comfort of reliability

Nobody is really looking for complexity in business. Because complexity often leads to mistakes, delays or losses. Unfortunately, the world we are all doing business in, is sometimes quite complex. When looking for further business development, we all expand our national and international operations. And that doesn't make things easy.

As a small scale business or multinational company, you deserve the best partners. Partners that can take away the headaches and make you feel comfortable again. With Daikin, you have found such a partner. Because Daikin would like things to be easy … for you.

Daikin quality

Daikin's much envied quality quite simply stems from the close attention paid to design, production and testing as well as aftersales support. To this end, every component is carefully selected and rigorously tested to verify its contribution to product quality and reliability.

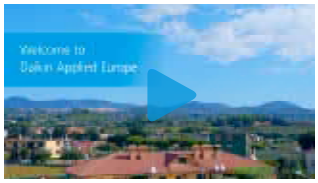
Staff who understands you

Daikin and its staff of devoted engineers, consultants and analysts are ready to assist you on a daily basis in setting up nationwide or international agreements, providing advice on equipment selection and monitoring regulations. Our goal is to help you carry out your plans with confidence, using custom-designed systems that meet your needs (for comfort, performance levels, support and service).

Daikin Applied Development Center

Opened in May 2009, the Daikin Applied Development Center is the world's most advanced facility for heating, ventilation and air conditioning (HVAC) research and development. The purpose of the center is to develop and test advanced chiller, compressor and other HVAC technologies to reduce energy consumption and, ultimately the carbon footprint of the buildings where they will be used.

Find out more about the Daikin Applied Europe in the video below:

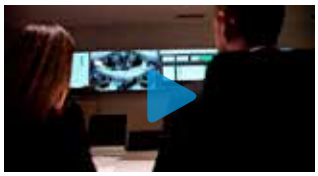


YouTube
www.youtube.com/DaikinEurope

Witness Testing Chiller testing facilities Daikin Applied Europe

We are industry leaders in air cooled and water cooled chiller technologies. Our performance in each condition can be shared through witness tests. During witness testing even the toughest design conditions can be simulated. Customers and consultants can appreciate product performance before its delivery, ensuring "peace of mind" chiller integration in the whole project.
We have specific competencies and state of the art testing facilities to pursue these goals.

Find out more about our testing facilities in the video below:



YouTube
www.youtube.com/DaikinEurope

Tools and platforms

Have a question, looking for specific software applications, need detailed product information or looking for any other marketing tools? This overview gives you an idea of what we can offer.

Selection software

Daikin Europe offers you a variety of building modelling, selection, simulation and quotation software tools to support your sales.

Web-based chiller selection software

A user-friendly interface allows users to quickly create new projects, open and change exisiting projects or simply do a quick selection.

Technical selection reports can be printed or downloaded in several formats.
To make life easier, the tool is accessible everywhere, via any device. No matter where you are, projects can be consulted.

Create now a new account on:
› http://tools.daikinapplied.eu/

ASTRA Web

› Quick AHU selection that will save you precious time, drastically reducing selection time through the new software interface.
› Very competitive solution available within the Wizard thanks to pre-uploaded parameters.
› High selection quality, thanks to the intelligence embedded within the software core.

Online support

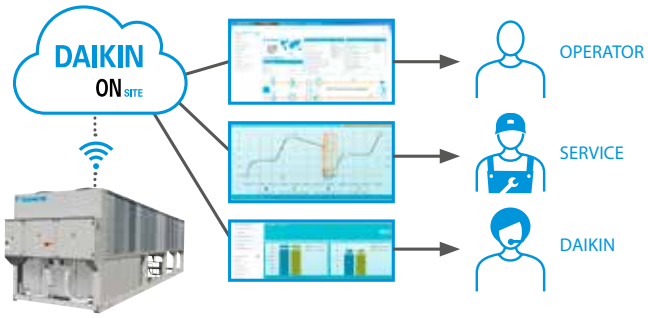
Business portal

Experience our new extranet that thinks with you
› Find information in seconds via a powerful search
› Customize the options so you see only info relevant for you
› Access via mobile or desktop via **my.daikin.eu**

Daikin on Site

A new remote monitoring and control for chillers and air handling units has been developed by Daikin to give peace of mind to the end-customer.

Using this new tool results in optimum use and costs over the system's entire lifetime:
› enhanced control and measuring
› monitors the system
› reduces risks at the earliest possible moment
› keeps the system running as it was intended to



BREEAM®

Daikin, the best partner for your green project

From 2015 onwards the majority of new building projects in Europe are expected to be green.

93% percent of developers & investors consider green certification important

BREEAM and LEED green building programmes are the two most important sustainable building certificates in Europe, covering more than 75% of the total sustainable-building certificate market.

Property developers are setting high standards

› Aiming for a BREEAM Excellent or LEED Gold target is no longer rare
› The real challenge? Achieving these targets while staying within budget

HVAC-R systems play an important role

› Within the total green assessment & investment cost
› They require the alignment of many different parties

It is essential to choose an HVAC-R partner with the knowledge and portfolio to achieve your BREEAM or LEED objectives, and other green needs.

Daikin has successfully participated in many green and sustainable projects. Helping builders achieve BREEAM Excellent, LEED Gold, NZEB and similar certificates has become one of our specialities.

We have a team of BREEAM accredited professionals (APs) at your service!

› Over 17 APs across Europe
› Assisting you to achieve your BREEAM certificate

You get maximum support in scoring BREEAM credits & LEED points:

› Daikin Total HVAC-R Solutions
› High seasonal efficiency technologies
› Smart energy management with intelligent network
› Boost your end score with innovative products & technologies

Maximise your BREEAM and LEED green building programme score with Daikin solutions

› **Manage up to 70% of your energy consumption with the Daikin Total Solution**
› **Top seasonal efficiency**
Both BREEAM and LEED green building programmes put the strongest focus on energy efficiency. This is exactly why it's so important to choose Daikin.
› **Smart air conditioning management with Intelligent Network**
To drastically reduce your energy consumption and CO_2 emissions it's not enough to simply make your equipment more efficient.

Seasonal efficiency,

Smart use of energy

Challenging 20-20-20 environmental targets

The European Commission has set challenging targets for improving energy efficiency in the EU. These so-called 20-20-20 targets aim at a 20% reduction in CO2 emissions, 20% share of renewable energy and a 20% reduction in the use of primary energy, all by the year 2020. To realise these objectives, Europe issued the Eco-Design Directive [2009/125/EC]. This sets minimum efficiency requirements for energy related products.

European action plan 20-20-20

-20%

CO_2 emissions vs. 1990

20%

Share of renewable energy

-20%

Primary energy use vs. Business as usual

By the year 2020

Applied systems: products in scope

Since 26 September 2015, heat generators for space heating (LOT 1) also need to comply to these 20-20-20 targets. For the applied systems market it means that all heat pumps below 400 kW need to comply to minimum efficiency requirements. Heat pumps below 70 kW must be marked with a product energy label.

Our service

Daikin helps it partners to meet their obligations regarding the Ecodesign Directive and energy labelling. Labels, product and technical fiches for each individual product are available as downloads at any time from the Energy Label Generator at **https://www.daikin.eu/en_us/about/daikin-innovations/seasonal-efficiency.html**.

Chiller modernisation

Be smart – replace components, not systems

Our concept

Even if the R-22 chiller has been maintained well and is still in good condition, R-22 is no longer allowed to be used. That's why Daikin offers chiller modernisation packages. Not only is the chiller made compliant with the latest legislation, the technology upgrade also revives your system, increasing reliability and efficiency.

Main benefits

- Convert R-22 to be compliant with legislation
- Limit capital
- Save money for future equipment thanks to the chiller's longer lifetime, increased reliability, and improved maintenance efficiency
- Enhance energy efficiency up to +20% ESEER by manufacturer pre-engineered upgrade

Benefits for budget and risk management

- No chiller removal
- No water pipe work
- No electrical modifications
- Low logistic expenses (transport, cranage, permissions …)
- Quick delivery
- Government-sponsored subsidies may be available

Controller box upgrade

Fact: R-22 has been banned in Europe*

If your equipment is more than 15 years old, it probably still uses R-22 refrigerant. Since 31 December 2014 repairs to R-22 systems are prohibited, possibly resulting in unexpected downtime. Keep your business running at all times with Daikin replacement technology.

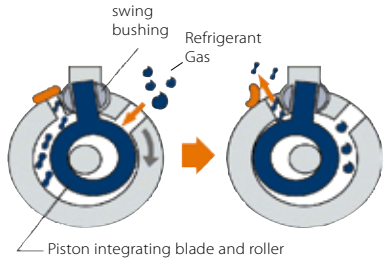
* EU directive: Regulation (EC) No.2037/2000

Day-to-day reliability and efficiency

Inhouse development and manufacturing of compressors

Unlike many other air conditioning manufacturers, Daikin manufactures its own compressors.
This is important because the compressor is the very heart of the air conditioning system, increasing the pressure and temperature of the refrigerant vapour, effectively concentrating the heat as it passes around the system. Daikin has always been at the forefront of developing compressor technology and now offers a comprehensive range of swing, scroll, screw and centrifugal compressors. As a result, inverter compressor control is applied throughout our product range, delivering enhanced comfort and system efficiency.

Swing compressor



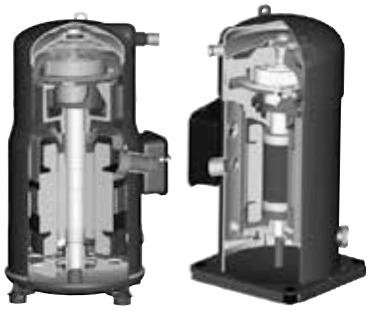
The mini chiller series EWAQ005-007ADVP & EWYQ005-007ADVP are equipped with a swing inverter compressor. This innovative design by Daikin has fewer moving parts allowing a smoother, more reliable operation with low vibration and low noise levels. The high-efficiency motor reduces energy consumption, resulting in energy cost savings.

Scroll compressor for controlled capacity

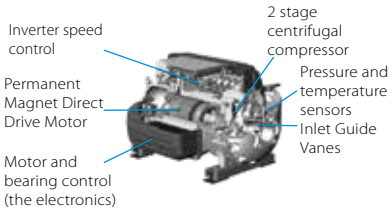
Being compact, the Daikin scroll compressor is used with R-407C and R-410A to provide constant reliability and high efficiency throughout its service life. Designed for small and medium capacities, the scroll compressors are used with air cooled and water cooled chillers.

Characteristics:

- Compact, simple yet robust design
- Absence of valves and oscillating connecting mechanisms providing maximum reliability
- Constant compression guaranteeing low energy consumption
- Increased compression efficiency thanks to the absence of volumetric re-expansion
- Low sound level
- Low starting current



Innovative frictionless centrifugal compressor

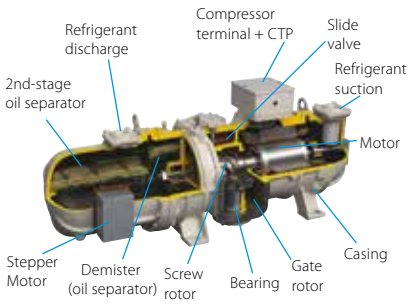


The innovative frictionless centrifugal compressor has an integrated VFD, as well as magnetic bearings, and delivers high levels of unit efficiency and reliability. The compressor's only moving part - the rotor shaft and impellers - are powered by the permanent magnetic direct-drive motor and kept levitated by a digitally controlled magnetic bearing system. This reduction in moving parts significantly increases unit reliability and reduces maintenance costs. As the condensing temperature and/or cooling load reduces, the speed of rotation reduces and movable inlet guide vanes, activated by the step motor, redirect gas flow into the first stage impeller once the compressor has reached its minimum speed. This delivers increased efficiency and cost savings during part-load operations.

Whatever the requirements of the customer - large systems requiring constant capacity or small systems for flexibility - Daikin always provides a reliable and efficient solution.

The single-screw stepless compressor for high capacity

At the heart of the larger Daikin chillers is a semi hermetic single screw compressor, designed, tested and manufactured in Daikin's own factories, in order to meet the highest capacity, performance and maintenance specifications. This compressor has been especially developed for operation with R-410A or R-134a refrigerants, guaranteeing unequalled reliability and many years of efficient operation. The bearing life is 100,000hrs with inspection and maintenance intervals every 40,000hrs.



Characteristics:

- Optimal performance through stepless capacity control chilled water temperatures. The unit capacity is infinitely variable from 30 - 100% on single circuit units and 15 -100 % on dual circuit units.
- Compact, simple yet robust construction.
- Using a main single screw and two gate rotors, axial and radial forces are balanced, thanks to the symmetrical compression guaranteeing low bearing loads.
- Gate rotors made of polymer material result in closer tolerances with the main screw and reduced friction greatly improves compressor efficiency and lifetime.
- No oil pump necessary - lubrication based on the differential pressure principle.
- Easy access to both compressor and safety devices.
- Star-Delta starter with low starting current as standard.

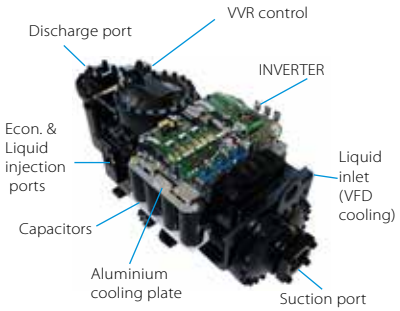
Screw compressor with integrated inverter

Characteristics:

- Compressor and inverter fully designed by Daikin
- Inverter integral to the compressor body
- Inverter refrigerant cooled
- VVR = Variable Volume Ration for optimized efficiency
- Enlarged discharge port and suction side for reduced refrigerant pressure drop
- New optimized compressor motors

Main benefits:

- Better ESEER & EER values
- 30% more compact than single-screw compressor
- Rapid payback time
- Silent operations
- Optimal comfort levels




BUFFERZONE
KRAT
VULLEN KRAT
VEDETT

Daikin chillers

Why choose

Daikin chillers

The widest and most flexible chiller portfolio

› From the smallest chiller for residential use to the largest chiller for district cooling
› Tailor made solutions based on the most advanced technologies

Worldwide experience in chiller design and manufacturing

› World's most advanced facilities for air conditioning research and development: the Applied Development Center in Minneapolis, Minnesota
› Inhouse development and manufacturing of chiller main components (compressors, fans, condenser coils, software, etc...)
› Chillers produced in European factories, in Milan and Ostend

The highest efficiency for every installation

› The lowest total cost of ownership and fast payback time

Quality and reliability

› Daikin's integrated zero defect policy ensures quality of components and finished products
› Each Daikin chiller is factory run-tested and subjected to quality audit before shipment

Benefits for the installer

› Plug & play solutions
› Maximum serviceability
› Ideal solutions for retrofit projects

Benefits for the consultant

› Energy efficient solutions without compromising on reliability and performance
› Latest technology embedded in all our products

Benefits for the end user

› Remarkable savings on running costs
› "Green" solutions to preserve the environment
› Eurovent and AHRI certification

Web-based Chiller selection software

A user-friendly interface allows users to quickly create new projects, open and change exisiting projects or simply do a quick selection.

Technical selection reports can be printed or downloaded in several formats.

To make life easier, the tool is accessible everywhere, via any device. No matter where you are, projects can be consulted.

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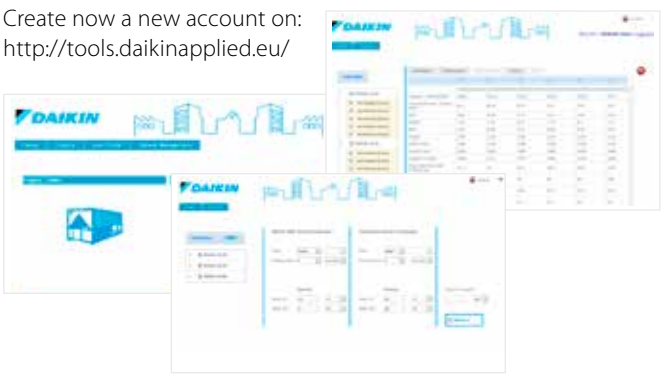


Lower your running costs

with our energy saving options

Inverter technology

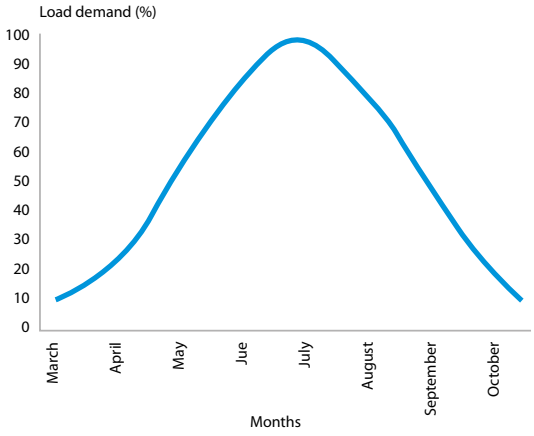
Traditional electric motors run at full load even when not needed (in chiller part load operations), resulting in energy waste.

Since in a building most of the energy consumption comes from HVAC systems and the cooling/heating load varies during the year depending on the application, energy saving becomes vital, especially with the current soaring price of energy and global warming concerns.

VFD (Variable Frequency Drive) allows the use of only the power necessary to perfectly match the real load, a highly efficient and green solution for HVAC applications (compressors, fans and pumps).

During most of the chiller operating time, the cooling capacity required in a building is lower than the peak load conditions, according to the building load profile.

The higher load variations during the year, the more vital is operating efficiency of the machine.



What are your benefits when choosing an inverter chiller ?

› Energy efficient: displacement power factor always > 0.95
Usually the power factor of a motor progressively worsens with the decrease of the power output. However, thanks to the inverter, there is no need for additional power factor correction capacitors as the power factor is always > 0.95 and there are no power surges so costs are constrained.

› Quick start-up: start-up time reduced by 1/3
The ability to vary the output power in direct relation to the cooling requirements of the system by allowing compressor boosts gives the inverter chiller a reduced start-up-to-operating-capacity, making it possible to achieve comfort conditions in 1/3 less time than with conventional systems.

› Less frequent start/stop cycles and low starting current
The inverter technology ensures fewer start/stop cycles as well as ensuring that the start-up current is always lower than the current absorbed maximum operating conditions (FLA). This generates obvious cost savings.

› Seasonal quietness: reduced sound levels
Low sound levels in partial load conditions are achieved by the variation of compressor frequency, thus ensuring minimum sound levels at all times.

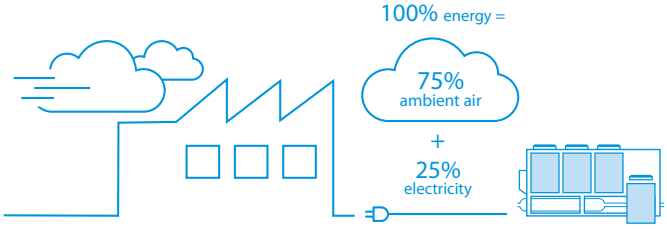
All these benefits will lead to a decrease in the overall running costs, resulting in a rapid return on investment.

For our complete range of options, please refer to page 110 of this catalogue.

Air-to-water heat pump technology

Air-to-air water pumps obtain 75% of their output energy from a renewable source: the ambient air, in summer and winter, even when it is freezing outside; air which is both renewable and inexhaustible.

A heat pump's efficiency is measured in SCOP (Seasonal Coefficient Of Performance) for heating and ESEER (Seasonal Energy Efficiency Ratio) for cooling. Our units deliver maximum energy efficiency and the minimum of operating costs.



Heat recovery (option n°01-03)

For those particular applications were heating and cooling may be required at the same time during operation of the chiller (e.g. hotels, manufacturing, hospitals) partial or total heat recovery options are available. The heat recovery technology extracts heat from the cooling process to ensure free or low-cost heating for other facilities in your company.

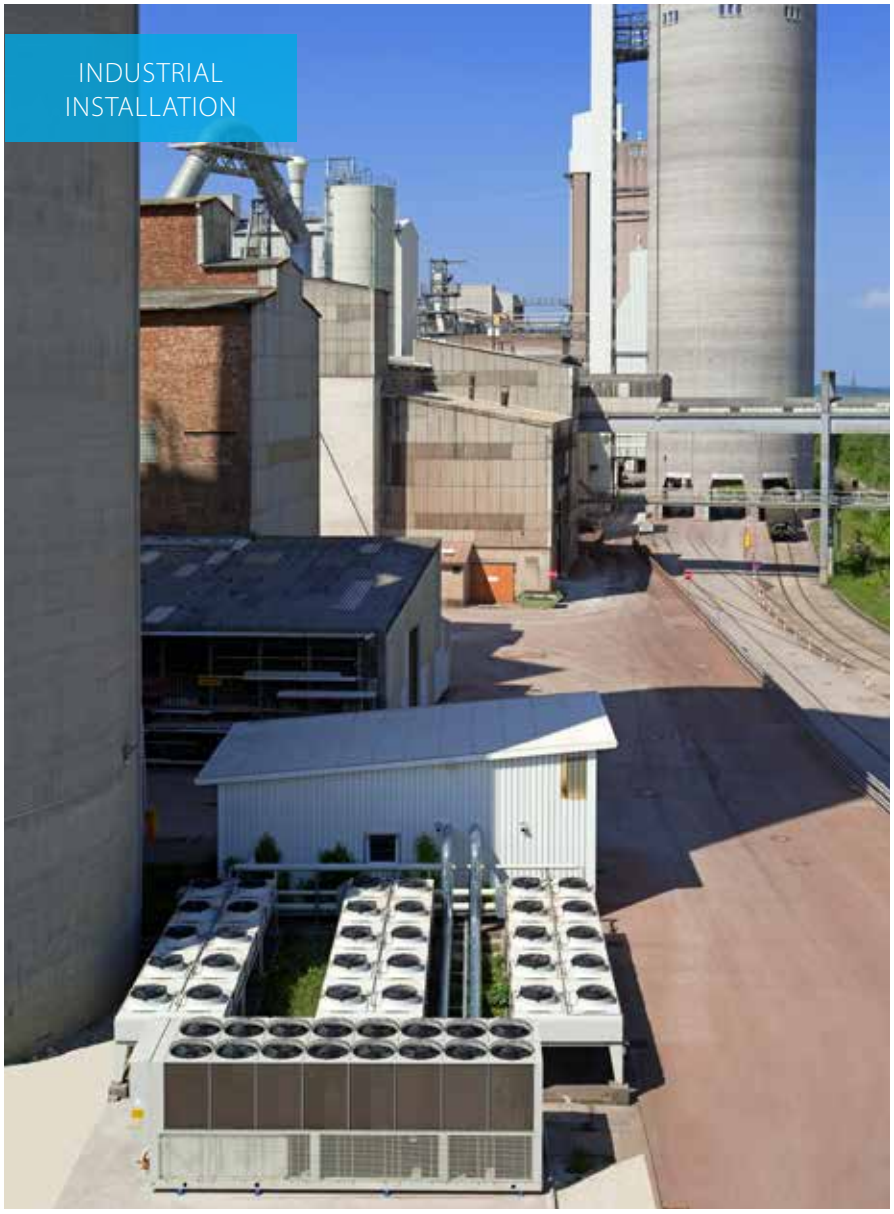
Rapid restart (option n°110)

In case of power failure the Daikin chillers can quickly restart and load up to 100 % in a very short time (typically less than 6 minutes versus circa 20 minutes in case of a standard chiller) Rapid restart means lower impact on the customer side especially in critical applications where they cannot afford to lose cooling: e.g. data centers and hospitals

Free cooling (option n°113)

Free cooling uses cold air from outside to assist in chilling water for applications such as data centers that need cooling during cold season. When the ambient air temperature drops below a set point, all or part of the chilled water bypasses the existing chiller and runs through the free cooling system, thus using less power.

When outside temperatures are +2°C or lower, the chiller compressors are fully shut down and cooling is almost for free. This dramatically reduces the load on the system and cuts energy consumption by up to 75%, as well as prolonging the lifespan of the chiller.



INDUSTRIAL INSTALLATION

AIR COOLED CHILLER INSTALLATION

AIR COOLED CHILLER INSTALLATION

HOTEL INSTALLATION

EWAQ-E-
INSTALLATION

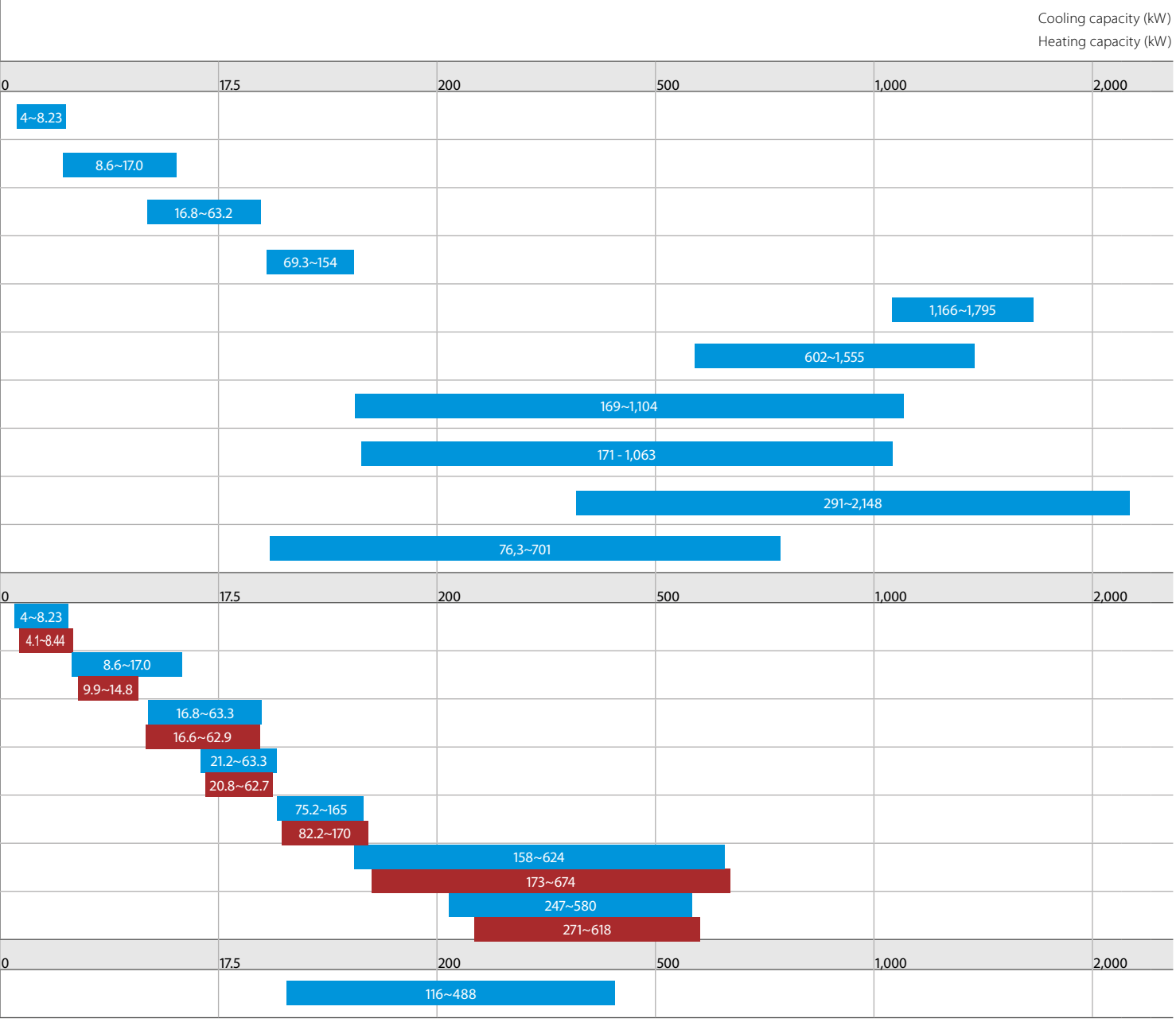
DATA CENTER
APPLICATION

PROCESS COOLING
INSTALLATION

Products overview

		Refrigerant type *	Refrigerant circuits	Inverter	Free cooling	Compressor			Water heat exchanger		Efficiency version			Sound version		
						Swing	Scroll	Screw	Plate **	Single pass shell and tube	Standard	High	Premium	Standard	Low	Reduced
Cooling only																
EWAQ~BVP		R-410A	1	●		●			● BPHE		●			●		
EWAQ~ACV3/ACW1		R-410A	1	●			●		● BPHE		●			●		
EWAQ~CWN/P/H		R-410A	1-2	●			●		● BPHE		●			●		
EWAQ~G-		R-410A	1				●		● BPHE		●	●		●		●
EWAD~CZ		R-134a	2-3	●				●		●		●		●	●	●
EWAD~CF		R-134a	2		●			●		●		●		●	●	●
EWAD-TZ B		R-134a	1-2	●				●	●	●	●	●	●	●	●	●
EWAH-TZ B		R1234ze	1-2	●				●	●	●	●	●	●	●	●	●
EWAD-T- NEW		R-134a	2					●		●	●	●	●	●	●	●
EWAT-B NEW		R-32	1-2				●		●		●	●	●	●	●	●
Heat pump																
EWYQ~BVP		R-410A	1	●		●			● BPHE		●			●		
EWYQ~ACV3/ACW1		R-410A	1	●			●		● BPHE		●			●		
EWYQ~CWN/P/H		R-410A	1-2	●			●		● BPHE		●			●		
SEHVX-BW SERHQ-BW1		R-410A	1	●			●		● BPHE		●			●		
EWYQ~G-		R-410A	1				●		● BPHE			●		●		●
EWYQ~F-		R-410A	1-2				●		●			●		●	●	●
EWYD~BZ		R-134a	2-3	●				●		●	●			●	●	
Condensing unit																
ERAD~E-		R-134a	1					●			●			●	●	

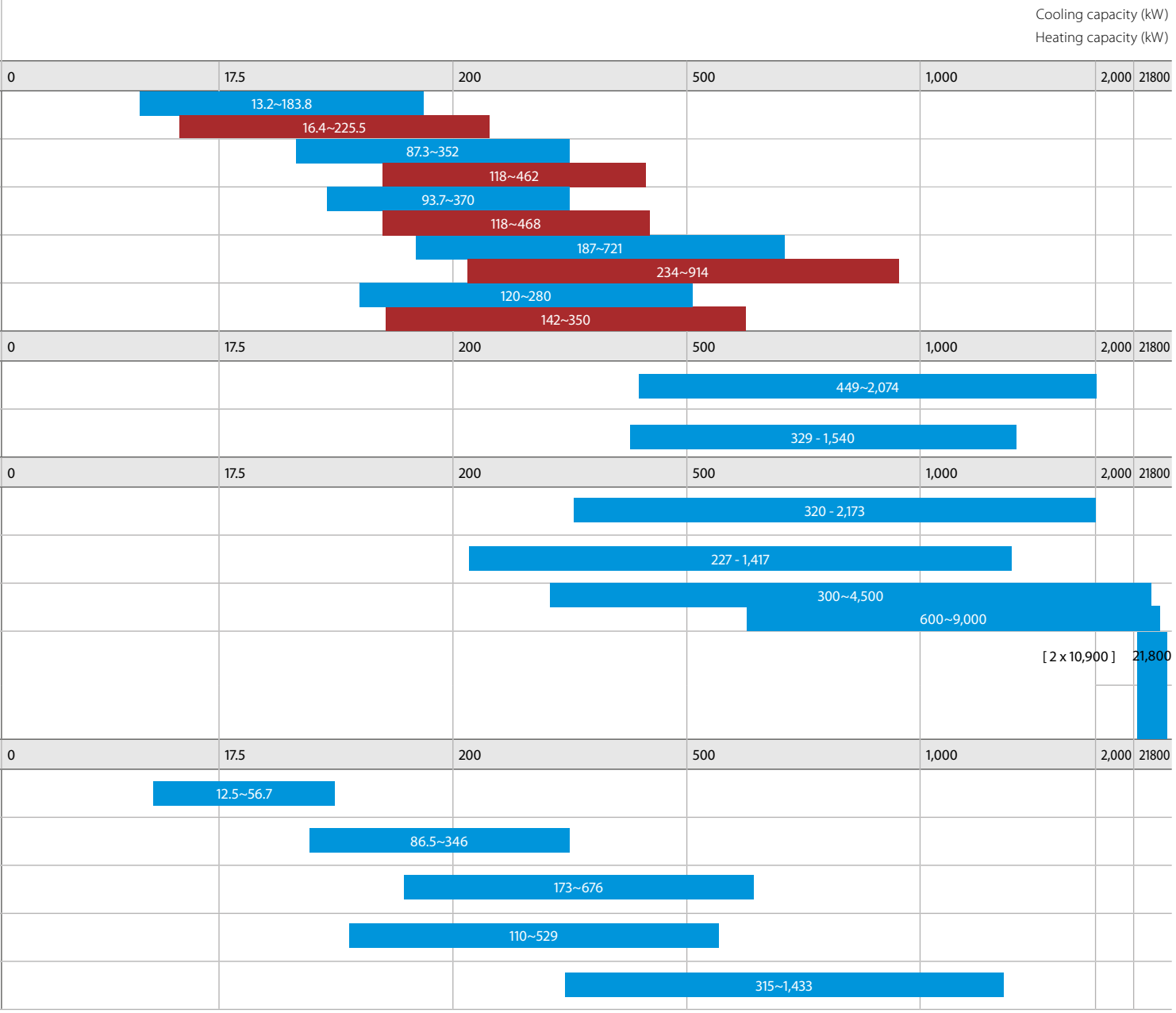
* (GWP) : R-410A (2087.5), R-134a (1430) - ** BPHE: Brazed plate heat exchanger


Cooling capacity (kW)
Heating capacity (kW)
0
17.5
200
500
1,000
2,000
4~8.23
8.6~17.0
16.8~63.2
69.3~154
1,166~1,795
602~1,555
169~1,104
171 - 1,063
291~2,148
76,3~701
0
17.5
200
500
1,000
2,000
4~8.23
4.1~8.44
8.6~17.0
9.9~14.8
16.8~63.3
16.6~62.9
21.2~63.3
20.8~62.7
75.2~165
82.2~170
158~624
173~674
247~580
271~618
0
17.5
200
500
1,000
2,000
116~488

Products overview

		Refrigerant Type *	Refrigerant circuits	Inverter	Compressor			Water heat exchanger			Efficiency version			Sound version
					Scroll	Screw	Centrifugal	Plate **	Single pass shell and tube	Shell and tube	Standard	High	Premium	Standard
Water cooled chillers (Cooling only & Heating only)														
EWWQ-KBW1N		R-410a	1-2		●			●			●			●
EWHQ~G-		R-410A	1		●			●			●			●
EWWQ~G-		R-410A	1		●			●			●			●
EWWQ~L-		R-410A	2		●			●			●			●
EWWD~J-		R-134a	1-2			●		●			●			●
Water cooled chillers (Cooling only)														
EWWD-VZ		R-134a	1	●		●				● Flooded	●	●	●	●
EWWH-VZ		R1234ze	1	●		●				● Flooded	●	●	●	●
Water cooled centrifugal chillers														
EWWD-DZ	NEW 	R-134a	1				●			●		●		●
EWWH-DZ	NEW 	R-1234ze(E)	1				●			●		●		●
DWSC DWDC		R-134a	1	optional			●		● Flooded			●		●
6,000 RT CENTRIFUGAL		R-134a	2 per chiller				●		● Flooded			●		●
Condenserless chillers														
EWLQ-KBW1N		R-410a	1-2		●			● BPHE			●			●
EWLQ~G-		R-410A	1		●			●			●			●
EWLQ~L-		R-410A	2		●			●			●			●
EWLD~J-		R-134a	1-2			●		●			●			●
EWLD~I-		R-134a	1-2-3			●			●		●			●

* (GWP) : R-410A (2087.5), R-134a (1430), R-407C (1773.9) - ** BPHE: Brazed plate heat exchanger


Cooling capacity (kW)
Heating capacity (kW)
0
17.5
200
500
1,000
2,000
21800
13.2~183.8
16.4~225.5
87.3~352
118~462
93.7~370
118~468
187~721
234~914
120~280
142~350
449~2,074
329 - 1,540
320 - 2,173
227 - 1,417
300~4,500
600~9,000
[2 x 10,900]
21,800
12.5~56.7
86.5~346
173~676
110~529
315~1,433

Why choose a Daikin air cooled chiller?

Daikin air cooled chillers are designed for small to large cooling and heating capacities. A wide range of chillers are available to match every building's air conditioning and process cooling needs. Air cooled chillers are available in different versions:

Mini chillers

Daikin mini chillers are equipped with an inverter swing or scroll compressor allowing a smooth, more reliable and energy-efficient operation with low noise levels and leader-of-class ESEER.
Ideal for residential or light commercial applications.

Air cooled scroll chillers

Daikin scroll chillers are designed for small and medium cooling and heating capacities. A wide range to match every building's air conditioning and process cooling needs.

Air cooled screw chillers

Manufactured for large capacities, Daikin screw chillers deliver unparalleled reliability and efficiency, both for comfort and process cooling. Equipped with an inverter they provide high efficiency at part load.

Wide range of products

Thanks to an extensive product line-up for medium- to large-scale facilities, you can select your optimum model.

Application versatility

Daikin delivers solutions to a wide range for process and comfort climate applications, for all conditions and both cooling or heating requirements.

Energy and cost savings

Utilizing the latest technology, Daikin has achieved industry-leading efficiency and energy-saving operation for outstanding cost saving performance.

Options flexibility

Multiple unique options are available for customizing the chiller to your specific building's needs.

Table of content
Air cooled

Air cooled chillers (Cooling only)

R-410A

R-134a

R-1234ze(E) **44**

R-32

Air cooled chillers (Heat pump)

R-410A

R-134a

Please consult the Webbased Selection Software Tool for detailed technical information.

Air cooled mini inverter chiller

- Top product in terms of energy efficiency and operation range
- All capacities available in 2 versions: standard version and version with OP10 option (no freeze up of water when not in operation thanks to the water piping heater tape)
- Easy, plug and play' installation
- Amongst the most quiet units in the market (63dBA - sound power)
- Single phase power supply and low starting currents make the unit ideal for residential applications
- Weight reduced with 20% compared with the previous models.
- Built-in Hydraulic kit: no buffer tank required, standard inverter driven pump, main flow sensor and switch included.
- Standard wired remote control enables setting of different set points (cooling, heating, water leaving temperature) or based on outdoor conditions (weather dependent control). It has an alarm history, night time noise reduction function and is language based.

EWAQ-BVP EKRUMCL1

› More information about EWAQ-BVP

Cooling Only					EWAQ-BVP	004	005	006	008
Space cooling	A Condition 35°C	Pdc		kW		4.00	4.93	5.88	7.95
	ηs,c			%		172	173	174	178
SEER						4.38	4.39	4.42	4.53
Cooling capacity	Nom.			kW		4.00 (1) / 4.01 (2)	4.93 (1) / 5.07 (2)	5.88 (1) / 6.07 (2)	7.95 (1) / 8.23 (2)
Power input	Cooling	Nom.		kW		1.27 (1) / 0.840 (2)	1.61 (1) / 1.12 (2)	1.87 (1) / 1.13 (2)	2.57 (1) / 1.65 (2)
Capacity control	Method					Variable (inverter)			
EER						3.14 (1) / 4.80 (2)	3.06 (1) / 4.51 (2)	3.15 (1) / 5.35 (2)	3.10 (1) / 4.99 (2)
Dimensions	Unit	Height		mm		735		997	
		Width		mm		1,090		1,160	
		Depth		mm		350		380	
Weight	Unit			kg		83		106	
Water heat exchanger	Type					Brazed plate			
	Water volume			l		1		2	
Air heat exchanger	Type					Cross fin coil/Hi-X tubes and chromate coated waffle louvre fins		Cross fin coil/Hi-X tubes and PE coated waffle louvre fins	
Compressor	Type					Hermetically sealed swing compressor			
	Quantity					1			
Fan	Type					Propeller fan			
	Quantity					1			
	Air flow rate	Cooling	Nom.	m^3/min		53		72 (1)	
Sound power level	Cooling	Nom.		dBA		63 (1)	64 (1)	69 (1)	
Sound pressure level	Cooling	Nom.		dBA		48	49	52	53
Operation range	Air side	Cooling	Min.~Max.	°CDB		10~43		10~46	
	Water side	Cooling	Min.~Max.	°CDB		5~22			
Refrigerant	Type/GWP					R-410A/2,088		R-410A/2,087.5	
	Control					Electronic expansion valve			
	Circuits	Quantity				1			
Refrigerant charge	Per circuit			kg		2.10		2.70	
	Per circuit			TCO2Eq		4.4		5.6	
Water circuit	Piping connections diameter			inch		1" MBSP			
Unit	Starting current	Max		A		15.7		19.9	
	Running current	Max		A		15.7		19.9	
Power supply	Phase/Frequency/Voltage			Hz/V		1N~/50/230			

(1)Cooling: entering evaporator water temp. 12°C; leaving evaporator water temp. 7°C; ambient air temp. 35°C | (2)Cooling: entering evaporator water temp. 23°C; leaving evaporator water temp. 18°C

Air cooled mini inverter chiller

- Inverter technology to ensure low sound values and leader-of-class ESEER
- Wide operating range
- Built-in hydronic module: no buffer tank required and a standard pump and main switch are included
- Easy, plug and play' installation
- Single phase power supply for residential applications, three phase power supply model available for light commercial applications

EWAQ-ACV3/ACW1

Digital controller

› More information about EWAQ-ACW1

› More information about EWAQ-ACV3

Cooling Only				EWAQ	009ACV3	010ACV3	011ACV3	009ACW1	011ACW1	013ACW1
Space cooling	A Condition 35°C	Pdc		kW	8.49	9.89	11.2	8.75	11.0	13.2
	ηs,c			%	162	169	171	155	163	
SEER					4.13	4.29	4.35	3.94	4.16	4.15
Cooling capacity	Nom.			kW	12.2 (1) / 8.60 (2)	13.6 (1) / 9.60 (2)	15.7 (1) / 11.1 (2)	12.9 (1) / 9.10 (2)	15.7 (1) / 11.1 (2)	17.0 (1) / 13.3 (2)
Power input	Cooling	Nom.		kW	2.85 (1) / 2.83 (2)	3.41 (1) / 3.28 (2)	4.13 (1) / 3.90 (2)	3.08 (1) / 3.05 (2)	4.13 (1) / 3.90 (2)	5.52 (1) / 5.18 (2)
Capacity control	Method				Variable (inverter)					
EER					4.27 (1) / 3.05 (2)	4.00 (1) / 2.93 (2)	3.79 (1) / 2.85 (2)	4.19 (1) / 2.99 (2)	3.79 (1) / 2.85 (2)	3.08 (1) / 2.57 (2)
Dimensions	Unit	Height		mm	1,435					
		Width		mm	1,420					
		Depth		mm	382					
Weight	Unit			kg	168					
Water heat exchanger	Type				Brazed plate					
	Water volume			l	1.01					
Air heat exchanger	Type				Hi-XSS					
Compressor	Type				Hermetically sealed scroll compressor					
	Quantity				1					
Fan	Type				Propeller fan					
	Quantity				2					
	Air flow rate	Cooling	Nom.	m^3/min	96.0	100	97.0	96.0		100
Sound power level	Cooling	Nom.		dBA	64					66
Sound pressure level	Cooling	Nom.		dBA	51					52
Operation range	Air side	Cooling	Min.~Max.	°CDB	10~46					
	Water side	Cooling	Min.~Max.	°CDB	5~20					
Refrigerant	Type/GWP				R-410A/2,087.5					
	Control				Electronic expansion valve					
	Circuits	Quantity			1.00					
Refrigerant charge	Per circuit			kg	2.95					
	Per circuit			TCO2Eq	6.16					
Water circuit	Piping connections diameter			inch	G 5/4" (female)					
	Piping			inch	5/4"					
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230			3N~/50/400		

(1)Underfloor program: cooling Ta 35°C - LWE 18°C (Dt: 5°C) | (2)Fan coil program: cooling Ta 35°C - LWE 7°C (Dt: 5°C)

Air cooled scroll inverter chiller

- Inverter chiller
- High part load efficiency for low running cost
- Minimal starting currents
- No buffertank required for standard applications
- Daikin scroll compressor
- Wide operation range
- Integrated hydronic module on request

EWAQ-CWN BRC21A52

› More information about EWAQ-CWN

Cooling Only				EWAQ-CWN	016	021	025	032	040	050	064
Space cooling	A Condition 35°C	Pdc		kW	16.8	21.0	25.3	31.6	42.1	50.5	63.2
	ηs,c			%	168	163	165	154	164	165	154
Cooling capacity	Nom.			kW	16.8	21.0	25.3	31.6	42.1	50.5	63.2
Power input	Cooling	Nom.		kW	5.93	7.61	9.60	12.9	15.1	19.2	25.7
Capacity control	Method				Inverter controlled						
	Minimum capacity			%	25						
EER					2.84	2.77	2.63	2.45	2.79	2.63	2.46
Dimensions	Unit	Height		mm	1,684						
		Width		mm	1,370			1,680	2,360		2,980
		Depth		mm	774				780		
Weight	Unit			kg	268	321		403	579		741
Water heat exchanger	Type				Brazed plate						
	Water volume			l	3			5	6		9
	Water pressure drop	Cooling	Total	kPa	8	10	14	8	10	14	8
Air heat exchanger	Type				Air cooled coil						
Compressor	Type				Hermetically sealed scroll compressor						
	Quantity				1	2		3	4		6
Fan	Type				Axial						
	Quantity				1			2			4
	Air flow rate	Cooling	Nom.	m^3/min	171	185		233	370		466
Sound power level	Cooling	Nom.		dBA	78.0			80.0	81.0		83.0
Operation range	Air side	Cooling	Min.~Max.	°CDB	-5~43						
	Water side	Cooling	Min.~Max.	°CDB	-10~20						
Refrigerant	Type/GWP				R-410A/2,087.5						
	Control				Electronic expansion valve						
	Circuits	Quantity			1				2		
Refrigerant charge	Per circuit			kg	7.60			9.60	7.60		9.60
	Per circuit			TCO2Eq	15.9			20.0	15.9		20.0
Water circuit	Piping connections diameter			inch	1-1/4" (female)				2" (female)		
	Piping			inch	1-1/4"				1-1/2"		
Unit	Starting current	Max		A	0.0	77.7	78.7	88.7	99.8	101.9	120.7
	Running current	Max		A	22.2	25.3	26.4	35.2	47.4	49.6	67.2
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400						

Air cooled scroll inverter chiller

- Inverter chiller
- High part load efficiency for low running cost
- Minimal starting currents
- No buffertank required for standard applications
- Daikin scroll compressor
- Wide operation range
- Integrated hydronic module on request
- EWAQ-CWP: Version with standard pump
- EWAQ-CWH: Version with optional high static pump

EWAQ-CWP/CWH

BRC21A52

› More information about EWAQ-CWP

› More information about EWAQ-CWH

Cooling Only				EWAQ	016CWP	021CWP	025CWP	032CWP	040CWP	050CWP	064CWP	016CWH	021CWH	025CWH	032CWH	040CWH	050CWH	064CWH
Space cooling	A Condition 35°C	Pdc		kW	17.0	21.2	25.5	31.8	42.3	50.7	63.4	17.1	21.3	25.5	31.8	42.4	50.8	63.5
	ηs,c			%	184	178	180	163	168	172	161	178	173	176	161	163	168	158
Cooling capacity	Nom.			kW	17.0	21.2	25.5	31.8	42.3	50.7	63.3	17.0	21.2	25.5	31.8	42.3	50.7	63.3
Power input	Cooling	Nom.		kW	5.81	7.47	9.45	12.7	15.1	19.0	25.5	5.81	7.47	9.45	12.7	15.1	19.0	25.5
Capacity control	Method				Inverter controlled													
	Minimum capacity			%	25													
EER					2.93	2.84	2.70	2.50	2.80	2.67	2.48	2.93	2.84	2.70	2.50	2.80	2.67	2.48
Dimensions	Unit	Height		mm	1,684													
		Width		mm	1,370			1,680	2,360		2,980	1,370			1,680	2,360		2,980
		Depth		mm	774				780			774				780		
Weight	Unit			kg	280	332		414	604		765	283	336		417	612		774
Water heat exchanger	Type				Brazed plate													
	Water volume			l	3			5	6		9	3			5	6		9
	Water pressure drop	Cooling	Total	kPa	8	10	14	8	10	14	8		10	14	8	10	14	8
Air heat exchanger	Type				Air cooled coil													
Compressor	Type				Hermetically sealed scroll compressor													
	Quantity				1	2		3	4		6	1	2		3	4		6
Fan	Type				Axial													
	Quantity				1			2			4	1			2			4
	Air flow rate	Cooling	Nom.	m^3/min	171	185		233	370		466	171	185		233	370		466
Sound power level	Cooling	Nom.		dBA	78.0			80.0	81.0		83.0	78.0			80.0	81.0		83.0
Operation range	Air side	Cooling	Min.~Max.	°CDB	-5~43													
	Water side	Cooling	Min.~Max.	°CDB	-10~20													
Refrigerant	Type/GWP				R-410A/2,087.5													
	Control				Electronic expansion valve													
	Circuits	Quantity			1				2			1				2		
Refrigerant charge	Per circuit			kg	7.60		9.60		7.60		9.60	7.60			9.60	7.60		9.60
	Per circuit			TCO2Eq	15.9		20.0		15.9		20.0	15.9			20.0	15.9		20.0
Water circuit	Piping connections diameter			inch	1-1/4" (female)				2" (female)			1-1/4" (female)				2" (female)		
	Piping			inch	1-1/4"				1-1/2"			1-1/4"				1-1/2"		
Unit	Starting current	Max		A	0.0	77.7	78.7	88.7	99.8	101.9	120.7	0.0	79.9	81.7	91.7	103.7	106.3	125.1
	Running current	Max		A	22.2	25.3	26.4	35.2	47.4	49.6	67.2	24.4	27.5	29.4	38.2	51.3	54.0	71.6
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400													

Air cooled multi-scroll chiller, standard efficiency, standard sound

› Single refrigerant circuit (2 scroll compressors) with single evaporator
› Compact design
› Micro channel heat exchanger technology reduces the amount of refrigerant used in the system, lowering environmental impact
› Partial and total heat recovery option available
› Stainless steel plate heat exchanger
› MicroTech III controller with superior control logic and easy interface

› More information about EWAQ-G-SS

Cooling Only				EWAQ-G-SS	075	085	100	110	120	140	155
Space cooling	A Condition 35°C	Pdc		kW	74.7	84.2	96.7	106.7	116.9	139.4	154.4
	ηs,c			%	149.8	153.6	160.9	157.7	157.2	158.2	150.1
SEER					3.8	3.9	4.1		4.0		3.8
Cooling capacity	Nom.			kW	74.69	84.16	96.67	106.70	116.90	139.40	154.40
Power input	Cooling	Nom.		kW	27.7	31.2	35.0	39.5	43.4	51.1	57.2
Capacity control	Method				Staged						
	Minimum capacity			%	50	44	50	44	50	43	50
EER					2.698		2.762	2.699	2.696	2.728	2.698
IPLV					4.79	4.97	4.78	4.86	4.66	4.92	4.78
Dimensions	Unit	Height		mm	1,800						
		Width		mm	1,195						
		Depth		mm	2,140		2,680			3,200	
Weight	Unit			kg	681	792	923	953	982	1,037	1,066
	Operation weight			kg	692	802	934	963	993	1,054	1,085
Water heat exchanger	Type				Braze plate heat exchanger						
	Water volume			l	5.60	4.90		5.60		8.10	9.40
	Water flow rate	Cooling	Nom.	l/s	3.6	4.0	4.6	5.1	5.6	6.7	7.4
	Water pressure drop	Cooling	Nom.	kPa	15.5	27.3	36.9	31.6	36.0	27.5	25.8
Air heat exchanger	Type				Microchannel						
Compressor	Type				Driven vapour compression						
	Quantity				2						
Fan	Type				Direct propeller						
	Quantity				4		6			8	
	Air flow rate	Nom.		l/s	6,017.0	6,444.0	9,029.0			12,008.0	
	Speed			rpm	1,360						
Sound power level	Cooling	Nom.		dBA	83.0	85.0	87.0	89.0			
Sound pressure level	Cooling	Nom.		dBA	66.0	68.0	69.0	71.0			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~42						
	Water side	Cooling	Min.~Max.	°CDB	-10~15						
Refrigerant	Type/GWP				R-410A/2,088.0						
	Circuits	Quantity			1						
Refrigerant charge	Per circuit			kg	8.5	10.4	10.7	11.5	12.9	14.1	13.4
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2						
Unit	Starting current	Max		A	211	262	270	317	325	365	379
	Running current	Cooling	Nom.	A	54	58	62	70	79	89	102
		Max		A	68	74	81	89	97	114	129
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Air cooled multi-scroll chiller, standard efficiency, reduced sound

EWAQ-G-SS/SR

MicroTech III

› More information about EWAQ-G-SR

Cooling Only				EWAQ-G-SR	075	085	100	110	120	140	155
Space cooling	A Condition 35°C	Pdc		kW	69.3	78.9	91.0	99.7	108.6	130.4	143.4
	ηs,c			%	149.0	149.9	156.7	152.4	151.5	153.8	150.6
SEER					3.8		4.0		3.9		3.8
Cooling capacity	Nom.			kW	69.33	78.85	90.96	99.68	108.60	130.40	143.40
Power input	Cooling	Nom.		kW	29.4	33.1	36.8	42.0	46.3	54.0	61.2
Capacity control	Method				Staged						
	Minimum capacity			%	50	44	50	44	50	43	50
EER					2.358	2.383	2.470	2.376	2.347	2.416	2.343
IPLV					4.67	4.85	4.71	4.78	4.50	4.85	4.61
Dimensions	Unit	Height		mm	1,800						
		Width		mm	1,195						
		Depth		mm	2,140		2,680			3,200	
Weight	Unit			kg	711	822	953	983	1,012	1,067	1,096
	Operation weight			kg	722	832	964	993	1,023	1,084	1,115
Water heat exchanger	Type				Braze plate heat exchanger						
	Water volume			l	5.58	4.86		5.60		8.10	9.36
	Water flow rate	Cooling	Nom.	l/s	3.3	3.8	4.4	4.8	5.2	6.2	6.9
	Water pressure drop	Cooling	Nom.	kPa	13.3	24.0	32.6	27.6	31.1	24.1	22.2
Air heat exchanger	Type				Microchannel						
Compressor	Type				Driven vapour compression						
	Quantity				2						
Fan	Type				Direct propeller						
	Quantity				4		6			8	
	Air flow rate	Nom.		l/s	4,523.0	5,046.0	6,787.0			9,023.0	
	Speed			rpm	1,108						
Sound power level	Cooling	Nom.		dBA	79.0	82.0	84.0	86.0			
Sound pressure level	Cooling	Nom.		dBA	62.0	65.0	66.0	68.0			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~42						
	Water side	Cooling	Min.~Max.	°CDB	-10~15						
Refrigerant	Type/GWP				R-410A/2,088.0						
	Circuits	Quantity			1						
Refrigerant charge	Per circuit			kg	8.5	10.4	10.7	11.5	12.9	14.1	13.4
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2						
Unit	Starting current	Max		A	211	262	270	317	325	365	379
	Running current	Cooling	Nom.	A	57	61	65	74	84	93	109
		Max		A	68	74	81	89	97	114	129
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Air cooled multi-scroll chiller, high efficiency, standard sound

› Single refrigerant circuit (2 scroll compressors) with single evaporator
› Compact design
› Micro channel heat exchanger technology reduces the amount of refrigerant used in the system, lowering environmental impact
› Partial and total heat recovery option available
› Stainless steel plate heat exchanger
› MicroTech III controller with superior control logic and easy interface

› More information about EWAQ-G-XS

Cooling Only				EWAQ-G-XS	080	090	105	115	130	150
Space cooling	A Condition 35°C	Pdc		kW	79.8	90.3	105.3	116.8	130.0	149.0
	ηs,c			%	155.0	164.5	167.2	166.0	169.6	165.4
SEER					4.0	4.2	4.3	4.2	4.3	4.2
Cooling capacity	Nom.			kW	79.79	90.26	105.30	116.80	130.00	149.00
Power input	Cooling	Nom.		kW	25.8	29.0	33.8	37.7	42.3	48.1
Capacity control	Method				Staged					
	Minimum capacity			%	50	44	50	44	50	43
EER					3.099	3.108	3.121	3.099	3.100	3.099
IPLV					4.82	5.04	4.96	5.02	4.92	5.05
Dimensions	Unit	Height		mm	1,800				1,820	
		Width		mm	1,195					
		Depth		mm	2,680	3,200			3,800	
Weight	Unit			kg	734	850	987	1,024	1,086	1,123
	Operation weight			kg	744	860	1,002	1,040	1,102	1,144
Water heat exchanger	Type				Braze plate heat exchanger					
	Water volume			l	5.58	4.86		5.60		8.10
	Water flow rate	Cooling	Nom.	l/s	3.8	4.3	5.0	5.6	6.3	7.1
	Water pressure drop	Cooling	Nom.	kPa	25.7	32.7	20.3	19.9	25.4	20.6
Air heat exchanger	Type				Microchannel					
Compressor	Type				Driven vapour compression					
	Quantity				2					
Fan	Type				Direct propeller					
	Quantity				6		8		10	
	Air flow rate	Nom.		l/s	9,029.0	9,498.0	12,008.0		15,046.0	
	Speed			rpm	1,360					
Sound power level	Cooling	Nom.		dBA	84.0	85.0	87.0		89.0	
Sound pressure level	Cooling	Nom.		dBA	66.0	68.0	69.0		71.0	
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45					
	Water side	Cooling	Min.~Max.	°CDB	-10~15					
Refrigerant	Type/GWP				R-410A/2,088.0					
	Circuits	Quantity			1					
Refrigerant charge	Per circuit			kg	9.1	12.7	13.1	13.2	16.1	15.0
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2					
Unit	Starting current	Max		A	213	264	272	319	329	367
	Running current	Cooling	Nom.	A	52	56	61	69	76	87
		Max		A	70	75	83	91	101	116
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400					

Air cooled multi-scroll chiller, high efficiency, reduced sound

EWAQ-G-XS/XR

MicroTech III

› More information about EWAQ-G-XR

Cooling Only				EWAQ-G-XR	080	090	105	115	130	150
Space cooling	A Condition 35°C	Pdc		kW	76.0	86.0	100.3	110.5	124.8	140.8
	ηs,c			%	150.9	157.4	167.0	161.7	169.8	160.5
SEER					3.8	4.0	4.3	4.1	4.3	4.1
Cooling capacity	Nom.			kW	75.95	86.00	100.30	110.50	124.80	140.80
Power input	Cooling	Nom.		kW	26.4	29.9	34.7	39.0	43.3	49.8
Capacity control	Method				Staged					
	Minimum capacity			%	50	44	50	44		43
EER					2.877	2.875	2.894	2.832	2.880	2.825
IPLV					4.85	4.99	4.93	4.99	4.89	5.03
Dimensions	Unit	Height		mm	1,800				1,820	
		Width		mm	1,195					
		Depth		mm	2,680	3,200			3,800	
Weight	Unit			kg	764	880	1,017	1,054	1,116	1,153
	Operation weight			kg	774	890	1,032	1,070	1,132	1,174
Water heat exchanger	Type				Braze plate heat exchanger					
	Water volume			l	5.58	4.86		5.60		8.10
	Water flow rate	Cooling	Nom.	l/s	3.6	4.1	4.8	5.3	6.0	6.7
	Water pressure drop	Cooling	Nom.	kPa	23.3	29.6	18.4	17.8	23.0	18.4
Air heat exchanger	Type				Microchannel					
Compressor	Type				Driven vapour compression					
	Quantity				2					
Fan	Type				Direct propeller					
	Quantity				6		8		10	
	Air flow rate	Nom.		l/s	6,787.0	7,356.0	9,023.0		11,309.0	
	Speed			rpm	1,108					
Sound power level	Cooling	Nom.		dBA	80.0	82.0	84.0		86.0	
Sound pressure level	Cooling	Nom.		dBA	62.0	65.0	66.0	68.0	67.0	
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45					
	Water side	Cooling	Min.~Max.	°CDB	-10~15					
Refrigerant	Type/GWP				R-410A/2,088.0					
	Circuits	Quantity			1					
Refrigerant charge	Per circuit			kg	9.1	12.7	13.1	13.2	16.1	15.0
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2					
Unit	Starting current	Max		A	213	264	272	319	329	367
	Running current	Cooling	Nom.	A	54	58	63	71	78	90
		Max		A	70	75	83	91	101	116
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400					

Air cooled screw inverter chiller, high efficiency, standard/low sound

› High efficiency with leader-of-class ESEER
› Inverter stepless single-screw compressor
› Highly efficient fans with patented blade profile for quiet operation
› Extensive option list (heat recovery option available)
› Wide operating range
› Low starting current
› MicroTech III controller with superior control logic and easy interface

› More information about EWAD-CZXS

› More information about EWAD-CZXL

Cooling Only				EWAD-CZXS/XL	C12	C13	C14	C15	C16	C17	C18
Space cooling	A Condition 35°C	Pdc		kW	1,232	1,303.04	1,444.04	1,538	1,616.03	1,701	1,795
	ηs,c			%	205.8	204.6	206.2	201.4	199.8	203	207.4
SEER					5.22	5.19	5.23	5.11	5.07	5.15	5.26
Cooling capacity	Nom.			kW	1,232	1,303	1,444	1,538	1,616	1,701	1,795
Power input	Cooling	Nom.		kW	404.3	446.6	493.7	538.4	564.3	595.9	618.7
Capacity control	Method				Variable						
	Minimum capacity			%	20				13		
EER					3.047	2.919	2.926	2.856	2.863	2.855	2.9
IPLV					5.58	5.45	5.61	5.75	5.65	5.46	5.29
Dimensions	Unit	Height		mm	2,540						
		Width		mm	2,285						
		Depth		mm	10,325		11,625	12,525		13,425	14,325
Weight (XS)	Unit			kg	8,570	8,970	9,600	9,940	11,370	12,190	12,920
	Operation weight			kg	8,960	9,360	9,980	10,320	12,220	13,040	13,790
Weight (XL)	Unit			kg	8,850	9,250	9,880	10,220	11,790	12,610	13,340
	Operation weight			kg	9,240	9,640	10,260	10,600	12,640	13,460	14,210
Water heat exchanger	Type										
	Water volume			l	383		374		850		871
	Water flow rate	Cooling	Nom.	l/s	59	62.4	69.2	73.7	77.4	81.5	86
	Water pressure drop	Cooling	Nom.	kPa	47	52.1	61.9	71.9	62.8	69.1	65.1
Air heat exchanger	Type				High efficiency fin and tube type						
Compressor	Type				Driven vapour compression						
	Quantity				2				3		
Fan	Type				Direct propeller						
	Quantity				20		22	24		26	28
	Air flow rate	Nom.		l/s	108,376		119,214	130,051	129,455	140,143	151,130
	Speed			rpm	900						
Sound power level (XS)	Cooling	Nom.		dBA	104				106		
Sound power level (XL)	Cooling	Nom.		dBA	101				103		
Sound pressure level (XS)	Cooling	Nom.		dBA	81				83		
Sound pressure level (XL)	Cooling	Nom.		dBA	78				80		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50						
	Water side	Cooling	Min.~Max.	°CDB	-8~15						
Refrigerant	Type/GWP				R-134a/1,430						
	Charge			kg	250			280	320	340	350
	Circuits	Quantity			2				3		
Piping connections	Evaporator water inlet/outlet (OD)				219.1mm				273mm		
Unit	Starting current	Max		A	590	626	709	772	848	899	949
	Running current	Cooling	Nom.	A	636	698	769	837	881	931	970
		Max		A	824	877	979	1,081	1,132	1,193	1,255
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Air cooled screw inverter chiller, high efficiency, reduced sound

EWAD-CZXS/XL/XR

MicroTech III

› More information about EWAD-CZXR

Cooling Only				EWAD-CZXR	C11	C12	C13	C14	C15	C16	C17
Space cooling	A Condition 35°C	Pdc		kW	1,166	1,231.01	1,327	1,437	1,539	1,624.03	1,706.04
	ηs,c			%	219	202.2	206.2	199.8	211.4	214.6	220.2
SEER					5.55	5.13	5.23	5.07	5.36	5.44	5.58
Cooling capacity	Nom.			kW	1,166	1,231	1,327	1,437	1,539	1,624	1,706
Power input	Cooling	Nom.		kW	411.8	458	492	523.4	585.5	616.7	638.1
Capacity control	Method				Variable						
	Minimum capacity			%	20				13		
EER					2.831	2.681	2.692	2.745	2.628	2.634	2.673
IPLV					5.96	5.67	6.03	6.21	6.17	5.89	5.85
Dimensions	Unit	Height		mm	2,540						
		Width		mm	2,285						
		Depth		mm	10,325		11,625	12,525		13,425	14,325
Weight	Unit			kg	9,120	9,530	10,180	10,530	12,150	12,990	13,740
	Operation weight			kg	9,500	9,920	10,550	10,910	13,000	13,840	14,610
Water heat exchanger	Type				Shell and tube						
	Water volume			l	383		374		850		871
	Water flow rate	Cooling	Nom.	l/s	55.8	58.9	63.6	68.8	73.7	77.8	81.7
	Water pressure drop	Cooling	Nom.	kPa	43.2	47.6	56.5	65.8	57.3	63.2	60.1
Air heat exchanger	Type				High efficiency fin and tube type						
Compressor	Type				Driven vapour compression						
	Quantity				2				3		
Fan	Type				Direct propeller						
	Quantity				20		22	24		26	28
	Air flow rate	Nom.		l/s	83,072		91,380	99,687		107,994	116,301
	Speed			rpm							
Sound power level	Cooling	Nom.		dBA	97				99		
Sound pressure level	Cooling	Nom.		dBA	74				76		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50						
	Water side	Cooling	Min.~Max.	°CDB	-8~15						
Refrigerant	Type/GWP				R-134a/1,430						
	Charge			kg	250			280	320	340	350
	Circuits	Quantity			2				3		
Piping connections	Evaporator water inlet/outlet (OD)				219.1mm				273mm		
Unit	Starting current	Max		A	576	606	686	756	825	873	921
	Running current	Cooling	Nom.	A	647	709	782	859	912	960	998
		Max		A	796	841	940	1,048	1,098	1,157	1,215
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Air cooled screw chiller with free cooling, high efficiency, standard/low sound

› Free cooling chiller for space cooling and industrial processes
› Stepless single-screw compressor
› Greater energy savings and reduced CO2 emissions during cold season
› Wide operating range
› MicroTech III controller with superior control logic and easy interface

› More information about EWAD-CFXS

› More information about EWAD-CFXL

Cooling only					EWAD-CFXS/XL	640	770	850	900	C10	C11	C12	C13	C14	C15	C16
Cooling capacity	Nom.			kW		640 (1) / 415 (2)	772 (1) / 510 (2)	852 (1) / 583 (2)	902 (1) / 612 (2)	1,027 (1) / 701 (2)	1,089 (1) / 734 (2)	1,269 (1) / 902 (2)	1,349 (1) / 957 (2)	1,435 (1) / 963 (2)	1,493 (1) / 1,013 (2)	1,555 (1) / 1,039 (2)
Power input	Cooling	Nom.		kW		257 (1) / 53.7 (2)	272 (1) / 62.0 (2)	293 (1) / 64.7 (2)	324 (1) / 69.8 (2)	360 (1) / 75.7 (2)	399 (1) / 83.4 (2)	397 (1) / 86.4 (2)	439 (1) / 92.8 (2)	454 (1) / 101 (2)	492 (1) / 109 (2)	530 (1) / 115 (2)
Capacity control	Method					Stepless										
	Minimum capacity			%		12.5										
EER						2.49 (1) / 11.91 (2)	2.84 (1) / 12.44 (2)	2.90 (1) / 13.17 (2)	2.78 (1) / 12.93 (2)	2.85 (1) / 13.56 (2)	2.73 (1) / 13.05 (2)	3.19 (1) / 14.68 (2)	3.08 (1) / 14.55 (2)	3.16 (1) / 14.21 (2)	3.04 (1) / 13.72 (2)	2.93 (1) / 13.50 (2)
IPLV						3.86	4.03	4.10	4.05	4.00	3.95	4.36	4.25	4.36	4.35	4.26
Dimensions	Unit	Height		mm		2,565										
		Width		mm		2,480										
		Depth		mm		6,300	7,200	8,100		9,000		10,800				
Weight (XS)	Unit			kg		7,760	8,340	8,900		10,160	10,420	11,900		12,540	12,620	12,670
	Operation weight			kg		8,515	9,100	9,705		11,169	11,429	13,276		14,516	14,596	14,646
Weight (XL)	Unit			kg		8,050	8,620	9,190		10,450	10,710	12,190		12,830	12,910	12,960
	Operation weight			kg		8,795	9,390	9,995		11,459	11,719	13,566		14,806	14,886	14,936
Water heat exchanger	Type					Single pass shell & tube										
	Water flow rate	Cooling	Nom.	l/s		27.8 (1) / 27.8 (2)	33.5 (1) / 33.5 (2)	37.0 (1) / 37.0 (2)	39.2 (1) / 39.2 (2)	44.6 (1) / 44.6 (2)	47.3 (1) / 47.3 (2)	55.1 (1) / 55.1 (2)	58.6 (1) / 58.6 (2)	62.4 (1) / 62.4 (2)	64.9 (1) / 64.9 (2)	67.6 (1) / 67.6 (2)
	Water pressure drop	Cooling	Nom.	kPa		85 (1) / 128 (2)	105 (1) / 172 (2)	90 (1) / 178 (2)	101 (1) / 198 (2)	111 (1) / 245 (2)	124 (1) / 272 (2)	98 (1) / 232 (2)	110 (1) / 259 (2)	139 (1) / 305 (2)	150 (1) / 328 (2)	162 (1) / 354 (2)
	Water volume			l		741	771	808		1,012		1,372		1,965		
Air heat exchanger	Type					High efficiency fin and tube type										
Compressor	Type					Asymmetric single screw compressor										
	Quantity					2										
Fan	Type					Direct propeller										
	Air flow rate	Nom.		l/s		50,368	60,441	70,515		80,588		95,253				
Sound power level (XS)	Cooling	Nom.		dBA		100		101			102		103			
Sound power level (XL)	Cooling	Nom.		dBA		96	97			98		99				
Sound pressure level (XS)	Cooling	Nom.		dBA		79	80				81	80				
Sound pressure level (XL)	Cooling	Nom.		dBA		76	77									
Operation range	Air side	Cooling	Min.~Max.	°CDB		-20~45										
	Water side	Cooling	Min.~Max.	°CDB		-8~15										
Refrigerant	Type/GWP					R-134a/1,430										
	Circuits	Quantity				2										
Refrigerant charge				kg/TCO2Eq		64.0/91.5	73.0/104.4	81.0/115.8		91.0/130.1		107.0/153.0		112.5/160.9	124.0/177.3	
Piping connections	Evaporator water inlet/outlet (OD)					168.3mm				219.1mm				273mm		
Unit	Starting current	Max		A		605	619	658		924	971	1,030			1,073	1,086
	Running current	Cooling	Nom.	A		404	430	467	515	568	628	636	701	720	773	825
		Max		A		476	510	561	605	672	731	811	875		929	982
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/400										

(1) Cooling: entering evaporator water temp. 16°C; leaving evaporator water temp. 10°C; ambient air temp. 35°C; full load operation.
(2) Data is calculated at ambient air temperature 5°C, inlet water temperature 16°C.

Air cooled screw chiller with free cooling, high efficiency, reduced sound

EWAD-CFXS/XL/XR

Microtech III

› More information about EWAD-CFXR

Cooling Only					EWAD-CFXR	600	740	820	870	980	C10	C11	C12	C13	C14	C15
Cooling capacity	Nom.			kW		602 (1) / 374 (2)	739 (1) / 468 (2)	821 (1) / 539 (2)	866 (1) / 562 (2)	981 (1) / 644 (2)	1,034 (1) / 670 (2)	1,229 (1) / 825 (2)	1,302 (1) / 866 (2)	1,374 (1) / 889 (2)	1,424 (1) / 909 (2)	1,476 (1) / 929 (2)
Power input	Cooling	Nom.		kW		263 (1) / 46.6 (2)	278 (1) / 56.2 (2)	299 (1) / 58.5 (2)	334 (1) / 63.1 (2)	368 (1) / 68.5 (2)	412 (1) / 74.4 (2)	403 (1) / 80.0 (2)	450 (1) / 87.5 (2)	466 (1) / 93.4 (2)	511 (1) / 103 (2)	556 (1) / 109 (2)
Capacity control	Method					Stepless										
	Minimum capacity			%		12.5										
EER						2.29 (1) / 12.91 (2)	2.66 (1) / 13.17 (2)	2.75 (1) / 14.04 (2)	2.59 (1) / 13.71 (2)	2.67 (1) / 14.33 (2)	2.51 (1) / 13.89 (2)	3.05 (1) / 15.36 (2)	2.90 (1) / 14.87 (2)	2.95 (1) / 14.7 (2)	2.79 (1) / 13.85 (2)	2.66 (1) / 13.56 (2)
IPLV						4.09	4.15	4.16	4.20	4.10	4.08	4.42	4.37	4.42		4.28
Dimensions	Unit	Height		mm		2,565										
		Width		mm		2,480										
		Depth		mm		6,300	7,200	8,100		9,000		10,800				
Weight	Unit			kg		8,050	8,620	9,190		10,450	10,710	12,190		12,830	12,910	12,960
	Operation weight			kg		8,795	9,390	9,995		11,459	11,719	13,566		14,806	14,886	14,936
Water heat exchanger	Type					Single pass shell & tube										
	Water flow rate	Cooling	Nom.	l/s		26.2 (1) / 26.2 (2)	32.1 (1) / 32.1 (2)	35.7 (1) / 35.7 (2)	37.6 (1) / 37.6 (2)	42.6 (1) / 42.6 (2)	44.9 (1) / 44.9 (2)	53.4 (1) / 53.4 (2)	56.6 (1) / 56.6 (2)	59.7 (1) / 59.7 (2)	61.9 (1) / 61.9 (2)	64.1 (1) / 64.1 (2)
	Water pressure drop	Cooling	Nom.	kPa		76 (1) / 115 (2)	97 (1) / 159 (2)	84 (1) / 167 (2)	93 (1) / 184 (2)	102 (1) / 225 (2)	113 (1) / 248 (2)	92 (1) / 219 (2)	103 (1) / 243 (2)	128 (1) / 282 (2)	137 (1) / 301 (2)	146 (1) / 321 (2)
	Water volume			l		741	771	808		1,012		1,372		1,965		
Air heat exchanger	Type					High efficiency fin and tube type										
Compressor	Type					Asymm single screw										
	Quantity					2										
Fan	Type					Direct propeller										
	Quantity					10	12	14		16		20				
	Air flow rate	Nom.		l/s		38,935	46,722	54,508		62,295		73,011				
	Speed			rpm		715										
Sound power level	Cooling	Nom.		dBA		92				94			95			
Sound pressure level	Cooling	Nom.		dBA		71	72				73	72			73	
Operation range	Air side	Cooling	Min.~Max.	°CDB		-20~45										
	Water side	Cooling	Min.~Max.	°CDB		-8~15										
Refrigerant	Type/GWP					R-134a/1,430										
	Circuits	Quantity				2										
Refrigerant charge	Per circuit			kg		64.0	73.0	81.0		91.0		107.0		112.5	124.0	
	Per circuit			TCO2Eq		91.5	104.4	115.8		130.1		153.0		160.9	177.3	
Piping connections	Evaporator water inlet/outlet (OD)					168.3mm				219.1mm				273mm		
Unit	Starting current	Max		A		598	611	648		912	960	1,016			1,059	1,072
	Running current	Cooling	Nom.	A		411	439	473	526	580	647	645	717	738	800	862
		Max		A		462	493	542	585	649	708	783	847		901	954
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/400										

(1) Cooling: entering evaporator water temp. 16°C; leaving evaporator water temp. 10°C; ambient air temp. 35°C; full load operation.
(2)Data is calculated at ambient air temperature 5°C, inlet water temperature 16°C.

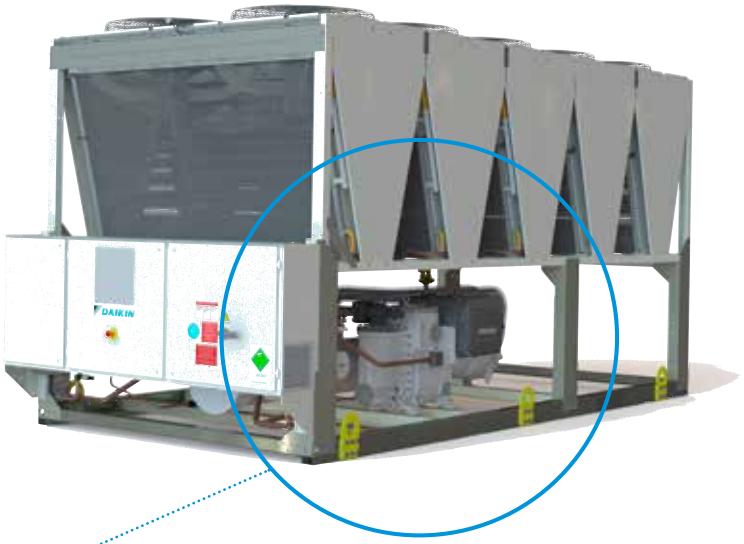
TZ Chiller series
Screw inverter chiller
High efficiency in comfort and process cooling

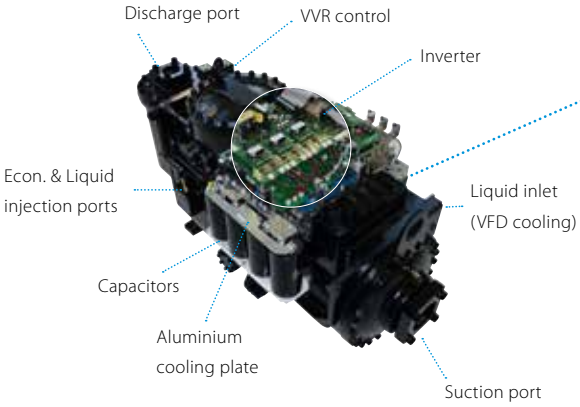
Over 1,000 sites around the world with screw chillers installed is demonstrating that we will never stop developing the most advanced technology with highest quality level to offer the best chiller experience to our customers.

TZ CHILLER SERIES

EWAD-TZB at a glance

- Full inverter air cooled chiller
- Capacity range from 170 up to 1,100 kW
- Daikin single screw compressor with integrated inverter and variable volume ratio
- Best efficiency at full load and part load conditions





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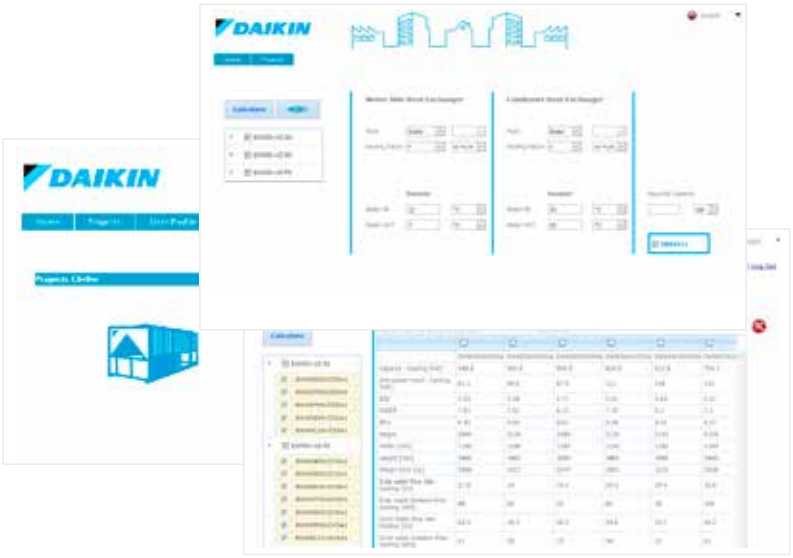

Why choose TZ Chiller series?

High efficiencies both at full load and part load: SEER up to 6.35 & EER up to 3.93

› Daikin compressor with in-built inverter and Variable Volume Ratio (VVR) for optimized efficiency
› In-house developed software with dynamic condensing pressure management and innovative economizer control logic

Rapid return on investment

› Payback of three years, compared to a non-inverter unit for comfort cooling applications
› Less than one year a for process cooling applications

Perfect comfort level

› Infinitely variable load regulation
› Precise leaving water temperature control thanks to stepless regulation

Compact design

› More compact heat exchanger with superior efficiencies
› Reduced electrical panel dimensions thanks to the inverter compressor mounted

Lowest sound levels

› Down to 87 dB(A) sound power at full load and even lower at part load thanks to fans and compressors variable speed
› Quiet compressor thanks to special acoustic executions
› Unique Daikin fans design with reduced noise impact and vibrations

Unrivaled and proven reliability

› Extensive testing of chillers and components in laboratories, Daikin factories and selected job sites - even at extreme working conditions
› Reduced energy demand without compromising on reliability and performance

Extensive option list

More than 60 different options are available to fit the EWAD-TZ B chiller to fit to your requirements:
› Rapid restart after power failure
› Variable speed water pumps to optimise the working efficiency
› Total heat recovery: 80 to 85% of the total heat rejection of the chiller can be recovered
› Partial heat recovery: 15 to 20% of the total heat rejection of the chiller can be recovered
› Refrigerant leak detection

Check on YouTube
www.youtube.com/DaikinEurope

› Daikin EWAD-TZB Screw Inverter Chiller

Air cooled screw inverter chiller, standard efficiency, standard sound

› Optimized energy efficiency both at full and part load conditions
› Inverter stepless single-screw compressor
› Advanced compressor technology featuring integrated inverter and variable volume ratio (VVR)
› Compact design for small footprint and minimized installation space
› Low operating sound levels are achieved by the latest compressor and fan design
› One or two truly independent refrigerant circuits for outstanding reliability

› More information about EWAD-TZSSB

› More information about EWAD-TZSLB

Cooling Only				EWAD-TZSSB/SLB	160	190	240	270	300	360	380	450	495	570	610	660	700	820	900	990	C10	C11
Space cooling	A Condition 35°C	Pdc		kW	169.1	200.88	235.3	268.82	305.99	351.41	394.74	455.64	499.81	569.52	612.22	660.72	700.94	815.92	889.95	987.19	1,045.39	1,103.99
	ηs,c			%	168.2	172.6	169.4	175.4	177	183	172.6	171.4	175	180.2	189.8	182.6	185.4	197.4	194.2	200.6	200.2	200.6
SEER					4.28	4.39	4.3	4.46	4.5	4.65	4.39	4.36	4.45	4.58	4.82	4.64	4.71	5.01	4.93	5.09	5.08	5.09
Cooling capacity	Nom.			kW	169.1	200.9	235.30	268.8	306	351.4	394.7	455.6	499.8	569.5	612.2	660.7	700.9	816	890	987	1,045	1,104
Power input	Cooling	Nom.		kW	56.48	69.9	83.0	89.94	108.6	118	139.4	163.8	174.6	198.1	217.6	239	249.1	257.9	296.1	321.3	346.4	366.2
Capacity control	Method				Variable																	
	Minimum capacity			%	37	31	34	29	25	24	16	17	16	14	13	12		10				
EER					2.995	2.874	2.835	2.989	2.817	2.954	2.832	2.783	2.862	2.876	2.813	2.764	2.813	3.164	3.005	3.072	3.017	3.015
IPLV					5.3	5.27	5.04	5.19	5.37	5.53	5.34	5.3	5.46	5.64	5.62		5.7	5.29	5.26	5.25	5.26	5.27
Dimensions	Unit	Height		mm	2,483													2,482				
		Width		mm	2,258																	
		Depth		mm	2,283			3,183			4,083		4,983		5,883			6,783		7,783	8,820	9,591
Weight (SSB)	Unit			kg	2,066	2,091	2,149	2,375	2,422	2,771	4,044	4,060	4,317	4,603	4,780	4,804	5,074	6,282	6,382	6,777	7,132	7,410
	Operation weight			kg	2,086	2,117	2,187	2,401	2,460	2,821	4,202	4,224	4,475	4,761	5,050	5,059	5,329	6,532	6,632	7,027	7,382	7,660
Weight (SLB)	Unit			kg	2,081	2,106	2,164	2,390	2,437	2,786	4,074	4,090	4,347	4,633	4,810	4,834	5,104	6,282	6,382	6,777	7,132	7,410
	Operation weight			kg	2,101	2,132	2,202	2,416	2,475	2,836	4,232	4,254	4,505	4,791	5,080	5,089	5,359	6,532	6,382	7,027	7,382	7,660
Water heat exchanger	Type				Plate heat exchanger						Shell and tube											
	Water volume			l	20.25	26.1	37.35	26.1	37.35	49.5	158	164	158		270	255	283	485		453		
	Water flow rate	Cooling	Nom.	l/s	8.1	9.6	11.2	12.9	14.6	16.8	18.9	21.8	23.9	27.3	29.3	31.6	33.5	39.1	42.6	47.2	50	52.8
	Water pressure drop	Cooling	Nom.	kPa	25	19.3	15.4	32.6	25.2	25.9		32.4	44	55.7	38.8	32.3	36	52.6	36.9	42.2	46.6	37.3
Air heat exchanger	Type				Microchannel																	
Compressor	Type				Driven vapour compression																	
	Quantity				1						2											
Fan	Type				Direct propeller																	
	Quantity				4			6		8			10	12			14			16	18	20
	Air flow rate	Nom.		l/s	15,109			22,664		30,219			37,774	45,328			52,883	69,177		79,060	88,942	98,825
	Speed			rpm	700													900				
Sound power level (SSB)	Cooling	Nom.		dBA	96			97	98	99				100	101	102	105	102			103	
Sound power level (SLB)	Cooling	Nom.		dBA	90	91		92	93	94				95	96	97		99			100.0	
Sound pressure level (SSB)	Cooling	Nom.		dBA	77			78		79				80		82	84	81				
Sound pressure level (SLB)	Cooling	Nom.		dBA	71	72		73		74					75	76	77	78				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~47													-18~45				
	Water side	Cooling	Min.~Max.	°CDB	-8~18													-15~20				
Refrigerant	Type/GWP				R-134a/1,430.0																	
	Charge			kg	27	29	33	38	41	52	58	59	68	75	77	83	90	91		104	117	130
	Circuits	Quantity			1						2											
Refrigerant charge	Per circuit			TCO2Eq	38.6	41.5	47	54.3	58.6	74.4	41.5	42.2	48.6	53.6	55.1	59.3	64.4	65.1		74.4	83.7	93.0
Piping connections	Evaporator water inlet/outlet (OD)				88.9 mm			114.3 mm			139.7 mm				168.3 mm				219.1mm			
Unit	Running current	Cooling	Nom.	A	102	123	188	177	188	200	246	372	366	361	377	396	414	429	501	528	563	597
		Max		A	130	149	160	187	220	246	298	320	350	374	439	466	486	537	599	652	708	768
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Air cooled screw inverter chiller, standard efficiency, reduced sound

EWAD-TZSSB/SLB/SRB

MicroTech III

› More information about EWAD-TZSRB

Cooling Only				EWAD-TZSRB	160	190	240	270	300	360	380	450	495	570	610	660	700	820	900	990	C10	C11
Space cooling	A Condition 35°C	Pdc		kW	169.1	200.88	235.29	268.82	305.99	351.41	394.01	454.57	499.14	568.6	610.43	658.99	699.87	799.95	894.94	956.14	1,013.27	1,067.02
	ηs,c			%	168.2	172.6	169.4	175.4	177	183	172.2	170.6	174.2	179.4	188.6	181.8	184.6	215	213.4	213.8	216.2	217.8
SEER					4.28	4.39	4.31	4.46	4.5	4.65	4.38	4.34	4.43	4.56	4.79	4.62	4.69	5.45	5.41	5.42	5.48	5.52
Cooling capacity	Nom.			kW	169.1	200.9	235.3	268.8	306	351.4	394	454.6	499.1	568.6	610.4	659	699.9	800	895	956	1,013	1,067
Power input	Cooling	Nom.		kW	56.48	69.9	82.99	89.94	108.6	118	140.2	164.8	175.4	199.1	218.4	240.3	250.3	247.8	294.1	316	335.6	358.9
Capacity control	Method				Variable																	
	Minimum capacity			%	37	31	34	29	25	24	16	17	16	14	13	12		10				
EER					2.995	2.874	2.835	2.989	2.817	2.954	2.81	2.759	2.846	2.856	2.795	2.742	2.796	3.229	3.043	3.016	3.018	2.973
IPLV					5.3	5.27	5.04	5.19	5.37	5.53	5.3	5.26	5.43	5.6	5.61	5.6	5.67	5.92	5.74	5.77	5.75	5.86
Dimensions	Unit	Height		mm	2,483													2,482				
		Width		mm	2,258																	
		Depth		mm	2,283			3,183			4,083		4,983	5,883			6,783	7,783		8,820	9,591	10,461
Weight	Unit			kg	2,166	2,191	2,249	2,475	2,522	2,871	4,244	4,260	4,517	4,803	4,980	5,004	5,274	6,997	7,097	7,452	7,730	8,023
	Operation weight			kg	2,186	2,217	2,287	2,501	2,560	2,921	4,402	4,424	4,675	4,961	5,250	5,259	5,529	7,247	7,347	7,702	7,980	8,273
Water heat exchanger	Type				Plate heat exchanger						Shell and tube											
	Water volume			l	20.25	26.1	37.35	26.1	37.35	49.5	158	164	158		270	255		283	485			453
	Water flow rate	Cooling	Nom.	l/s	8.1	9.6	11.2	12.9	14.6	16.8	18.8	21.7	23.9	27.2	29.2	31.5	33.5	38.3	42.8	45.7	48.5	51
	Water pressure drop	Cooling	Nom.	kPa	25	19.3	15.4	32.6	25.2	25.9	25.8	32.2	43.9	55.5	38.6	32.2	35.9	52.1	36.3	41	45.6	36.3
Air heat exchanger	Type				Microchannel																	
Compressor	Type				Driven vapour compression																	
	Quantity				1						2											
Fan	Type				Direct propeller																	
	Quantity				4			6		8			10	12		14	16		18	20	22	
	Air flow rate	Nom.		l/s	15,109			22,664		30,219	29,650		36,920	44,475		51,745	59,299		66,570	74,124	81,394	
	Speed			rpm	700																	
Sound power level	Cooling	Nom.		dBA	86	87		88			90			91	92		94		95			
Sound pressure level	Cooling	Nom.		dBA	67	68		69		70					71		73					
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~47													-18~45				
	Water side	Cooling	Min.~Max.	°CDB	-8~18													-15~20				
Refrigerant	Type/GWP				R-134a/1,430																	
	Charge			kg	27	29	33	38	41	52	58	59	68	75	77	83	90	104		117	130	143
	Circuits	Quantity			1						2											
Refrigerant charge	Per circuit			TCO2Eq	38.6	41.5	47.2	54.3	58.6	74.4	41.5	42.2	48.6	53.6	55.1	59.3	64.4	74.4		83.7	93.0	102.2
Piping connections	Evaporator water inlet/outlet (OD)				88.9 mm			114.3 mm			139.7 mm				168.3 mm				219.1 mm			
Unit	Running current	Cooling	Nom.	A	102	123	188	177	188	200	247	374	368	363	378	398	416	422	496	530	561	599
		Max		A	130	149	160	187	220	246	298	320	350	374	439	466	486	523	585	635	688	745
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Air cooled screw inverter chiller, high efficiency, standard/low sound

- High energy efficiency both at full and part load conditions
- Inverter stepless single-screw compressor with DC electrical motor
- Advanced compressor technology featuring integrated inverter and variable volume ratio (VVR)
- Continuous fans speed modulation thanks to inverter driven fans to improve part load efficiency
- Compact design for small footprint and minimized installation space
- Low operating sound levels are achieved by the latest compressor and fan design
- One or two truly independent refrigerant circuits for outstanding reliability

› More information about EWAD-TZXSB

› More information about EWAD-TZXLB

Cooling Only				EWAD-TZXSB/XLB	190	220	240	290	320	360	420	450	540	570	610	660	680	770	850	910	C10	C11
Space cooling	A Condition 35°C	Pdc		kW	180.41	211.34	239.54	276.79	313.2	360.56	417.27	472.59	528.99	563.39	599.41	639.37	678.22	763.88	850.16	911.93	1,001.2	1,045.43
	ηs,c			%	195	198.6	195.4	203	202.6	195.4	198.2	199.8	201	198.6	203.8	206.2	205.4	228.6	226.6	233.4	243	237
SEER					4.95	5.04	4.96	5.15	5.14	4.96	5.03	5.07	5.1	5.04	5.17	5.23	5.21	5.79	5.74	5.91	6.15	6
Cooling capacity	Nom.			kW	180.4	211.3	239.5	276.8	313.2	360.6	417.3	472.6	529	563.4	599.4	639.4	678.2	764	850	912	1,001	1,045
Power input	Cooling	Nom.		kW	52.13	63.22	72.5	83.87	100.2	109.1	132.2	144.9	163.5	181.1	191.7	202.1	219.8	226.5	266.1	275.8	303.4	320.1
Capacity control	Method				Variable																	
	Minimum capacity			%	34	29	34	29	25	17	16	17	16	15	14	13		10				
EER					3.46	3.343	3.304	3.3	3.127	3.304	3.156	3.261	3.236	3.111	3.127	3.164	3.085	3.374	3.195	3.306	3.3	3.265
IPLV					6.26	6.15	6.19	6.17		6.4	6.3	6.22		6.29	6.31	6.25	6.21	6.26	6.08	6.19	6.29	6.24
Dimensions	Unit	Height		mm	2,483													2,482				
		Width		mm	2,258																	
		Depth		mm	3,183			4,083		4,983			5,883		6,783	7,683		7,783		8,820	9,591	10,461
Weight (XSB)	Unit			kg	2,362	2,409	2,421	2,770		4,292		4,602	4,800		5,072	5,425		6,677	6,777	7,132	7,410	7,703
	Operation weight			kg	2,388	2,447	2,459	2,820		4,450		4,760	5,055		5,327	5,680		6,927	7,027	7,382	7,660	7,953
Weight (XLB)	Unit			kg	2,377	2,424	2,436	2,785		4,322		4,632	4,830		5,102	5,455		6,677	6,777	7,132	7,410	7,703
	Operation weight			kg	2,403	2,462	2,474	2,835		4,480		4,790	5,085		5,357	5,710		6,927	7,027	7,382	7,660	7,953
Water heat exchanger	Type				Plate heat exchanger					Shell and tube												
	Water volume			l	26.1	37.35		49.5		158			255					301	485			453
	Water flow rate	Cooling	Nom.	l/s	8.6	10.1	11.5	13.2	15	17.3	20	22.6	25.3	27	28.7	30.6	32.4	36.6	40.7	43.6	47.9	50
	Water pressure drop	Cooling	Nom.	kPa	16.4	13.2	16.2	17.1	21	34.3	31.2	39.7	36.7	41.1	27.1	30.5	33.3	40.5	33.5	37.5	42.4	34.3
Air heat exchanger	Type				Microchannel																	
Compressor	Type				Driven vapour compression																	
	Quantity				1					2												
Fan	Type				Direct propeller																	
	Quantity				6			8		10		12			14	16			18	20	22	
	Air flow rate	Nom.		l/s	22,664			30,219		37,774		45,328			52,883	60,438			67,993	75,547	83,102	
	Speed			rpm	700																	
Sound power level (XSB)	Cooling	Nom.		dBA	96.0	97.0	96.0	97.0	98.0	99				100		101						102
Sound power level (XLB)	Cooling	Nom.		dBA	91	92	91	92	93	94				95		96		97				
Sound pressure level (XSB)	Cooling	Nom.		dBA	77.0				78	79.0						80		79				
Sound pressure level (XLB)	Cooling	Nom.		dBA	72			73		74		73		74				75				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50																	
	Water side	Cooling	Min.~Max.	°CDB	-8~18													-15~20				
Refrigerant	Type/GWP				R-134a/1,430																	
	Charge			kg	36	39	40	51		64		74	80		89	96		104		117	130	143
	Circuits	Quantity			1					2												
Refrigerant charge	Per circuit			TCO2Eq	51.5	55.8	57.2	72.9		45.8		52.9	57.2		63.6	68.6		74.4		83.7	93.0	102.2
Piping connections	Evaporator water inlet/outlet (OD)				88.9 mm			114.3 mm		139.7 mm			168.3 mm						219.1 mm			
Unit	Running current	Cooling	Nom.	A	110	113		186	192	225	231	371.0	383	392	390	387	395	394	451	469	500	537
		Max		A	130	149	166	198	225	256	292	333	358	385	417	450	478	508	562	590	640	694
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Air cooled screw inverter chiller, high efficiency, reduced sound

EWAD-TZXS/XLB/XRB

MicroTech III

› More information about EWAD-TZXRB

Cooling Only				EWAD-TZXRB	190	220	240	290	320	360	420	450	540	570	610	660	680	770	850	910	C10	C11
Space cooling	A Condition 35°C	Pdc		kW	180.41	211.34	239.54	276.79	313.2	360.28	416.8	472.11	528.32	562.28	598.77	638.64	677.38	763.85	850.14	911.93	1,001.2	1,045.41
	ηs,c			%	195	198.6	195.4	203	202.6	194.6	198.2	199	200.2	198.2	202.6	205	204.6	229.8	229.4	233.4	244.2	237.8
Cooling capacity	Nom.			kW	180.4	211.3	239.5	276.8	313.2	360.3	416.8	472.1	528.3	562.3	598.8	638.6	677.4	764	850	912	1,001	1,045
Power input	Cooling	Nom.		kW	52.13	63.22	72.5	83.87	100.2	109.5	132.1	145.6	164.3	181.9	192.5	202	220.9	226.5	266.8	275.4	303.1	320.6
Capacity control	Method				Variable																	
	Minimum capacity			%	34	29	34	29	25	17	16	17	16	15	14	13		10				
EER					3.46	3.343	3.304	3.3	3.127	3.29	3.156	3.243	3.215	3.092	3.111	3.146	3.067	3.373	3.186	3.311	3.302	3.26
IPLV					6.26	6.15	6.19	6.17		6.37	6.3	6.2		6.26	6.27	6.24	6.18	6.26	6.08	6.19	6.29	6.24
Dimensions	Unit	Height		mm	2,483													2,482				
		Width		mm	2,258																	
		Depth		mm	3,183			4,083		4,983		5,883			6,783	7,683		7,783		8,820	9,591	10,461
Weight	Unit			kg	2,462	2,509	2,521	2,870		4,492		4,802	5,000		5,272	5,625		6,997	7,097	7,452	7,730	8,023
	Operation weight			kg	2,488	2,547	2,559	2,920		4,650		4,960	5,255		5,527	5,880		7,247	7,347	7,702	7,980	8,273
Water heat exchanger	Type				Plate heat exchanger					Shell and tube												
	Water volume			l	26.1	37.35		49.5		158			255					301	485			453
	Water flow rate	Cooling	Nom.	l/s	8.6	10.1	11.5	13.2	15	17.2	19.9	22.6	25.3	26.9	28.6	30.5	32.4	36.6	40.7	43.6	47.9	50
	Water pressure drop	Cooling	Nom.	kPa	16.4	13.2	16.2	17.1	21	34.2	31.1	39.7	36.6	41	27.1	30.4	33.2	40.3	33.3	37.3	42.3	34.2
Air heat exchanger	Type				Microchannel																	
Compressor	Type				Driven vapour compression																	
	Quantity				1					2												
Fan	Type				Direct propeller																	
	Quantity				6			8		10		12			14	16				18	20	22
	Air flow rate	Nom.		l/s	22,664			30,219		36,920		44,475			51,745	59,299				66,570	74,124	81,394
	Speed			rpm	700																	
Sound power level	Cooling	Nom.		dBA	88			89		90		91				92		94		95		
Sound pressure level	Cooling	Nom.		dBA	68			69		70						71		73				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50																	
	Water side	Cooling	Min.~Max.	°CDB	-8~18													-15~20				
Refrigerant	Type/GWP				R-134a/1,430																	
	Charge			kg	36	39	40	51		64		74	80		89	96		104		117	130	143
	Circuits	Quantity			1					2												
Refrigerant charge	Per circuit			TCO2Eq	51.5	55.8	57.2	72.9		45.8		52.9	57.2		63.6	68.6		74.4		83.7	93.0	102.2
Piping connections	Evaporator water inlet/outlet (OD)				88.9 mm			114.3 mm		139.7 mm			168.3 mm						219.1 mm			
Unit	Running current	Cooling	Nom.	A	110	113		186	192	226	231	373.0	385	393	391	389	396	395	453	471	502	539
		Max		A	130	149	166	198	225	256	292	333	358	385	417	450	478	508	562	590	640	694
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Air cooled screw inverter chiller, premium efficiency, standard/low sound

- Premium energy efficiency both at full and part load conditions
- Inverter stepless single-screw compressor with DC electrical motor
- Advanced compressor technology featuring integrated inverter and variable volume ratio (VVR)
- Continuous fans speed modulation with EC fans for even higher part load efficiency
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› More information about EWAD-TZPSB

› More information about EWAD-TZPLB

Cooling Only				EWAD-TZPSB/PLB	190	220	240	290	300	350	420	495	550	620	720	820	950
Space cooling	A Condition 35°C	Pdc		kW	183.6	216.12	244.42	281.93	323.37	378.96	437.31	501.15	543.03	620	717	832.86	949.85
	ηs,c			%	204.6	210.2	208.6	209	217	207	211.4	221.8	219	241.4	245.8	249	249.4
SEER					5.2	5.33	5.29	5.3	5.5	5.25	5.36	5.62	5.55	6.11	6.22	6.3	6.31
Cooling capacity	Nom.			kW	183.60	216.1	244.4	281.9	323.4	379	437.3	501.2	543	620	717	833	950
Power input	Cooling	Nom.		kW	50.5	60.72	68.74	83.43	95.89	104.6	124.9	139.1	151.4	178.8	182.3	220.4	252.5
Capacity control	Method				Variable												
	Minimum capacity			%	34	29	34	29	27	19	20	17	10				
EER					3.637	3.559	3.555	3.379	3.372	3.623	3.502	3.603	3.586	3.468	3.933	3.78	3.763
IPLV					6.49	6.35	6.41	6.35	6.21	6.52	6.58	6.55	6.51	6.47	6.73	6.6	6.64
Dimensions	Unit	Height		mm	2,483								2,482				
		Width		mm	2,258												
		Depth		mm	4,083				4,983	5,883	6,783		8,820	9,591		10,461	11,233
Weight (PSB)	Unit			kg	2,758		2,769	2,770	3,020	4,735	5,069	5,077	6,527	6,555	7,650	7,943	8,240
	Operation weight			kg	2,808		2,819	2,820	3,070	4,990	5,324	5,332	6,777	6,805	7,900	8,193	8,490
Weight (PLB)	Unit			kg	2,773		2,784	2,785	3,035	4,765	5,099	5,107	6,527	6,555	7,650	7,943	8,240
	Operation weight			kg	2,823		2,834	2,835	3,085	5,020	5,354	5,362	6,777	6,805	7,900	8,193	8,490
Water heat exchanger	Type				Plate heat exchanger					Shell and tube							
	Water volume			l	49.50					255			307		485		453
	Water flow rate	Cooling	Nom.	l/s	8.8	10.3	11.7	13.5	15.5	18.1	20.9	24	26	29.6	34.3	39.8	45.4
	Water pressure drop	Cooling	Nom.	kPa	10.6	11	13.4	17.1	21.5	20.4	26.5	33.3	19.8	25	24.2	31.7	29
Air heat exchanger	Type				Microchannel												
Compressor	Type				Driven vapour compression												
	Quantity				1					2							
Fan	Type				Direct propeller												
	Quantity				8				10	12	14	16	18	20		22	24
	Air flow rate	Nom.		l/s	29,610				37,013	44,415	51,818	59,220	66,623	74,025		81,428	88,830
	Speed			rpm	700												
Sound power level (PSB)	Cooling	Nom.		dBA	97.0				98	99		100	101				
Sound power level (PLB)	Cooling	Nom.		dBA	91.0	92	91	92		94			97				
Sound pressure level (PSB)	Cooling	Nom.		dBA	77.0					78	77	78	79				
Sound pressure level (PLB)	Cooling	Nom.		dBA	71.0	72	71	72		73	72	73	75				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52										-18~55		
	Water side	Cooling	Min.~Max.	°CDB	-8~18										-15~20		
Refrigerant	Type/GWP				R-134a/1,430												
	Charge			kg	49		50	51	58	77	86	94	105	114	130	143	156
	Circuits	Quantity			1					2							
Refrigerant charge	Per circuit			TCO2Eq	70.1		71.5	72.9	82.9	55.1	61.5	67.2	75.1	81.5	93.0	102.2	111.5
Piping connections	Evaporator water inlet/outlet (OD)				88.9 mm		114.3 mm			168.3 mm					219.1 mm		
Unit	Running current	Cooling	Nom.	A	101	104	172	177		208	211	346	258	298	316	375	424
		Max		A	126	144	162	188	218	246	285	324	352	436	437	512	577
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

Air cooled screw inverter chiller, premium efficiency, reduced sound

EWAD-TZPSB/PLB/PRB

MicroTech III

› More information about EWAD-TZPRB

Cooling Only				EWAD-TZPRB	190	220	240	290	300	350	420	495	550	620	720	820	950
Space cooling	A Condition 35°C	Pdc		kW	187.3	218.24	246.75	279.23	317.21	382.29	436.87	505.48	543.03	620.04	717	832.86	949.86
	ηs,c			%	208.6	212.2	210.6	207	212.2	208.2	210.2	221	218.2	219.8	248.6	249.4	251
SEER					5.29	5.38	5.34	5.25	5.38	5.28	5.33	5.6	5.53	5.57	6.29	6.31	6.35
Cooling capacity	Nom.			kW	187.3	218.2	246.8	279.2	317.2	382.3	436.9	505.5	543	620	717	833	950
Power input	Cooling	Nom.		kW	50.48	60.72	68.74	83.42	95.88	105.1	125.3	139.7	151.3	178.5	182.2	220.2	252.4
Capacity control	Method				Variable												
	Minimum capacity			%	34	29	34	29	27	19	20	17	10				
EER					3.71	3.594	3.59	3.347	3.308	3.637	3.486	3.618	3.59	3.473	3.935	3.783	3.764
IPLV					6.49	6.35	6.23	6.07	6.04	6.3	6.27	6.47	6.53	6.47	6.73	6.6	6.64
Dimensions	Unit	Height		mm	2,483								2,482				
		Width		mm	2,258												
		Depth		mm	4,083				4,983	5,883	6,783		8,820	9,591		10,461	11,233
Weight	Unit			kg	2,858		2,869	2,870	3,120	4,935	5,269	5,277	6,677	6,705	7,970	8,263	8,560
	Operation weight			kg	2,908		2,919	2,920	3,170	5,190	5,524	5,532	6,927	6,955	8,220	8,513	8,810
Water heat exchanger	Type				Plate heat exchanger					Shell and tube							
	Water volume			l	49.5					255			307		485		453
	Water flow rate	Cooling	Nom.	l/s	9	10.4	11.8	13.3	15.2	18.3	20.9	24.2	26	29.6	34.3	39.8	45.4
	Water pressure drop	Cooling	Nom.	kPa	10.6	11	13.4	17.1	21.5	20.4	26.4	33.2	19.8	24.9	24.2	31.7	28.9
Air heat exchanger	Type				Microchannel												
Compressor	Type				Driven vapour compression												
	Quantity				1					2							
Fan	Type				Direct propeller												
	Quantity				8				10	12	14	16	18	20		22	24
	Air flow rate	Nom.		l/s	29,610				37,013	43,369	50,423	57,826	64,879	72,282		79,336	86,738
	Speed			rpm	700												
Sound power level	Cooling	Nom.		dBA	87	88	87	88		89	90		94	95			
Sound pressure level	Cooling	Nom.		dBA	67	68	67	68				69	73				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52										-18~55		
	Water side	Cooling	Min.~Max.	°CDB	-8~18										-15~20		
Refrigerant	Type/GWP				R-134a/1,430												
	Charge			kg	49		50	51	58	77	86	94	105	114	130	143	156
	Circuits	Quantity			1					2							
Refrigerant charge	Per circuit			TCO2Eq	70.1		71.5	72.9	82.9	55.1	61.5	67.2	75.1	81.5	93.0	102.2	111.5
Piping connections	Evaporator water inlet/outlet (OD)				88.9 mm		114.3 mm			168.3 mm					219.1 mm		
Unit	Running current	Cooling	Nom.	A	101	104	172	177		209	212	347	259	300	317	377	426
		Max		A	126	144	162	188	218	246	285	324	352	436	437	512	577
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

Air cooled screw inverter chiller, standard efficiency, standard/low sound

- Optimized energy efficiency both at full and part load conditions
- Inverter stepless single-screw compressor
- Advanced compressor technology featuring integrated inverter and variable volume ratio (VVR)
- HFO R1234zeE Refrigerant with Ozone Depletion Potential equal to zero and extremely low Global Warming Potential
- Low operating sound levels are achieved by the latest compressor and fan design
- One or two truly independent refrigerant circuits for outstanding reliability
- Compact design for small footprint and minimized installation space

› More info about EWAH-TZSSB

› More information about EWAH-TZSLB

Cooling Only				EWAH-TZSSB/SLB	170	200	240	290	330	390	420	490	530	600	690	750	820	920	980	C10
Space cooling	A Condition 35°C	Pdc		kW	170.68	199.73	240.35	293.87	326.19	393.7	421.46	490.52	528.28	598.77	689.86	746.17	820.93	914.93	982.38	1,063.28
	ηs,c			%	166.8	169.44	179.68	186.68	180.56	181.08	180.56	187.04	186.72	190.68	195.04	197.24	206.92	208.12	205.24	202.2
SEER					4.245	4.311	4.567	4.742	4.589	4.602	4.589	4.751	4.743	4.842	4.951	5.006	5.248	5.278	5.206	5.13
Cooling capacity	Nom.			kW	171	200	240	294	326	394	421	491	528	599	690	746	821	915	982	1,063
Power input	Cooling	Nom.		kW	55.4	69.4	83.3	97.5	115	131	146	170	188	212	244	259	280	321	341	378
Capacity control	Method				Variable															
	Minimum capacity			%	33.4	28.6	23.6	18.7		14.3	13.4	11.8	11.2	10						
EER					3.08	2.88	2.89	3.02	2.82	2.99	2.88		2.8	2.82		2.87	2.93	2.85	2.88	2.81
IPLV					5.19	5.22	5.5	5.73	5.52	5.18	5.16	5.4	5.31	5.41	5.66	5.62	5.72	5.7	5.81	5.86
Dimensions	Unit	Height		mm	2,537															
		Width		mm	2,258															
		Depth		mm	2,283			3,183		4,983		5,883		6,783		7,776		8,676	9,576	
Weight	Unit			kg	2,160.6	2,170.6	2,449.4	2,559.4		4,170.2		4,634		5,619		6,820.8	6,942.8	7,262.2	7,553	
	Operation weight			kg	2,186.7	2,207.95	2,486.75	2,608.9		4,329.2	4,323.2	4,890	4,867	5,867	5,920	7,316.8	7,438.8	7,758.2	8,038	8,006
Water heat exchanger	Type				Plate heat exchanger					Shell and tube										
	Water volume			l	26	37		50		159	153	256	233	248	301	496			485	453
	Water flow rate	Cooling	Nom.	l/s	8.2	9.5	11.5	14	15.6	18.8	20.1	23.4	25.2	28.6	33	35.6	39.2	43.7	47	50.8
	Water pressure drop	Cooling	Nom.	kPa	15.1	12.3	17.1	18.2	22	24.4	31.6	33.8	31.1	27.8	34.4	26.3	31.2	38	45.7	34.7
Air heat exchanger	Type				Microchannel															
Compressor	Type				Driven vapour compression															
	Quantity				1					2										
Fan	Type				Direct propeller															
	Quantity				4		6			10		12		14		16		18	20	
	Air flow rate	Nom.		l/s	17,448		26,172			43,620		52,344		61,068		69,792		78,516	87,240	
	Speed			rpm	760															
Sound power level (SSB)	Cooling	Nom.		dBA	97.07	97.53	100.19	101.14		100.59	101.02	103.19	105.6	104.14	104.17	104.19	105.02	106.46	107.18	107.89
Sound power level (SLB)					91.73	92.13	94.69	96,44		95.32	97.69		99.9	99.44	99.51	99.57	99.46	100.8	101.49	102.16
Sound pressure level (SSB)	Cooling	Nom.		dBA	78.10	78.60	80.7	81.70		80.2	80.60	82.40	84.8	83.40	83.00	82.7	83.50	84.70	85.1	85.80
Sound pressure level (SLB)					72.78	73.17	75.2	76.96		74.94	75.31	76.92	79.12	78.67	78.39	78.08	77.97	79.01	79.41	80.08
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50															
	Water side	Cooling	Min.~Max.	°CDB	-8~18															
Refrigerant	Type/GWP				R-1234(ze)/7															
	Charge			kg	27.6		41.4			64.2		78		102		116.8		131.2	146	
	Circuits	Quantity			1					2										
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm		114.3mm			139.7mm		168.3mm				219.1mm				
Unit	Running current	Cooling	Nom.	A	93.0	114.0	137.0	158.0	191.0	217.0	243.0	279.0	307.0	343.0	403.0	426.0	457.0	517.0	546.0	602.0
		Max		A	132.0	156.0	217.0	236.0	272.0	312.0	348.0	434.0	500.0	522.0	606.0	690.0	589.0	661.0	706.0	754.0
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

Air cooled screw inverter chiller, standard efficiency, reduced sound

EWAH-TZSSB/SLB/SRB

Microtech III

HFO R-1234ze

› More information about EWAH-TZSRB

Cooling Only				EWAH-TZSRB	170	200	240	290	330	390	420	490	530	600	690	750	820	920	980	C10
Space cooling	A Condition 35°C	Pdc	kW		170.68	199.73	240.35	293.87	326.19	393.39	421.08	489.94	527.57	597.68	688.98	744.94	819.15	913.23	980.27	1,060.24
	ηs,c		%		166.8	169.44	179.68	186.68	180.56	180.04	181.36	187.4	185.56	189.6	194.04	195.92	204	206.92	203.36	201.2
SEER					4.245	4.311	4.567	4.742	4.589	4.576	4.609	4.76	4.714	4.815	4.926	4.973	5.175	5.248	5.159	5.105
Cooling capacity	Nom.		kW		171	200	240	294	326	393	421	490	528	598	689	745	819	913	980	1,060
Power input	Cooling	Nom.	kW		55.4	69.4	83.3	97.5	115	132	146	171	189	214	245	261	281	323	343	380
Capacity control	Method				Variable															
	Minimum capacity		%		33.4	28.6	23.6	18.7		14.3	13.4	11.8	11.2	10			10.8	10		
EER					3.08	2.88	2.89	3.02	2.82	2.98	2.87	2.86	2.78	2.79	2.8	2.85	2.91	2.83	2.86	2.79
IPLV					5.19	5.22	5.5	5.73	5.52	5.13	5.22	5.38	5.29	5.38	5.62	5.6	5.69	5.66	5.79	5.83
Dimensions	Unit	Height	mm		2,537															
		Width	mm		2,258															
		Depth	mm		2,283			3,183		4,983		5,883		6,783		7,776		8,676	9,576	
Weight	Unit		kg		2,260.6	2,270.6	2,549.4	2,719.4		4,370.2		4,834		5,939		7,140.8	7,262.8	7,582.2	7,873	
	Operation weight		kg		2,286.7	2,307.95	2,586.75	2,768.9		4,529.2	4,523.2	5,090	5,067	6,187	6,240	7,636.8	7,758.8	8,078.2	8,358	8,326
Water heat exchanger	Type				Plate heat exchanger					Shell and tube										
	Water volume		l		26	37		50		159	153	256	233	248	301	496			485	453
	Water flow rate	Cooling	Nom.	l/s	8.2	9.5	11.5	14	15.6	18.8	20.1	23.4	25.2	28.6	32.9	35.6	39.1	43.6	46.9	50.7
	Water pressure drop	Cooling	Nom.	kPa	15.1	12.3	17.1	18.2	22	24.4	31.6	33.7	31	27.7	34.3	26.2	31.1	37.8	45.5	34.5
Air heat exchanger	Type				Microchannel															
Compressor	Type				Driven vapour compression															
	Quantity				1					2										
Fan	Type				Direct propeller															
	Quantity				4		6			10		12			14	16		18	20	
	Air flow rate	Nom.		l/s	17,448		26,172			42,600		51,324			59,709	68,433		76,817	85,541	
	Speed			rpm	760															
Sound power level	Cooling	Nom.		dBA	87.67	87.93	90.25	92.27		91.42	91.65	93.25	94.9	95.27	95.46	95.6	94.85	95.96	96.53	97.07
Sound pressure level	Cooling	Nom.		dBA	68.70	69.00	70.80	72.80		71.00	71.30	72.50	74.10	74.5	74.30	74.10	73.40	74.20	74.50	75.00
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50															
	Water side	Cooling	Min.~Max.	°CDB	-8~18															
Refrigerant	Type/GWP				R-1234(ze)/7															
	Charge			kg	27.6		41.4			64.2		78		102		116.8		131.2	146	
	Circuits	Quantity			1					2										
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm		114.3mm			139.7mm		168.3mm				219.1mm				
Unit	Running current	Cooling	Nom.	A	93.0	114.0	137.0	158.0	191.0	218.0	244.0	281.0	309.0	345.0	405.0	429.0	459.0	519.0	549.0	604.0
		Max		A	132.0	156.0	217.0	236.0	272.0	312.0	348.0	434.0	500.0	522.0	606.0	690.0	589.0	661.0	706.0	754.0
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

Air cooled screw inverter chiller, high efficiency, standard/low sound

- High energy efficiency both at full and part load conditions
- Inverter stepless single-screw compressor with DC electrical motor
- Advanced compressor technology featuring integrated inverter and variable volume ratio (VVR)
- HFO R1234zeE Refrigerant with Ozone Depletion Potential equal to zero and extremely low Global Warming Potential
- Compact design for small footprint and minimized installation space
- Low operating sound levels are achieved by the latest compressor and fan design
- One or two truly independent refrigerant circuits for outstanding reliability
- Continuous fans speed modulation thanks to inverter driven fans to improve part load efficiency

HFO R-1234ze

› More information about EWAH-TZXSB

› More information about EWAH-TZXLB

Cooling Only				EWAH-TZXSB/XLB	180	220	270	300	350	390	430	480	580	620	670	710	760	820	930	990
Space cooling	A Condition 35°C	Pdc		kW	180.38	224.67	270.66	300.22	355	392	427.64	481.86	574.38	619.88	672.62	713.55	759.36	825.01	925.8	988.46
	ηs,c			%	188.68	195.84	194.04	203.08	196.16	196.4	203.28	206.2	214.96	217.88	216.48	220.72	226.8	227.72	227.88	223.6
SEER					4.792	4.971	4.926	5.152	4.979	4.985	5.157	5.23	5.449	5.522	5.487	5.593	5.745	5.768	5.772	5.665
Cooling capacity	Nom.			kW	180	225	271	300	355	392	428	482	574	620	673	714	759	825	926	988
Power input	Cooling	Nom.		kW	51.8	66.3	79	89.6	103	114	125	144	164	181	194	209	224	243	274	307
Capacity control	Method				Variable															
	Minimum capacity			%	33.4	26.7	21.6	18.7	16.7	15.4	14.3	12.5	10.8	10				11.7	10	
EER					3.49	3.39	3.43	3.35	3.44	3.42		3.33	3.5	3.41	3.45	3.4	3.38	3.39	3.37	3.22
IPLV					6.05	6.09	5.92	6.2	5.8	5.81	5.9	6	6.01	6.2	5.99	6.21	6.43	6.32	6.37	6.27
Dimensions	Unit	Height		mm	2,537															
		Width		mm	2,258															
		Depth		mm	3,183	4,083	3,183	4,083	5,883		6,783	7,776	6,783	7,683		8,583	9,483	10,383	11,283	
Weight	Unit			kg	2,447	2,813	2,557	2,923	4,445.2	4,629.2	5,004.6	5,748.6	5,720	6,364.8		7,140.2	7,431	7,879	8,178.2	
	Operation weight			kg	2,484.35	2,862.5	2,606.5	2,972.5	4,598.2	4,870.2	5,237.6	5,981.6	6,021	6,656.8	6,647.8	7,625.2	7,884	8,343	8,631.2	
Water heat exchanger	Type				Plate heat exchanger				Shell and tube											
	Water volume			l	37	50			153	241	233		301	292	283	485	453	464	453	
	Water flow rate	Cooling	Nom.	l/s	8.6	10.7	12.9	14.3	17	18.7	20.4	23	27.4	29.6	32.2	34.1	36.3	39.4	44.2	47.3
	Water pressure drop	Cooling	Nom.	kPa	10.2	11.2	15.7	18.9	23.2	16.7	34.2	26.3	24.7	31.1	39.8	25.6	57	40.5	27	56.2
Air heat exchanger	Type				Microchannel															
Compressor	Type				Driven vapour compressor															
	Quantity				1				2											
Fan	Type				Direct propeller															
	Quantity				6	8	6	8	12		14	16	14	16		18	20	22	24	
	Air flow rate	Nom.		l/s	26,172	34,896	26,172	34,896	52,344		61,068	69,792	61,068	69,792		78,516	87,240	95,964	104,688	
	Speed			rpm	760															
Sound power level (XSB)	Cooling	Nom.		dBA	97.19	98.16	101.14	96.57	100.19	100.4	100.7	101.94	99.44	104.19		104.21	104.22	104.34	105.79	106.49
Sound power level (XLB)					92.14	93.15	96.44	96.57	95.14	95.3	95.68	96.78	99.44	99.57		99.63	99.65	98.92	100.3	100.93
Sound pressure level (XSB)	Cooling	Nom.		dBA	77.7	78.20	81.70	76.60	79.40	79.60		80.40	78.70	82.70		82.40	82.20	82.3	83.20	83.90
Sound pressure level (XLB)					72.65	73.19	76.96	76.62	74.36	74.53	74.55	75.29	78.67	78.12		77.86	77.6	76.87	77.73	78.36
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~55															
	Water side	Cooling	Min.~Max.	°CDB	-8~18															
Refrigerant	Type/GWP				R-1234(ze)/7															
	Charge			kg	39	52	39	52	73.2		84.6	97.6	102	116.8		131.2	146	160	175.2	
	Circuits	Quantity			1				2											
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm	114.3mm			139.7mm	168.3mm						219.1mm				
Unit	Running current	Cooling	Nom.	A	88.5	113.05	131.55	147.5	176.4	193.47	208.66	243.65	272.5	298.67	327.94	351.57	371.7	400.97	448.69	494.78
		Max		A	134	173	190	233	266	286	311	372	403	465	483	534	597	568	619	670
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

Air cooled screw inverter chiller, high efficiency, reduced sound

EWAH-TZXSB/XLB/XRB

Microtech III

HFO R-1234ze

› More information about EWAH-TZXRB

Cooling Only				EWAH-TZXRB	180	220	270	300	350	390	430	480	580	620	670	710	760	820	930	990
Space cooling	A Condition 35°C	Pdc	kW		180.38	224.67	270.66	300.22	354.75	391.7	427.42	481.53	573.98	619.32	671.95	712.95	758.61	824.24	924.69	987.05
	ηs,c		%		188.68	195.84	194.04	203.08	195.44	195.76	202.72	205.68	213.64	217.16	215.52	219.4	226.04	226.28	227.08	222.8
SEER					4.792	4.971	4.926	5.152	4.961	4.969	5.143	5.217	5.416	5.504	5.463	5.56	5.726	5.732	5.752	5.645
Cooling capacity	Nom.		kW		180	225	271	300	355	392	427	482	574	619	672	713	759	824	925	987
Power input	Cooling	Nom.	kW		51.8	66.3	79	89.6	103	115	125	145	164	182	195	210	225	244	275	308
Capacity control	Method				Variable															
	Minimum capacity		%		33.4	26.7	21.6	18.7	16.7	15.4	14.3	12.5	10.8	10				11.7	10	
EER					3.49	3.39	3.43	3.35	3.42	3.41		3.32	3.48	3.39	3.44	3.39	3.36	3.38	3.36	3.2
IPLV					6.05	6.09	5.92	6.2	5.78	5.77	5.88	5.97	5.98	6.17	5.96	6.16	6.41	6.33	6.34	6.24
Dimensions	Unit	Height	mm		2,537															
		Width	mm		2,258															
		Depth	mm		3,183	4,083	3,183	4,083	5,883		6,783	7,776	6,783	7,683		8,583	9,483	10,383	11,283	
Weight	Unit		kg		2,547	2,913	2,717	3,083	4,645.2	4,829.2	5,204.6	5,948.6	6,040	6,684.8		7,460.2	7,751	8,199	8,498.2	
	Operation weight		kg		2,584.35	2,962.5	2,766.5	3,132.5	4,798.2	5,070.2	5,437.6	6,181.6	6,341	6,976.8	6,967.8	7,945.2	8,204	8,663	8,951.2	
Water heat exchanger	Type				Plate heat exchanger				Shell and tube											
	Water volume		l		37	50			153	241	233		301	292	283	485	453	464	453	
	Water flow rate	Cooling	Nom.	l/s	8.6	10.7	12.9	14.3	16.9	18.7	20.4	23	27.4	29.6	32.1	34.1	36.3	39.4	44.2	47.2
	Water pressure drop	Cooling	Nom.	kPa	10.2	11.2	15.7	18.9	23.2	16.6	34.1	26.3	24.7	31.1	39.7	25.6	56.9	40.4	26.9	56
Air heat exchanger	Type				Microchannel															
Compressor	Type				Driven vapour compressor															
	Quantity				1				2											
Fan	Type				Direct propeller															
	Quantity				6	8	6	8	12		14	16	14	16		18	20	22	24	
	Air flow rate	Nom.		l/s	26,172	34,896	26,172	34,896	51,324		59,709	68,433	59,709	68,433		76,817	85,541	93,925	102,649	
	Speed			rpm	760															
Sound power level	Cooling	Nom.		dBA	88.63	89.73	92.27	92.6	91.63	91.73	92.25	93.09	95.27	95.6		95.73	95.8	94.66	95.89	96.34
Sound pressure level	Cooling	Nom.		dBA	69.20	69.80	72.80	72.60	70.90	71.00	71.10	71.6	74.5	74.20		74.00	73.80	72.60	73.30	73.80
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~55															
	Water side	Cooling	Min.~Max.	°CDB	-8~18															
Refrigerant	Type/GWP				R-1234(ze)/7															
	Charge			kg	39	52	39	52	73.2		84.6	97.6	102	116.8		131.2	146	160	175.2	
	Circuits	Quantity			1				2											
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm	114.3mm			139.7mm	168.3mm						219.1mm				
Unit	Running current	Cooling	Nom.	A	88.5	113.05	131.55	147.5	176.9	194.09	209.13	244.41	273.41	299.81	329.23	352.76	373.1	402.29	450.27	496.57
		Max		A	134	173	190	233	266	286	311	372	403	465	483	534	597	568	619	670
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

Air cooled screw inverter chiller, premium efficiency, standard/low sound

› Premium energy efficiency both at full and part load conditions
› Inverter stepless single-screw compressor with DC electrical motor
› Advanced compressor technology featuring integrated inverter and variable volume ratio (VVR)
› HFO R1234zeE Refrigerant with Ozone Depletion Potential equal to zero and extremely low Global Warming Potential
› Compact design for small footprint and minimized installation space
› Low operating sound levels are achieved by the latest compressor and fan design
› One or two truly independent refrigerant circuits for outstanding reliability
› Continuous fans speed modulation with EC fans for even higher part load efficiency

HFO R-1234ze

› More information about EWAH-TZPSB

› More information about EWAH-TZPLB

Cooling Only				TZPSB/PLB	370	440	530	610	690	770
Space cooling	A Condition 35°C	Pdc		kW	371.15	435.24	532.06	606.43	692.3	778.66
	ηs,c			%	206.56	213.68	220.48	224.96	231.2	232.04
SEER					5.239	5.417	5.587	5.699	5.855	5.876
Cooling capacity	Nom.			kW	371	435	532	606	692	779
Power input	Cooling	Nom.		kW	102	121	137	163	186	217
Capacity control	Method				Variable					
	Minimum capacity			%	16.7	14.3	11.7	10		12.8
EER					3.62	3.58	3.86	3.7	3.72	3.58
IPLV					6.15	6.35	6.36	6.35	6.48	6.63
Dimensions	Unit	Height		mm	2,537					
		Width		mm	2,258					
		Depth		mm	7,683	9,483	7,683	8,583	9,483	11,283
Weight	Unit			kg	5,741.4	6,722	6,364.8	7,140.2	7,804.4	8,208.2
	Operation weight			kg	5,982.4	7,023	6,656.8	7,636.2	8,289.4	8,661.2
Water heat exchanger	Type				Shell and tube					
	Water volume			l	241	301	292	496	485	453
	Water flow rate	Cooling	Nom.	l/s	17.7	20.8	25.4	29	33.1	37.2
	Water pressure drop	Cooling	Nom.	kPa	24.4	15	15.3	18	24.3	19.7
Air heat exchanger	Type				Microchannel					
Compressor	Type				Driven vapour compression					
	Quantity				2					
Fan	Type				Direct propeller					
	Quantity				16	20	16	18	22	24
	Air flow rate	Nom.		l/s	251,251.0	314,064	251,251.0	282,658.0	345,470.0	376,877.0
	Speed			rpm	760					
Sound power level (PSB)	Cooling	Nom.		dBA	100.3	100.8	103.24	104.21	104.24	103.7
Sound power level (PLB)	Cooling	Nom.		dBA	95.48	96	98.71	99.63	99.73	98.5
Sound pressure level (PSB)	Cooling	Nom.		dBA	78.80		81.80	82.40	82.2	81.10
Sound pressure level (PLB)	Cooling	Nom.		dBA	74.03	73.96	77.25	77.86	77.68	75.93
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~55					
	Water side	Cooling	Min.~Max.	°CDB	-8~18					
Refrigerant	Type/GWP				R-1234(ze)/7					
	Circuits	Quantity			2					
Refrigerant circuit	Charge			kg	90.4	113	116.8	131.2	160.4	175.2
Refrigerant charge	Per circuit			kg	316.4	395.5	408.8	459.2	561.4	613.2
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm			219.1mm		
Unit	Running current	Cooling	Nom.	A	175.85	205.4	233.82	272.98	316.97	364.19
		Max		A	272	319	350	424	491	536
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400					

Air cooled screw inverter chiller, premium efficiency, reduced sound

EWAH-TZPSB/PLB/PRB

Microtech III

HFO R-1234ze

› More information about EWAH-TZPRB

Cooling Only					EWAH-TZPRB	370	440	530	610	690	770
Space cooling	A Condition 35°C	Pdc		kW		370.96	435.06	531.76	606.09	691.95	778.03
	ηs,c			%		206.04	213.28	219.28	223.8	229.96	231.24
SEER						5.226	5.407	5.557	5.67	5.824	5.856
Cooling capacity	Nom.			kW		371	435	532	606	692	778
Power input	Cooling	Nom.		kW		102	122	138	164	186	218
Capacity control	Method					Variable					
	Minimum capacity			%		16.7	14.3	11.7	10		12.8
EER						3.61	3.57	3.84	3.69	3.7	3.57
IPLV						6.12	6.32			6.42	6.59
Dimensions	Unit	Height		mm		2,537					
		Width		mm		2,258					
		Depth		mm		7,683	9,483	7,683	8,583	9,483	11,283
Weight	Unit			kg		5,941.4	6,922	6,684.8	7,460.2	8,124.4	8,528.2
	Operation weight			kg		6,182.4	7,223	6,976.8	7,956.2	8,609.4	8,981.2
Water heat exchanger	Type					Shell and tube					
	Water volume			l		241	301	292	496	485	453
	Water flow rate	Cooling	Nom.	l/s		17.7	20.8	25.4	28.9	33	37.1
	Water pressure drop	Cooling	Nom.	kPa		24.4	14.9	15.3	18	24.2	19.7
Air heat exchanger	Type					Microchannel					
Compressor	Type					Driven vapour compression					
	Quantity					2					
Fan	Type					Direct propeller					
	Quantity					16	20	16	18	22	24
	Air flow rate	Nom.		l/s		246,359.0	307,948.0	246,359.0	276,541.0	338,130	369,536.0
	Speed			rpm		760					
Sound power level	Cooling	Nom.		dBA		92.37	92.94	94.94	95.73	95.97	94.72
Sound pressure level	Cooling	Nom.		dBA		70.90		73.50	74.00	73.90	72.20
Operation range	Air side	Cooling	Min.~Max.	°CDB		-18~55					
	Water side	Cooling	Min.~Max.	°CDB		-8~18					
Refrigerant	Type/GWP					R-1234(ze)/7					
	Circuits	Quantity				2					
Refrigerant circuit	Charge			kg		90.4	113	116.8	131.2	160.4	175.2
Refrigerant charge	Per circuit			kg		316.4	395.5	408.8	459.2	561.4	613.2
Piping connections	Evaporator water inlet/outlet (OD)						168.3mm			219.1mm	
Unit	Running current	Cooling	Nom.	A		176.22	205.83	234.54	273.8	317.85	365.38
		Max		A		272	319	350	424	491	536
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/400					

Air cooled screw chiller, standard efficiency, standard/low sound

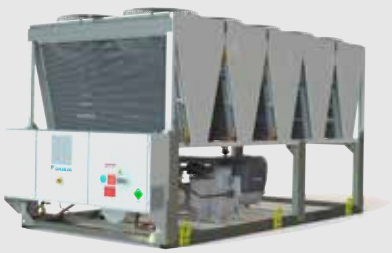
- Low operating cost and extended operating life thanks to the careful design aimed to optimize the energy efficiency of the chillers and to improve installation profitability, effectiveness and economical management
- Advanced compressor and fans design that operate at very low sound levels
- 2 or 3 independent refrigerant circuits for outstanding reliability and maximum safety for maintenance
- Extremely wide range from 290kW to over 2 MW
- Optimised for use with R-134a
- Large operation range (ambient temperature down to -18°C)
- Units with stepless regulation offer the benefit of following the system energy demand at any time with high efficiency if compared to the units with step regulation. Each unit has infinitely variable capacity control from 100% down to 12,5%
- The Microchannel technology maximizes the heat exchange ensuring the highest performance with the minimum surface for the exchanger and a reduced quantity of refrigerant compared to Cu/Al condenser.
- MicroTech III controller with superior control logic and easy interface

› More information about EWAD-T-SSB

› More information about EWAD-T-SLB

Cooling Only				EWAD-T-SSB/SLB	290	330	370	510	520	580	700	800	940	C10	H10	C11	H12	H13	H14	H15	H16	C17	H18	C19	C20	C21
Space cooling	A Condition 35°C	Pdc		kW	290.7	334.5	373.4	505.8	522.7	575.8	701.3	809.9	936.3	999.7	1,051	1,135	1,268	1,352	1,456	1,579	1,684	1,762	1,871	1,967	2,065	2,148
	ηs,c			%	149.5		149.6	161.6	161.1	164.6	161.9	161.7	161.3	161.6	162.1	161.9	161.5	162.1	161.7	161.9	162.7	162.1	161.7	161.5	161.6	161.7
SEER					3.8			4.1		4.2	4.1									4.12	4.14	4.13	4.12	4.11		4.12
Cooling capacity	Nom.			kW	290.7	334.5	373.4	505.8	522.7	575.8	701.3	809.9	936.3	999.7	1,051	1,135	1,268	1,352	1,456	1,579	1,684	1,762	1,871	1,967	2,065	2,148
Power input	Cooling	Nom.		kW	92.73	111.6	120.8	166.6	171	189.6	234.1	266.1	308.3	340.7	362.4	387.9	438.8	464.4	490.7	534	563	605.3	654.1	682.5	710	735.3
Capacity control	Method				Fixed															Stepless						
	Minimum capacity			%	12.5															8.3						
EER					3.135	2.996	3.09	3.037	3.057	3.036	2.996	3.043	3.037	2.934	2.903	2.928	2.89	2.913	2.969	2.956	2.992	2.912	2.861	2.882	2.908	2.922
IPLV					4.48	4.38	4.37	4.83	5.38	5.49	4.93	4.55	4.69	4.61	4.41	4.46		4.5	4.53	4.58	4.61	4.54	4.45	4.46	4.4	4.53
Dimensions	Unit	Height		mm	2,537																					
		Width		mm	2,258						2,282															
		Depth		mm	3,230		4,130		5,030		5,976		6,876			7,776		8,676	9,576	10,509	11,409			12,309	13,209	14,109
Weight	Unit			kg	3,061	4,104	4,724	4,860			5,527	5,525	5,858	6,229	6,520	6,780	8,084	8,426		9,938	10,575		10,636	10,902	11,202	11,422
	Operation weight			kg	3,161	4,274	4,894	5,030			5,825		6,188	6,710	6,981	7,272	8,554	8,887		10,460	11,446		11,589	11,855	12,237	12,457
Water heat exchanger	Type				Shell and tube																					
	Water volume			l	89		181	164	170	164	298	300	330		481	461	492	470	461	522	871		953		1,035	
	Water flow rate	Cooling	Nom.	l/s	13.9	16	17.9	24.2	25	27.6	33.6	38.7	44.8	47.8	50.3	54.3	60.7	64.7	69.8	75.5	80.6	84.4	89.6	94.2	98.9	102.9
	Water pressure drop	Cooling	Nom.	kPa	28.5	31.1	42	30.5	43.6	60.4	51.4	32.4	39.5	44.7	41.6	32.7	34.2	44.5	61.3	43.8	49.3	53.5	56.4	64.5	64.8	69.6
Air heat exchanger	Type				Microchannel																					
Compressor	Type				Driven vapour compression																					
	Quantity				2															3						
Fan	Type				Direct propeller, on/off fans																					
	Quantity				6		8		10		12		14			16		18	20	22	24			26	28	30
	Air flow rate	Nom.		l/s	33,129		44,172		55,214		66,257		77,300			88,343		99,386	110,429	121,472	132,515			143,557	154,600	165,643
	Speed			rpm	900																					
Sound power level (SSB)	Cooling	Nom.		dBA	98			101						102					103							
Sound power level (SLB)	Cooling	Nom.		dBA	94	95		97			96	97	98	97		98					100					
Sound pressure level (SSB)	Cooling	Nom.		dBA	78			81			83				84						80					
Sound pressure level (SLB)	Cooling	Nom.		dBA	74	75		77			79			80			79			76	77					
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50																					
	Water side	Cooling	Min.~Max.	°CDB	-8~18																					
Refrigerant	Type/GWP				R-134a/1,430																					
	Charge			kg	50	55	58	66	67		93.6		109.2			124.8		140.4	156	172	187			203	218	234
	Circuits	Quantity			2															3						
Refrigerant charge	Per circuit			TCO2Eq	35.75		39.32	41.47	47.19	47.90	66.92		78.08			89.23		100.39	111.54	81.99	89.14			96.76	103.91	111.54
Piping connections	Evaporator water inlet/outlet (OD)				114.3 mm		139.7 mm				168.3 mm					219.1 mm					273 mm					
Unit	Starting current	Max		A	253	264	306	470	493		574	645	697	705	773	797	877	925	933	1,075	1,161	1,217		1,270	1,324	
	Running current	Cooling	Nom.	A	76.76	94.25	195.63	144.71	148.11	171.97	370.76	422.34	486.54	534.13	572.46	610	692.46	727.9	763.34	839	885	951	1,029	1,073	1,118	1,158
		Max		A	211	242	272	345.00	373	395	492	536	621	675	709	768	838	897	956	986	1,118	1,188	1,257	1,323	1,389	1,455
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																					

Air cooled screw chiller, standard efficiency, reduced sound



EWAD-TSSB/SLB/SRB

MicroTech III

› More information about EWAD-T-SRB

Cooling Only				EWAD-T-SRB	700	800	940	C10	H10	C11	H12	H13	H14	H15	H16	C17	H18	C19	C20	21
Space cooling	A Condition 35°C	Pdc		kW	684.7	786.9	909	967.5	1,014	1,099	1,216	1,302	1,408	1,525	1,632	1,702	1,798	1,894	1,992	2,077
	ηs,c			%	161.3	161.1	161.0	161.2	161.3	161.1	161.2			161.0	161.9	161.3	161.1	160.9	161.1	161.2
SEER					4.1										4.12	4.11	4.1			
Cooling capacity	Nom.			kW	684.7	786.9	909	967.5	1,014	1,099	1,216	1,302	1,408	1,525	1,632	1,702	1,798	1,894	1,992	2,077
Power input	Cooling	Nom.		kW	236.6	270.7	314.8	351.1	373	398	453.8	478.7	504.2	547.5	575.4	622.1	675.9	703.7	730.9	755.5
Capacity control	Method				Fixed									Stepless						
	Minimum capacity			%	12.5									8.3						
EER					2.894	2.907	2.89	2.755	2.719	2.762	2.681	2.722	2.793	2.785	2.837	2.736	2.66	2.691	2.725	2.75
IPLV					4.9	4.56	4.57	4.45	4.39	4.44	4.43	4.49		4.6	4.62	4.54	4.44	4.46	4.4	4.53
Dimensions	Unit	Height		mm	2,537															
		Width		mm	2,282															
		Depth		mm	5,976		6,876			7,776		8,676	9,576	10,509	11,409			12,309	13,209	14,109
Weight	Unit			kg	5,527	5,525	5,858		6,229	6,520	6,780	8,084	8,426	10,588	11,225		11,286	11,552	11,852	12,072
	Operation weight			kg	5,825		6,188		6,710	6,981	7,272	8,554	8,887	11,110	12,096		12,239	12,505	12,887	13,107
Water heat exchanger	Type				Shell and tube															
	Water volume			l	298	300	330		481	461	492	470	461	522	871		953		1,035	
	Water flow rate	Cooling	Nom.	l/s	32.8	37.6	43.5	46.3	48.5	52.6	58.2	62.3	67.4	73	78.1	81.5	86.1	90.7	95.4	99.5
	Water pressure drop	Cooling	Nom.	kPa	49.2	30.7	37.5	42.2	39	30.8	31.7	41.6	57.7	41.1	46.5	50.2	52.5	60.2	60.7	65.5
Air heat exchanger	Type				Microchannel															
Compressor	Type				Driven vapour compression															
	Quantity				2									3						
Fan	Type				Direct propeller, on/off fans															
	Quantity				12		14			16		18	20	22	24			26	28	30
	Air flow rate	Nom.		l/s	52,172		60,868			69,563		78,258	86,954	95,649	104,344			113,040	121,735	130,431
	Speed			rpm	760									700						
Sound power level	Cooling	Nom.		dBA	91			92				93		95				96		
Sound pressure level	Cooling	Nom.		dBA	73	74	73	74						72			73			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~46									-18~50						
	Water side	Cooling	Min.~Max.	°CDB	-8~18															
Refrigerant	Type/GWP				R-134a/1,430															
	Charge			kg	93.6		109.2			124.8		140.4	156	172	187			203	218	234
	Circuits	Quantity			2									3						
Refrigerant charge	Per circuit			TCO2Eq	66.92		78.08			89.23		100.39	111.54	81.99	89.14			96.76	103.91	111.54
Piping connections	Evaporator water inlet/outlet (OD)				168.3 mm				219.1 mm						273 mm					
Unit	Starting current	Max		A	567	638	693	701	766	786	868	914	922	1,057	1,143	1,199		1,250	1,301	
	Running current	Cooling	Nom.	A	376.73	431.76	499.71	554.32	592.7	629.99	720.93	755.84	790.74	864	909	984	1,070	1,115	1,161	1,201
		Max		A	478	523	605	659	693	750	820	876	933	961	1,091	1,160	1,230	1,293	1,357	1,420
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

Air cooled screw chiller, high efficiency, standard/low sound

- Low operating cost and extended operating life thanks to the careful design aimed to optimize the energy efficiency of the chillers and to improve installation profitability, effectiveness and economical management
- Advanced compressor and fans design that operate at very low sound levels
- 2 or 3 independent refrigerant circuits for outstanding reliability and maximum safety for maintenance
- Extremely wide range from 290kW to over 2 MW
- Optimised for use with R-134a
- Large operation range (ambient temperature down to -18°C)
- Units with stepless regulation offer the benefit of following the system energy demand at any time with high efficiency if compared to the units with step regulation. Each unit has infinitely variable capacity control from 100% down to 12,5%
- The Microchannel technology maximizes the heat exchange ensuring the highest performance with the minimum surface for the exchanger and a reduced quantity of refrigerant compared to Cu/Al condenser.
- MicroTech III controller with superior control logic and easy interface

› More information about EWAD-T-XSB

› More information about EWAD-T-XLB

Cooling Only				EWAD-T-XSB/XLB	350	380	400	420	440	490	540	570	730	820	950	C10	H10	H11	C13	H13	C14	H15	H16	C17	18	C19	C20
Space cooling	A Condition 35°C	Pdc		kW	351.5	376.9	398.3	415.2	437.9	491.7	541.2	564.8	725.4	831.9	943.5	1,008	1,077	1,164	1,308	1,390	1,454	1,606	1,705	1,836	1,952	2,027	2,088
	ηs,c			%	154.6	155.1	162.1	161.2	161.1	168.0	171.7	168.0	167.1	164.5	169.6	166.3	166.7	167.1		166.7	164.7	164.8	163.7	164.9	168.1	166.8	167.0
SEER					3.9	4.0		4.1		4.3	4.4	4.3		4.2	4.3	4.2		4.3		4.2		4.19	4.17	4.20	4.28	4.24	4.25
Cooling capacity	Nom.			kW	351.5	376.9	398.3	415.2	437.9	491.7	541.2	564.8	725.4	831.9	943.5	1,008	1,077	1,164	1,308	1,390	1,454	1,606	1,705	1,836	1,952	2,027	2,088
Power input	Cooling	Nom.		kW	106.1	114.9	121.4	128.8	138.5	159.1	166.6	177.8	234.6	267.5	299.3	333.1	347.2	374.7	421.1	447.1	481.7	520.7	552.3	589.3	624.4	662.6	699
Capacity control	Method				Fixed																	Stepless				
	Minimum capacity			%	12.5																	8.3				
EER					3.314	3.28		3.224	3.163	3.091	3.248	3.177	3.092	3.11	3.152	3.027	3.103	3.108	3.107	3.109	3.019	3.085	3.088	3.115	3.126	3.059	2.987
IPLV					4.6	4.55	4.76	4.61	4.57	5.46	5.49	5.3	4.93	4.65	5.17	4.69	4.63	4.66	4.64	4.68	4.63	4.5	4.51	4.55	4.56	4.53	4.48
Dimensions	Unit	Height		mm	2,537																						
		Width		mm	2,258								2,282														
		Depth		mm	4,130			5,030			5,878		5,976		7,776		8,676	9,576		10,476		11,409	12,309	13,209	14,109		
Weight	Unit			kg	4,054	4,064		4,360		4,860	5,397	5,387	5,315	5,525	6,121		7,798	8,126	8,386	8,751	8,765	10,575	10,841	10,711	10,931	11,451	
	Operation weight			kg	4,224	4,234		4,530		5,030	5,567	5,557	5,604	5,825	6,451		8,259	8,587	8,878	9,232	9,235	11,446	11,712	11,233	11,453	12,461	
Water heat exchanger	Type				Shell and tube																						
	Water volume			l	134	129		170			164	170	289	300	330		461		492	481	470	871		522		1,010	
	Water flow rate	Cooling	Nom.	l/s	16.8	18	19	19.8	20.9	23.5	25.9	27	34.7	39.8	45.1	48.3	51.6	55.8	62.6	66.5	69.6	76.9	81.6	87.9	93.5	97.1	100
	Water pressure drop	Cooling	Nom.	kPa	20.1	26.3	25.1	19.3	21.1	42.7	34.1	33.4	33	36.8	40.8	46	51.9	60.5	36.2	40.4	50.8	45.2	50.4	54.5	63.6	62.7	66.1
Air heat exchanger	Type				Microchannel																						
Compressor	Type				Driven vapour compression																						
	Quantity				2																	3					
Fan	Type				Direct propeller, on/off fans																						
	Quantity				8		10			12					16		18	20		22		24	26	28	30		
	Air flow rate	Nom.		l/s	44,172		55,214			66,257					88,343		99,386	110,429		121,472		132,515	143,557	154,600	165,643		
	Speed			rpm	900																						
Sound power level (XSB)	Cooling	Nom.		dBA	98					101			99		100			101				103					
Sound power level (XLB)					95					97					98			99				100			98	99	
Sound pressure level(XSB)	Cooling	Nom.		dBA	78					81			82	81	82	81		82				80		79		80	
Sound pressure level(XLB)					75					77			79	80	79	80		79				77					
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~53																						
	Water side	Cooling	Min.~Max.	°CDB	-8~18																						
Refrigerant	Type/GWP				R-134a/1,430																						
	Charge			kg	52	54	65	66			72		93.6		124.8		140.4	156		171.6		187	203	218	234		
	Circuits	Quantity			2																	3					
Refrigerant charge	Per circuit			TCO2Eq	37.18	38.61	46.48	47.19			51.48		66.92		89.23		100.39	111.54		122.69		89.14	96.76	103.91	111.54		
Piping connections	Evaporator water inlet/outlet (OD)				139.7 mm								168.3 mm					219.1 mm				273 mm					
Unit	Starting current	Max		A	253	296	311	399	422	475	493		574	645	703	705	778	802	883	931	939	1,075	1,166	1,227		1,276	1,324
	Running current	Cooling	Nom.	A	174.38	97.83	114.97	114.79	129.16	147.79	141.98	158.14	372.87	424.09	471.71	521	546.1	584.5	662.5	699.2	749.6	818	867	924	978	1,040	1,099
		Max		A	248	260	277	299	322.00	351	378	401	492	536	626	680	719	778	848	907	961	991	1,123	1,198	1,273	1,333	1,394
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																						

Air cooled screw chiller, high efficiency, reduced sound

EWAD-T-XSB/XLB/XRB

MicroTech III

› More information about EWAD-T-XRB

Cooling Only				EWAD-T-XRB	730	820	950	C10	H10	H11	C13	H13	C14	H15	H16	C17	H18	C19	C20
Space cooling	A Condition 35°C	Pdc		kW	707.6	807.8	922.1	982.4	1,053	1,164.0	1,273	1,355	1,412.0	1,563	1,661	1,789	1,903	1,970	2,024
	ηs,c			%	165.4	163.9	167.5	165.1	165.4	166.3	165.9	165.5	163.8	164.3	163.3	164.5	166.488	165.13	165.732
SEER					4.2		4.3		4.2					4.18	4.16	4.19	4.24	4.20	4.22
Cooling capacity	Nom.			kW	707.6	807.8	922.1	982.4	1,053	1,164	1,273	1,355	1,412	1,563	1,661	1,789	1,903	1,970	2,024
Power input	Cooling	Nom.		kW	237.3	272.1	301.1	338.9	348	374.7	426.4	452	490.7	528.7	559.8	596.8	631.7	674.4	714.9
Capacity control	Method				Fixed									Stepless					
	Minimum capacity			%	12.5									8.3					
EER					2.982	2.968	3.063	2.898	3.018	3.108	2.986	2.998	2.879	2.956	2.968	2.997	3.013	2.921	2.831
IPLV					4.92	4.56	5.1	4.57	4.65	4.67	4.65	4.69	4.62	4.51	4.53	4.56	4.57	4.54	4.48
Dimensions	Unit	Height		mm	2,537														
		Width		mm	2,282														
		Depth		mm	5,976		7,776		8,676	9,576		10,476		11,409	12,309	13,209	14,109		
Weight	Unit			kg	5,315	5,525	6,121		7,798	8,126	8,386	8,751	8,765	11,225	11,491	11,361	11,581	12,101	
	Operation weight			kg	5,604	5,825	6,451		8,259	8,587	8,878	9,232	9,235	12,096	12,362	11,883	12,103	13,111	
Water heat exchanger	Type				Shell and tube														
	Water volume			l	289	300	330		461		492	481	470	871		522		1,010	
	Water flow rate	Cooling	Nom.	l/s	33.8	38.6	44.1	47	50.4	55.8	60.9	64.8	67.6	74.8	79.5	85.6	91.1	94.3	96.9
	Water pressure drop	Cooling	Nom.	kPa	31.6	34.9	39.2	43.9	49.8	60.5	34.4	38.5	48.2	43	48.1	52	60.8	59.5	62.5
Air heat exchanger	Type				Microchannel														
Compressor	Type				Driven vapour compression														
	Quantity				2									3					
Fan	Type				Direct propeller, on/off fans														
	Quantity				12		16		18	20		22		24	26	28	30		
	Air flow rate	Nom.		l/s	52,172		69,563		78,258	110,429	86,954	95,649		104,344	113,040	121,735	130,431		
	Speed			rpm	760				900	760				700					
Sound power level	Cooling	Nom.		dBA	91		92		93					97				98	
Sound pressure level	Cooling	Nom.		dBA	73	74	73	74	73		74			75	74				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~46									-18~53					
	Water side	Cooling	Min.~Max.	°CDB	-8~18														
Refrigerant	Type/GWP				R-134a/1,430														
	Charge			kg	93.6		124.8		140.4	156		171.6		187	203	218	234		
	Circuits	Quantity			2									3					
Refrigerant charge	Per circuit			TCO2Eq	66.92		89.23		100.39	111.54		122.69		89.14	96.76	103.91	111.54		
Piping connections	Evaporator water inlet/outlet (OD)				168.3 mm				219.1 mm					273 mm					
Unit	Starting current	Max		A	567	638	696	701	769	802	871	917	925	1,057	1,146	1,204		1,253	1,301
	Running current	Cooling	Nom.	A	379.04	433.58	477.39	533.75	552.3	584.5	675.01	711.6	769.5	834	883	941	995	1,067	1,134
		Max		A	478	523	608	662	699	778	826	882	936	964	1,093	1,166	1,239	1,299	1,360
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400														

EWAT-B- Multi scroll Air cooled chiller with R-32 refrigerant

EWAT-B- at a glance

BLUEVOLUTION

- Wide capacity range: 80 – 700 kW
- Silver and Gold efficiency versions
- 3 sound configurations
- Full compatibility with Daikin on Site
- New Hydronic Kit configurations
  (single and twin pump, inertial tank, VFD)
- Single and dual circuit version overlapping between 150 kW and 350 kW
- Extensive option lists
- Fan speed modulation option (VFD)

Single V

Modular V

Daikin, world's first company introducing a new generation of air cooled scroll chiller series with R-32 refrigerant.

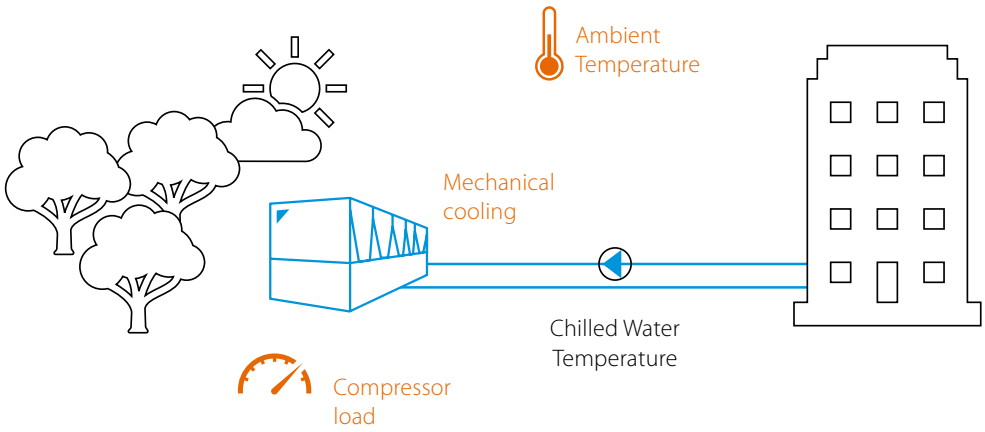
Environmental friendly refrigerant → First in the market
New R-32 optimized scroll compressors and heat exchangers

The Global Warming Potential (GWP) of R-32 refrigerant is 675, which is only one third compared to commonly used refrigerant R-410 The low GWP R-32 refrigerant falls into category class A2L in ISO817 and it can be safely used in many applications including chilled water systems As a single component refrigerant, R-32 is also easier to recycle and reuse, another environmental plus in its favour

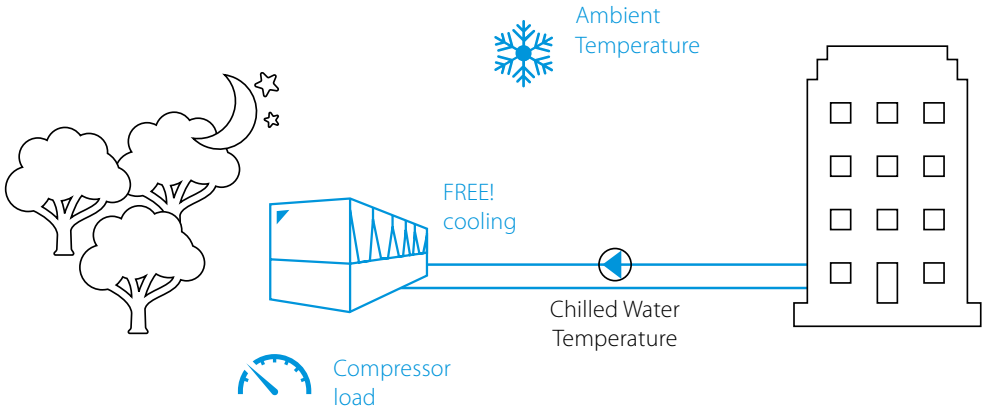
New free-cooling options

What is free cooling?

It's the capability of a system/equipment to cool air or water by taking advantage of the **favorable outdoor conditions** when ambient temperature is reducing, for example during winter or intermediate season or even during night time operation.



Free cooling operation allows to **reduce the power consumption** generated by traditional mechanical cooling (e.g. Compressors).



BLUEVOLUTION + FREE cooling

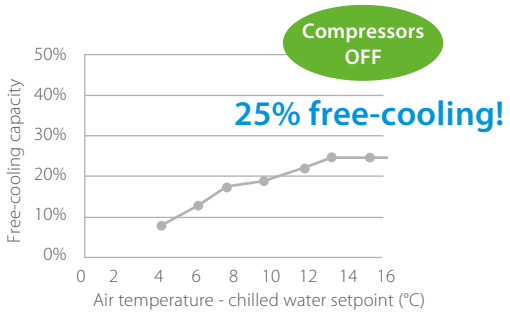
The new Daikin R-32 chiller series can be offered with innovative free-cooling options to further improve energy efficiency and reduce running costs

Free-cooling - Light

Refrigerant migration system allowing
to recover up to 25% of normal unit capacity

Benefits

› Glycol free solution
› No refrigerant pump required
› No extra footprint vs standard unit
› No extra pressure drops on water side



Free-cooling - Full

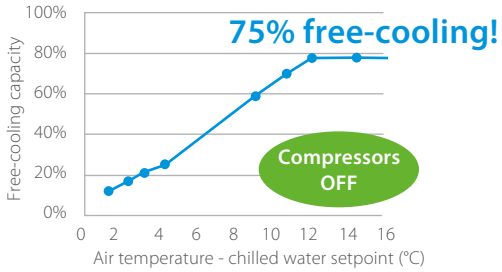
PATENTED

Refrigerant migration system allowing
to recover up to 75% of normal unit capacity

Benefits

› 75% free-cooling due to additional "Shell & Tube" refrigerant to water erchanger (compared to Light version)
› Glycol free solution
› No refrigerant pump required
› No extra footprint vs standard unit*
› No extra pressure drops on water side

(*) except 4 fans model



Air cooled scroll chiller, standard efficiency, standard/low sound

› First R-32 air cooled chiller with Scroll compressors in the market
› Choosing for an R-32 product, reduces the environmental impact with 68% compared to R-410A and leads directly to lower energy consumption thanks to its high energy efficiency
› One or two truly independent refrigerant circuits for outstanding reliability
› MicroTech III controller with superior control logic and easy interface
› Low operating cost and extended operating life thanks to the careful design aimed to optimize the energy efficiency of the chillers and to improve installation profitability, effectiveness and economical management
› Fan speed modulation to ensure precise airflow control and optimized condensing temperature
› Possible to set up detailed time bands to reduce fan rotation speed and therefore sound emission
› Thanks to the Dynamic Condensing Pressure Management, the chiller controller adjusts the condensing pressure set-point to minimize the overall chiller power input

› More information about EWAT-B-SS

› More information about EWAT-B-SL

Cooling Only					**EWAT-B-SS/SL**	**085**	**115**	**135**	**155**	**175**	**195**	**205**	**215**	**240**	**260**	**290**	**310**	**330**	**340**	**350**	**420**	**460**	**510**	**570**	**610**	**670**
Space cooling	A Condition 35°C	Pdc		kW		80.92	108.73	131.2	157.55	174.49	190.91	209.86	216.55	240.44	259.39	281.85	305.6	328.59	342	348.88	414.98	465.75	511.1	564.43	609.05	664.62
	ηs,c			%		149	161.8	149		163	157.8	159.8	151	165.4	155.4	168.2	166.2	167.4	169.8	161.4	174.6	171	172.2	169.8	171.4	
	ηs,c + VFDFAN					-								169	158,6	172,6	170,2	171	177	163,8	177,4	175,4	176,6	173,4	173,8	177,4
SEER						3.8	4.12	3.8		4.15	4.02	4.07	3.85	4.21	3.96	4.28	4.23	4.26	4.32	4.11	4.44	4.35	4.38	4.32	4.36	
SEER + VFDFAN						-								4.3	4.04	4.39	4.33	4.35	4.5	4.17	4.51	4.46	4.49	4.41	4.42	4.51
Cooling capacity	Nom.			kW		80.92	108.73	131.2	157.55	174.49	190.91	209.86	216.55	240.44	259.39	281.85	305.6	328.59	342	348.88	414.98	465.75	511.1	564.43	609.05	664.62
Power input	Cooling	Nom.		kW		31.8	38.5	49.8	61.8	67.7	69.4	79.8	85.6	85.3	95.7	108	112	121	117	132	146	171	186	216	230	239
Capacity control	Method					Staged			Var.	Staged	Variable		Staged	Variable												
	Minimum capacity			%		50	38	50	25	38	21	19	50	17	25	24	14	13	33	19	17	15	14	12	11	17
EER						2.55	2.82	2.64	2.55	2.58	2.75	2.63	2.53	2.82	2.71	2.61	2.71	2.7	2.92	2.64	2.83	2.72	2.74	2.61	2.64	2.78
IPLV						4.65	4.92	4.46	4.68	4.78	4.8	4.87	4.49	4.66	4.46	4.76	4.67	4.65	4.77	4.58	4.77	4.75	4.7	4.74	4.71	4.73
EER + VFDFAN						-								2.81	2.71	2.61	2.71	2.69	2.91	2.64	2.82	2.71	2.74	2.61	2.64	2.77
IPLV + VFDFAN						-								4.77	4.59	4.88	4.85	4.73	4.84	4.71	4.89	4.92	4.81	4.82	4.78	4.96
Dimensions	Unit	Height		mm		1,801			1,822	1,801	1,822			2,540												
		Width		mm		1,204								2,236												
		Depth		mm		2,120	2,660		3,570	3,180	4,170		3,780	2,326			3,226				4,126			5,025	5,874	
Weight (SS)	Unit			kg		679	763	810	1,005	983	1,164	1,156	1,191	1,660	1,688	1,853	2,096	2,123	2,247	2,304	2,600	2,921	2,913	3,148	3,554	3,888
	Operation weight			kg		686	773	820	1,014	996	1,177	1,169	1,210	1,668	1,694	1,869	2,114	2,141	2,268	2,324	2,630	2,954	2,946	3,195	3,597	3,924
Water heat exchanger	Type					Brazed plate																				
	Water volume			l		5	6	9	7	12	11		16	11		16	19		20	19	28			42		
	Water flow rate	Cooling	Nom.	l/s		3.9	5.2	6.3	7.6	8.4	9.1	10.1	10.4	11.5	12.4	13.5	14.6	15.7	16.4	16.7	19.9	22.3	24.5	27	29.2	31.9
	Water pressure drop	Cooling	Nom.	kPa		27.3	34.4	26.5	64.2	41.7	45.9	54.4	41.4	69.7	80	66.7	46.4	52.9	77.2	59	54.5	67.2	79.6	65.4	75.1	88
Air heat exchanger	Type					Microchannel																				
Compressor	Type					Driven vapour compression																				
	Quantity					2			4	2	4		2	4		3	4		3	4		5		6		
Fan	Type					Direct propeller																				
	Quantity					4	6		8		10			4			5		6	5	7		8		9	11
	Air flow rate	Nom.		l/s		6,022	9,036		13,354	12,023	16,710		15,057	20,306			25,382		30,459	25,382	35,535		40,612		45,688	55,841
	Speed			rpm		1,360								900												
Sound power level (SS)	Cooling	Nom.		dBA		84.8	88.2	89.7	87.8	91.8	89.9	90.9	93.2	93.3	93.8	94.8	94.9	95.3	96.1	95.6	96.7	97.0	97.6	97.8	98.3	99.0
Sound power level (SL)	Cooling	Nom.		dBA		83.7	86.2	87.0	86.7	88.8	88.1	88.7	90.0	90.8	90.8	91.0	91.8	91.9	92.7	91.9	93.3	93.4	93.9	94.0	94.5	95.3
Sound pressure level (SS)	Cooling	Nom.		dBA		67.4	70.5	72.0	69.5	73.8	71.3	72.3	74.8	74.3	74.8	75.8	75.4	75.8	76.6	76.1	76.7	77.0	77.6	77.9		78.2
Sound pressure level (SL)	Cooling	Nom.		dBA		66.3	68.5	69.3	68.4	70.7	69.5	70.1	71.6	71.8	71.8	72.0	72.3	72.4	73.2	72.4	73.3	73.4	74.0	74.0	74.1	74.6
Operation range	Air side	Cooling	Min.~Max.	°CDB		-10~43								-18~43												
	Water side	Cooling	Min.~Max.	°CDB		-13~20																				
Refrigerant	Type/GWP					R-32/675																				
	Charge			kg		10	11	12.5	15	14	18		17	36	38	36	42	43	50	44	57	58	60	62	80	90
	Circuits	Quantity				1			2	1	2		1	2		1	2		1	2						
Piping connections	Evaporator water inlet/outlet (OD)					76.1			88.9	76.1	88.9		76.1	88.9		76.1	88.9		76.1	88.9				114.3		
Unit	Starting current	Max		A		213	313	324	284	462	384	395	498	411	422	546	572	583	587	595	635	680	717	761	798	839
	Running current	Cooling	Nom.	A		59	69	83	112	113	122	136	142	147.0	160	179	194	207	197	220	238	285	310	358	382	399
		Max		A		73	86	96	143	132	156	167	168	183	195	215	241	253	256	264	305	349	386	431	467	508
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/400																				

Air cooled scroll chiller, standard efficiency, reduced sound

EWAT-B-SS/SL/SR Modular V

Single V

Microtech III

› More information about EWAT-B-SR

Cooling Only				EWAT-B-SR	085	115	135	155	175	195	205	215	240	260	290	310	330	340	350	420	460	510	570	610	670
Space cooling	A Condition 35°C	Pdc		kW	76.32	104.78	123.67	149.61	164.58	180.89	199.92	203.05	230.33	247.63	265.52	289.52	310.75	328.17	329.79	397.33	441.96	486.05	532.44	576.51	634.99
	ηs,c			%	149	161.4	149		163.8	153	153.8	149.8	168.6	157.4	167.4	165	167.4	173	158.6	173.8	171	173.4	169	171.8	173.4
SEER					3.8	4.11	3.8		4.17	3.9	3.92	3.82	4.29	4.01	4.26	4.2	4.26	4.4	4.04	4.42	4.35	4.41	4.3	4.37	4.41
Cooling capacity	Nom.			kW	76.32	104.78	123.67	149.61	164.58	180.89	199.92	203.05	230.33	247.63	265.52	289.52	310.75	328.17	329.79	397.33	441.96	486.05	532.44	576.51	634.99
Power input	Cooling	Nom.		kW	33.8	40.3	53.1	65.9	72.8	73.2	84.7	91.9	89.1	100	115	118	129	122	140	147	181	197	230	244	251
Capacity control	Method				Staged								Variable												
	Minimum capacity			%	50	38	50	25	38	21	19	50	17	25	24	14	13	33	19	17	15	14	12	11	17
EER					2.26	2.6	2.33	2.27	2.26	2.47	2.36	2.21	2.59	2.48	2.3	2.44	2.41	2.69	2.35	2.7	2.43	2.46	2.31	2.35	2.53
IPLV					4.67	4.97	4.5	4.63	4.74	4.62	4.72	4.36	4.88	4.63	4.84	4.83	4.72	5.01	4.7	4.81	4.86	4.75	4.84		4.89
Dimensions	Unit	Height		mm	1,801			1,822	1,801		1,822		2,540												
		Width		mm	1,204								2,236												
		Depth		mm	2.120	2.660		3,570	3,180	4,170		3,780	2,326			3,226				4,126			5,025		5,874
Weight	Unit			kg	689	773	820	1,026	993	1,185	1,177	1,191	1,815	1,843	1935	2,251	2,277	2,330	2,304	2,754	2,921	3,078	3,312	3,718	4,053
	Operation weight			kg	696	783	830	1,035	1,006	1,198	1,190	1,210	1,822	1,849	1951	2,268	2,296	2,350	2,324	2,784	2,954	3,111	3,360	3,762	4,089
Water heat exchanger	Type				Brazed plate																				
	Water volume			l	5	6	9	7	12	11		16	11		16	19		20	19	28			42		
	Water flow rate	Cooling	Nom.	l/s	3.7	5	5.9	7.2	7.9	8.7	9.6	9.7	11	11.9	12.7	13.9	14.9	15.7	15.8	19	21.2	23.3	25.5	27.6	30.4
	Water pressure drop	Cooling	Nom.	kPa	24.6	32.2	23.8	58.5	37.5	41.6	49.9	36.8	64.5	73.5	59.9	42.1	47.8	71.7	53.2	50.4	61.1	72.7	58.9	68	81
Air heat exchanger	Type				Microchannel																				
Compressor	Type				Driven vapour compression																				
	Quantity				2			4	2	4		2	4		3	4		3	4		5			6	
Fan	Type				Direct propeller																				
	Quantity				4	6		8		10			4			5		6	5	7		8		9	11
	Air flow rate	Nom.		l/s	4,929	7,396		11,352	9,838	14,202		12,325	17,064			21,330				29,862		34,128		38,394	46,926
	Speed			rpm	1,200								780												
Sound power level	Cooling	Nom.		dBA	78.6	82.5	84.1	81.6	86.3	83.9	85.2	87.8	87	87.2	87.5	88.2	88.3	89.1	88.4	89.8		90.4	90.5	91	91.8
Sound pressure level	Cooling	Nom.		dBA	61.2	64.7	66.4	63.3	68.3	65.3	66.6	69.4	68.1	68.2	68.5	68.7	68.8	69.6	68.9	69.8	69.9	70.5		70.6	71.1
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~43								-18~43												
	Water side	Cooling	Min.~Max.	°CDB	-13~20																				
Refrigerant	Type/GWP				R-32/675																				
	Charge			kg	10	11	12.5	15	14	18		17	36	38	36	42	43	50	44	57	58	60	62	80	90
	Circuits	Quantity			1			2	1	2		1	2		1	2		1		2					
Piping connections	Evaporator water inlet/outlet (OD)				76.1			88.9	76.1	88.9		76.1	88.9		76.1	88.9		76.1		88.9			114.3		
Unit	Starting current	Max		A	213	313	324	284	462	384	395	498	411	422	546	572	583	587	595	635	680	717	761	798	839
	Running current	Cooling	Nom.	A	62	71	87	119	119	128	143	151	151	165	189	203	216	202	231	245	298	324	378	402	414
		Max		A	73	86	96	143	132	156	167	168	183	195	215	241	253	256	264	305	349	386	431	467	508
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																				

Air cooled scroll chiller, high efficiency, standard/low sound

› First R-32 air cooled chiller with Scroll compressors in the market
› Choosing for an R-32 product, reduces the environmental impact with 68% compared to R-410A and leads directly to lower energy consumption thanks to its high energy efficiency
› One or two truly independent refrigerant circuits for outstanding reliability
› MicroTech III controller with superior control logic and easy interface
› Low operating cost and extended operating life thanks to the careful design aimed to optimize the energy efficiency of the chillers and to improve installation profitability, effectiveness and economical management
› Fan speed modulation to ensure precise airflow control and optimized condensing temperature
› Possible to set up detailed time bands to reduce fan rotation speed and therefore sound emission
› Thanks to the Dynamic Condensing Pressure Management, the chiller controller adjusts the condensing pressure set-point to minimize the overall chiller power input

› More information about EWAT-B-XS

› More information about EWAT-B-XL

Cooling Only					EWAT-B-XS/XL	085	115	145	180	185	200	220	230	250	280	300	310	320	360	370	430	470	540	600	660	700
Space cooling	A Condition 35°C	Pdc		kW		87.7	113.64	143.23	178.64	182.18	200.33	225.65	238.26	254.08	280.99	303.6	304.42	325.3	350.13	370.33	423.61	470.48	536.64	606.55	659.77	701.27
	ηs,c			%		155.4	171.8	165.4	161.4	169.4	164.2	167	165.4	167.8	173	170.6	173.8	171.4	171.8	171	175.8	171.4	173.8		175.8	175.4
	ηs,c + VFDFAN			%			-		168.6	-	171	173	170.2	174.6	180.2	184.2	179.4	173.8	181	175	180.2	175	183.8	184.2	185.8	186.6
SEER						3.96	4.37	4.21	4.11	4.31	4.18	4.25	4.21	4.27	4.4	4.34	4.42	4.36	4.37	4.35	4.47	4.36	4.42		4.47	4.46
SEER + VFDFAN							-		4.29	-	4.35	4.4	4.33	4.44	4.58	4.68	4.56	4.42	4.6	4.45	4.58	4.45	4.67	4.68	4.72	4.74
Cooling capacity	Nom.			kW		87.7	113.64	143.23	178.64	182.18	200.33	225.65	238.26	254.08	280.99	303.6	304.42	325.3	350.13	370.33	423.61	470.48	536.64	606.55	659.77	701.27
Power input	Cooling	Nom.		kW		28.9	36.5	44.5	57.2	63.8	65.7	74.9	74.8	81.8	88.2	97.7		106	113	121	136	152	175	195	211	227
Capacity control	Method					Staged			Var.	Staged	Variable		Staged	Variable												
	Minimum capacity			%		50	38	50	25	38	21	19	50	17	16	24	14	22	33	19	17	25	14	12	11	17
EER						3.04	3.11	3.22	3.12	2.86	3.05	3.01	3.19	3.11	3.19	3.11	3.12	3.05	3.1	3.05	3.11	3.08	3.06	3.1	3.12	3.08
IPLV						4.83	5	4.82	4.65	4.88	4.67	4.72	4.71	4.69	4.78	4.8	4.77	4.68	4.8	4.7	4.78	4.77	4.76	4.78	4.82	4.75
EER + VFDFAN							-		3.11	-	3.04	3.01	3.18	3.1	3.17	3.1	3.12	3.04	3.1	3.04	3.1	3.07	3.05	3.1	3.11	3.07
IPLV + VFDFAN							-		5.11	-	5.05	5.01	4.92	4.97	5.12	5.09	4.92	4.86	4.94	4.96	4.94	4.99	5.01	4.99	5.12	5.08
Dimensions	Unit	Height		mm		1,801		1,822	2,540	1,822	2,540															
		Width		mm		1,204			2,236	1,204	2,236															
		Depth		mm		2,660	3,180	3,780	2,326	3,780	2,326		3,226						4,126			5,025		5,874	6,774	
Weight (XS)	Unit			kg		733	826	951	1,577	1,062	1,609	1,636	1,915	1,899	2,037	2,130	2,065	2,093	2,508	2,472	2,656	3,072	3,293	3,708	4,083	4,231
	Operation weight			kg		742	836	958	1,588	1,078	1,618	1,646	1,935	1,912	2,055	2,152	2,087	2,123	2,532	2,501	2,693	3,103	3,332	3,751	4,125	4,267
Water heat exchanger	Type					Brazed plate																				
	Water volume			l		5	6	9	11	12	11		16	14	19	20	19		20		28		42		50	
	Water flow rate	Cooling	Nom.	l/s		4.2	5.4	6.9	8.6	8.7	9.6	10.8	11.4	12.2	13.4	14.5	14.6	15.6	16.8	17.7	20.3	22.5	25.7	29.1	31.6	33.6
	Water pressure drop	Cooling	Nom.	kPa		31.6	37.3	31	40.7	45.1	50.1	43.7	49.2	54.2	39.8	62.2	46.1	51.9	80.6	65.7	56.6	68.5	59.7	74.6	70.2	78.5
Air heat exchanger	Type					Microchannel																				
Compressor	Type					Driven vapour compression																				
	Quantity					2			4	2	4		2	4		3	4		3	4			5	6		
Fan	Type					Direct propeller																				
	Quantity					6	8	10	4	10	4		5	6					7	8	9	10	12	13	14	
	Air flow rate	Nom.		l/s		9,036	12,023	15,057	20,306	15,057	20,306		25,382	30,459					35,535	40,612	45,688	50,765	60,918	65,994	71,071	
	Speed			rpm		1,360			900	1,360	900															
Sound power level (XS)	Cooling	Nom.		dBA		86.0	88.8	90.5	91.2	92.1	92.0	92.7	94.8	93.8	94.6	95.6	95.0	95.4	96.4	96.2	96.9	97.6	98.0	98.6	99.0	99.4
Sound power level (XL)	Cooling	Nom.		dBA		85.2	87.1	88.5	90.6	89.3	90.6	90.7	91.8	91.7	92.5	92.6	92.5	92.6	93.3	93.2	93.8	94.4	94.8	95.6	95.9	96.3
Sound pressure level (XS)	Cooling	Nom.		dBA		68.3	70.8	72.2	72.3	73.7	73.1	73.7	75.3	74.3	75.1	76.1	75.5	75.9	76.4	76.3	77.0	77.2	77.6	77.8	77.9	78.3
Sound pressure level (XL)	Cooling	Nom.		dBA		67.5	69.1	70.1	71.6	70.9	71.7	71.7	72.3	72.2	73.0	73.1	73.0	73.1	73.3	73.3	73.9	74.0	74.4	74.8	74.8	75.2
Operation range	Air side	Cooling	Min.~Max.	°CDB		-10~46			-18~46	-10~46	-18~46															
	Water side	Cooling	Min.~Max.	°CDB		-13~20																				
Refrigerant	Type/GWP					R-32/675																				
	Charge			kg		10.5	12.5	15	30	16	36	37	30	42	48	36	50	52	50	58	62	70	78	80	92	100
	Circuits	Quantity				1			2	1	2		1	2		1	2		1				2			
Piping connections	Evaporator water inlet/outlet (OD)					76.1			88.9	76.1	88.9		76.1	88.9		76.1	88.9		76.1	88.9			114.3			
Unit	Starting current	Max		A		215	315	328	290	464	388	399	505	415	543	554	555	566	591	603	639	676	725	777	814	851
	Running current	Cooling	Nom.	A		56	67	78	110	108	122	135	128	145	158	168	171	184	193	209	235	260	299	335	361	388
		Max		A		75	87	100	149	134	160	172	175	187	212	223	224	235	260	272	309	345	394	447	483	520
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/400																				

Air cooled scroll chiller, high efficiency, reduced sound

Single V

EWAT-B-XS/XL/XR Modular V

Microtech III

› More information about EWAT-B-XR

Cooling Only				EWAT-B-XR	085	115	145	180	185	200	220	230	250	280	300	310	320	360	370	430	470	540	600	660	700
Space cooling	A Condition 35°C	Pdc		kW	81.68	108.36	135.38	167.75	165.77	187.07	207.97	223.94	238.24	264.17	284.03	283.97	301.05	327.53	345.32	393.29	437.99	500	569.48	618.9	656.69
	ηs,c			%	213.28	166.6	160.2	163.8	160.2	166.6		165	171.4	176.6	180.6	174.6	166.6	175	169.8	175.8	167.4	178.6	181.4	181	180.2
SEER					3.84	4.24	4.08	4.17	4.08	4.24		4.2	4.36	4.49	4.59	4.44	4.24	4.45	4.32	4.47	4.26	4.54	4.61	4.6	4.58
Cooling capacity	Nom.			kW	81.68	108.36	135.38	167.75	165.77	187.07	207.97	223.94	238.24	264.17	284.03	283.97	301.05	327.53	345.32	393.29	437.99	500	569.48	618.9	656.69
Power input	Cooling	Nom.		kW	30.9	39	47	59.1	70.5	69.8	80.7	79.2	86.4	92.2	104	103	114	121	130	146	163	188	207	224	242
Capacity control	Method				Staged			Var.	Staged	Variable		Staged	Variable												
	Minimum capacity			%	50	38	50	25	38	21	19	50	17	16	24	14	22	33	19	17	25	14	12	11	17
EER					2.64	2.78	2.88	2.84	2.35	2.68	2.58	2.83	2.76	2.87	2.71	2.76	2.63	2.7	2.66	2.68		2.66	2.74	2.76	2.71
IPLV					4.74	5.1	4.76	5	4.78	5	5.05	4.82	4.93	5.09	5.15	5.02	4.72	5.05	4.9	4.86	4.82	4.91	5.07	4.99	
Dimensions	Unit	Height		mm	1,801		1,822	2,540	1,822	2,540															
		Width		mm	1,204			2,236	1,204	2,236															
		Depth		mm	2,660	3,180	3,780	2,326	3,780	2,326		3,226						4,126			5,025		5,874	6,774	
Weight	Unit			kg	744	837	961	1,732	1,072	1,763	1,790	1,977	2,054	2,192	2,212	2,220	2,247	2,590	2,627	2,811	3,237	3,458	3,873	4,248	4,396
	Operation weight			kg	752	846	968	1,743	1,088	1,773	1,801	1,997	2,066	2,209	2,234	2,241	2,277	2,614	2,655	2,848	3,268	3,497	3,916	4,290	4,432
Water heat exchanger	Type				Brazed plate																				
	Water volume			l	5	6	9	11	12	11		16	14	19	20	19		20		28		42		50	
	Water flow rate	Cooling	Nom.	l/s	3.9	5.2	6.5	8	7.9	9	10	10.7	11.4	12.6	13.6		14.4	15.7	16.5	18.8	21	23.9	27.3	29.6	31.5
	Water pressure drop	Cooling	Nom.	kPa	27.8	34.2	28	36.3	38	44.2	37.7	44	48.2	35.6	55.1	40.6	45.1	71.4	57.9	49.5	60.2	52.5	66.5	62.6	69.7
Air heat exchanger	Type				Microchannel																				
Compressor	Type				Driven vapour compression																				
	Quantity				2			4	2	4		2	4		3	4		3	4			5	6		
Fan	Type				Direct propeller																				
	Quantity				6	8	10	4	10	4		5	6					7	8	9	10	12	13	14	
	Air flow rate	Nom.		l/s	6,673	8,896	11,122	15,054	11,122	15,054		18,819	18,818	22,582				26,346	30,110	33,874	37,637	45,164	48,928	52,692	
	Speed			rpm	1,108			700	1,108	700															
Sound power level	Cooling	Nom.		dBA	77.9	81.9	84	84.2	86	84.5	84.8	86.2	85.8	86.6	87	86.7	86.9	87.7	87.6	88.3	88.9	89.3	90	90.4	90.7
Sound pressure level	Cooling	Nom.		dBA	60.2	63.9	65.6	65.3	67.7	65.5	65.8	66.7	66.3	67.1	67.5	67.2	67.4	67.8	67.7	68.3	68.5	68.9	69.2	69.3	69.6
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~46			-18~46	-10~46	-18~46															
	Water side	Cooling	Min.~Max.	°CDB	-13~20																				
Refrigerant	Type/GWP				R-32/675																				
	Charge			kg	10.5	12.5	15	30	16	36	37	30	42	48	36	50	52	50	58	62	70	78	80	92	100
	Circuits	Quantity			1			2	1	2		1	2		1	2		1				2			
Piping connections	Evaporator water inlet/outlet (OD)				76.1			88.9	76.1	88.9		76.1	88.9		76.1	88.9		76.1	88.9			114.3			
Unit	Starting current	Max		A	215	315	328	290	464	388	399	505	415	543	554	555	566	591	603	639	676	725	777	814	851
	Running current	Cooling	Nom.	A	60	71	83	113	118	128	143	134	151	164	177	179	194	204	221	250	276	319	352	381	410
		Max		A	75	87	100	149	134	160	172	175	187	212	223	224	235	260	272	309	345	394	447	483	520
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																				

Air cooled mini inverter heat pump

- Top product in terms of energy efficiency and operation range
- All capacities available in 2 versions: standard version and version with OP10 option (no freeze up of water when not in operation thanks to the water piping heater tape)
- Easy‚plug and play' installation
- Amongst the most quiet units in the market (63dBA - sound power)
- Single phase power supply and low starting currents make the unit ideal for residential applications
- Weight reduced with 20% compared with the previous models.
- Built-in Hydraulic kit: no buffer tank required, standard inverter driven pump, main flow sensor and switch included.
- Standard wired remote control enables setting of different set points (cooling, heating, water leaving temperature) or based on outdoor conditions (weather dependent control). It has an alarm history, night time noise reduction function and is language based.

EWYQ-BVP EKRUMCL1

› More information about EWYQ-BVP

Heating & Cooling				EWYQ-BVP	004	005	006	008
Cooling capacity	Nom.			kW	4.00 / 4.01	4.93 / 5.07	5.88 / 6.07	7.95 / 8.23
Heating capacity	Nom.			kW	4.11 / 3.96	4.99 / 4.99	6.14 / 6.12	8.08 / 8.44
	Max.			kW	5.1	6.0	-	
Power input	Cooling	Nom.		kW	1.27 / 0.840	1.61 / 1.12	1.87 / 1.13	2.57 / 1.65
	Heating	Nom.		kW	1.19 / 0.860	1.46 / 1.09	1.75 / 1.28	2.31 / 1.84
Capacity control	Method				Variable (inverter)			
EER					3.14 / 4.80	3.06 / 4.51	3.15 / 5.35	3.10 / 4.99
COP					3.44 / 4.61	3.41 / 4.58	3.51 / 4.77	3.49 / 4.59
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	155	159	158	165
			SCOP		3.90	4.03		4.21
			Seasonal space heating eff. class		A++			
Dimensions	Unit	HeightxWidthxDepth		mm	735x1,090x350		997x1,160x380	
Weight	Unit			kg	83		106	
Water heat exchanger	Type				Brazed plate			
	Water flow rate	Cooling	Nom.	l/min	11.5 / 11.5	14.1 / 14.5	16.9 / 17.4	22.8 / 23.6
		Heating	Nom.	l/min	11.8 / 11.4	14.3 / 14.3	17.6 / 17.5	23.2 / 24.2
	Water volume			l	1		2	
Air heat exchanger	Type				Cross fin coil/Hi-X tubes and chromate coated waffle louvre fins		Cross fin coil/Hi-X tubes and PE coated waffle louvre fins	
Compressor	Type				Hermetically sealed swing compressor			
	Quantity				1			
Fan	Type				Propeller fan			
	Quantity				1			
	Air flow rate	Cooling	Nom.	m^3/min	53		72	
		Heating	Nom.	m^3/min	47.0		46.6	49.3
Sound power level	Cooling	Nom.		dBA	63	64	69	
	Heating	Nom.		dBA	65			
Sound pressure level	Cooling	Nom.		dBA	48	49	52	53
	Heating	Nom.		dBA	49		47	
Operation range	Air side	Cooling	Min.~Max.	°CDB	10~43		10~46	
		Heating	Min.~Max.	°CDB	-20~25		-15~25	
	Water side	Cooling	Min.~Max.	°CDB	5~22			
		Heating	Min.~Max.	°CDB	15 ~55			
Refrigerant	Type/GWP				R-410A/2,088		R-410A/2,087.5	
	Control				Electronic expansion valve			
	Circuits	Quantity			1			
Refrigerant charge	Per circuit			kg	2.10		2.70	
	Per circuit			TCO2Eq	4.4		5.6	
Water circuit	Piping connections diameter			inch	1" MBSP			
Unit	Starting current	Max		A	15.7		19.9	
	Running current	Max		A	15.7		19.9	
Power supply	Phase/Frequency/Voltage			Hz/V	1N~/50/230			

Air cooled mini inverter heat pump

- Inverter technology to ensure low sound values and leader-of-class ESEER
- Wide operating range
- Built-in hydronic module: no buffer tank required and a standard pump and main switch are included
- Easy‚plug and play' installation
- Single phase power supply for residential applications, three phase power supply model available for light commercial applications

› More information about EWYQ-ACV3

› More information about EWYQ-ACW1

EWYQ-ACV3/ACW1

Digital controller

Heating & Cooling				EWYQ-ACV3/ACW1	009	010	011	009	011	013
Cooling capacity	Nom.			kW	12.2 (1) / 8.60	13.6 (1) / 9.60	11.1 / 15.7 (1)	12.9 (1) / 9.10	15.7 (1) / 11.1	17.0 (1) / 13.3
Heating capacity	Nom.			kW	9.90 / 10.2 (1)	11.7 (1) / 11.4	13.8 (1) / 12.9	10.90 / 11.20 (1)	13.2 (1) / 12.4	14.8 (1) / 13.9
Power input	Cooling	Nom.		kW	2.83 / 2.85 (1)	3.28 / 3.41 (1)	3.90 / 4.13 (1)	3.05 / 3.08 (1)	4.13 (1) / 3.90	5.18 / 5.52 (1)
	Heating	Nom.		kW	2.43 (1) / 2.99	2.81 (1) / 3.46	3.20 (1) / 3.94	2.69 (1) / 3.31	3.07 (1) / 3.78	3.47 (1) / 4.27
Capacity control	Method				Inverter controlled					
EER					3.05 / 4.27 (1)	2.93 / 4.00 (1)	2.85 / 3.79 (1)	2.99 / 4.19 (1)	3.79 (1) / 2.85	2.57 / 3.08 (1)
COP					3.30 / 4.19 (1)	3.29 / 4.17 (1)	3.27 / 4.30 (1)	3.28 / 4.17 (1)	3.27 / 4.31 (1)	3.25 / 4.28 (1)
Space heating	Average climate water outlet 35°C	General	η_s (Seasonal space heating efficiency)	%	133	138	140	133	138	140
			SCOP		3.22	3.34	3.41	3.22	3.41	3.30
			Seasonal space heating eff. class		A+					
Dimensions	Unit	Height		mm	1,435					
		Width		mm	1,420					
		Depth		mm	382					
Weight	Unit			kg	180					
Water heat exchanger	Type				Brazed plate					
	Water flow rate	Heating	Nom.	l/min	28.3	32.6	36.9	31.2	35.5	39.8
	Water volume			l	1.01					
Air heat exchanger	Type				Hi-XSS					
Pump Standard	Nominal ESP unit	Cooling		kPa	60.5	57.8	53.2	59.2	53.2	40.9 / 45.6
		Heating		kPa	57.1	52.5	47.3	54.1	49.1	36.6 / 43.5
Hydraulic components	Expansion vessel	Volume		l	10					
Compressor	Type				Hermetically sealed scroll compressor					
	Quantity				1					
Fan	Type				Propeller fan					
	Quantity				2					
	Air flow rate	Cooling	Nom.	m^3/min	96.0	100	97.0	-		
		Heating	Nom.	m^3/min		90.0		-		
Fan motor	Speed	Cooling	Nom.	rpm	780					
		Heating	Nom.	rpm	760					
		Steps			8					
Sound power level	Cooling	Nom.		dBA	64.0					66.0
	Heating	Nom.		dBA	60	64	60			
Sound pressure level	Cooling	Nom.		dBA	50					
	Heating	Nom.		dBA	50					
	Night quiet mode	Cooling		dBA	45					46
		Heating		dBA	42					43
Operation range	Air side	Cooling	Min.~Max.	°CDB	10~46					
		Heating	Min.~Max.	°CDB	-15~35					
	Water side	Cooling	Min.~Max.	°CDB	5~20					
		Heating	Min.~Max.	°CDB	30~50					
Refrigerant	Type				R-410A					
	Circuits	Quantity			1					
	Control				Electronic expansion valve					
	GWP				2,087.5					
Refrigerant charge	Per circuit			kg	2.95					
				TCO_2eq	6.16					
Water circuit	Piping			inch	5/4"					
	Piping connections diameter			inch	G 5/4" (female)					
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230			3N~/50/400		

(1) Underfloor program: cooling Ta 35°C - LWE 18°C (Dt: 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (Dt: 5°C)

Air cooled scroll inverter heat pump

- Inverter chiller
- High part load efficiency for low running cost
- Minimal starting currents
- No buffertank required for standard applications
- Daikin scroll compressor
- Wide operation range
- Integrated hydronic module on request

EWYQ-CWN BRC21A52

› More information about EWYQ-CWN

Heating & Cooling				EWYQ-CWN	016	021	025	032	040	050	064
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	147	148	138	135	149	139	135
			SCOP		3.75	3.78	3.53	3.45	3.80	3.55	3.45
			Seasonal space heating eff. class		A+	A++			A+		
Cooling capacity	Nom.			kW	16.8	21.0	25.3	31.6	42.1	50.5	63.2
Heating capacity	Nom.			kW	16.8	21.0	25.1	31.4	41.9	50.3	62.9
Power input	Cooling	Nom.		kW	5.93	7.61	9.60	12.9	15.1	19.2	25.7
	Heating	Nom.		kW	5.60	6.89	8.74	10.8	13.7	17.5	21.6
Capacity control	Method				Inverter controlled						
	Minimum capacity			%	25						
EER					2.84	2.77	2.63	2.45	2.79	2.63	2.46
COP					3.00	3.05	2.87	2.91	3.06	2.87	2.91
Dimensions	Unit	Height		mm	1,684						
		Width		mm	1,370			1,680	2,360		2,980
		Depth		mm	774				780		
Weight	Unit			kg	268	321		403	579		741
Water heat exchanger	Type				Brazed plate						
	Water volume			l	3			5	6		9
	Water pressure drop	Cooling	Total	kPa	8	10	14	8	10	14	8
Air heat exchanger	Type				Air cooled coil						
Compressor	Type				Hermetically sealed scroll compressor						
	Quantity				1	2		3	4		6
Fan	Type				Axial						
	Quantity				1				2		4
	Air flow rate	Cooling	Nom.	m^3/min	171	185		233	370		466
		Heating	Nom.	m^3/min	171	185		233	370		466
Sound power level	Cooling	Nom.		dBA	78.0			80.0	81.0		83.0
Operation range	Air side	Cooling	Min.~Max.	°CDB	-5~43						
		Heating	Min.~Max.	°CDB	-15~35						
	Water side	Cooling	Min.~Max.	°CDB	-10~20						
		Heating	Min.~Max.	°CDB	25~50						
Refrigerant	Type/GWP				R-410A/2,087.5						
	Control				Electronic expansion valve						
	Circuits	Quantity			1				2		
Refrigerant charge	Per circuit			kg	7.60			9.60	7.60		9.60
	Per circuit			TCO2Eq	15.9			20.0	15.9		20.0
Water circuit	Piping connections diameter			inch	1-1/4" (female)				2" (female)		
	Piping			inch	1-1/4"				1-1/2"		
Unit	Starting current	Max		A	0.0	77.7	78.7	88.7	99.8	101.9	120.7
	Running current	Max		A	22.2	25.3	26.4	35.2	47.4	49.6	67.2
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400						

Air cooled scroll inverter heat pump

- Inverter chiller
- High part load efficiency for low running cost
- Minimal starting currents
- No buffertank required for standard applications
- Daikin scroll compressor
- Wide operation range
- Integrated hydronic module on request
- EWYQ-CWP: Version with standard pump
- EWYQ-CWH: Version with optional high static pump

EWYQ-CWP/CWH

BRC21A52

› More information about EWYQ-CWP

› More information about EWYQ-CWH

Heating & Cooling				EWYQ	016CWP	021CWP	025CWP	032CWP	040CWP	050CWP	064CWP	016CWH	021CWH	025CWH	032CWH	040CWH	050CWH	064CWH
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	144	154	139	138	149	139	138		150	135	136	144	133	135
			SCOP		3.68	3.93	3.55	3.53	3.80	3.55	3.53		3.83	3.45	3.48	3.68	3.40	3.45
			Seasonal space heating eff. class		A+	A++	A+						A++	A+				
Cooling capacity	Nom.			kW	17.0	21.2	25.5	31.8	42.3	50.7	63.3	17.0	21.2	25.5	31.8	42.3	50.7	63.7
Heating capacity	Nom.			kW	16.6	20.8	24.9	31.2	41.7	50.1	62.7	16.6	20.8	24.9	31.2	41.7	50.1	62.7
Power input	Cooling	Nom.		kW	5.81	7.47	9.45	12.7	15.1	19.0	25.5	5.81	7.47	9.45	12.7	15.1	19.0	25.5
	Heating	Nom.		kW	5.49	6.76	8.58	10.6	13.7	17.4	21.4	5.49	6.76	8.58	10.6	13.7	17.4	21.4
Capacity control	Method				Inverter controlled													
	Minimum capacity			%	25													
EER					2.93	2.84	2.70	2.50	2.80	2.67	2.48	2.93	2.84	2.70	2.50	2.80	2.67	2.48
COP					3.02	3.07	2.91	2.93	3.03	2.88	2.93	3.02	3.07	2.91	2.93	3.03	2.88	2.93
Dimensions	Unit	Height		mm	1,684													
		Width		mm	1,370			1,680	2,360		2,980	1,370			1,680	2,360		2,980
		Depth		mm	774				780			774				780		
Weight	Unit			kg	280	332		414	604		765	283	336		417	612		774
Water heat exchanger	Type				Brazed plate													
	Water volume			l	3			5	6		9	3			5	6		9
	Water pressure drop	Cooling	Total	kPa	8	10	14	8	10	14	8		10	14	8	10	14	8
Air heat exchanger	Type				Air cooled coil													
Compressor	Type				Hermetically sealed scroll compressor													
	Quantity				1	2		3	4		6	1	2		3	4		6
Fan	Type				Axial													
	Quantity				1			2			4	1			2			4
	Air flow rate	Cooling	Nom.	m^3/min	171	185		233	370		466	171	185		233	370		466
		Heating	Nom.	m^3/min	171	185		233	370		466	171	185		233	370		466
Sound power level	Cooling	Nom.		dBA	78.0			80.0	81.0		83.0	78.0			80.0	81.0		83.0
Operation range	Air side	Cooling	Min.~Max.	°CDB	-5~43													
		Heating	Min.~Max.	°CDB	-15~35													
	Water side	Cooling	Min.~Max.	°CDB	-10~20													
		Heating	Min.~Max.	°CDB	25~50													
Refrigerant	Type/GWP				R-410A/2,087.5													
	Control				Electronic expansion valve													
	Circuits	Quantity			1				2			1				2		
Refrigerant charge	Per circuit			kg	7.60			9.60	7.60		9.60	7.60			9.60	7.60		9.60
	Per circuit			TCO2Eq	15.9			20.0	15.9		20.0	15.9			20.0	15.9		20.0
Water circuit	Piping connections diameter			inch	1-1/4" (female)				2" (female)			1-1/4" (female)				2" (female)		
	Piping			inch	1-1/4"				1-1/2"			1-1/4"				1-1/2"		
Unit	Starting current	Max		A	0.0	77.7	78.7	88.7	99.8	101.9	120.7	0.0	79.9	81.7	91.7	103.7	106.3	125.1
	Running current	Max		A	22.2	25.3	26.4	35.2	47.4	49.6	67.2	24.4	27.5	29.4	38.2	51.3	54.0	71.6
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400													

Air cooled scroll inverter heat pump, split version

- Hydronic module for indoor installation eliminating the need for glycol
- Ideal for colder climates as the lack of glycol will allow for high efficiencies
- Compact dimensions and limited pipework allow for installation in very restricted spaces
- Easy transportation as separate units will fit in an elevator

SEHVX-BW SERHQ-BW1 BRC21A53/54 (Optional)

› More information about SEHVX-BW

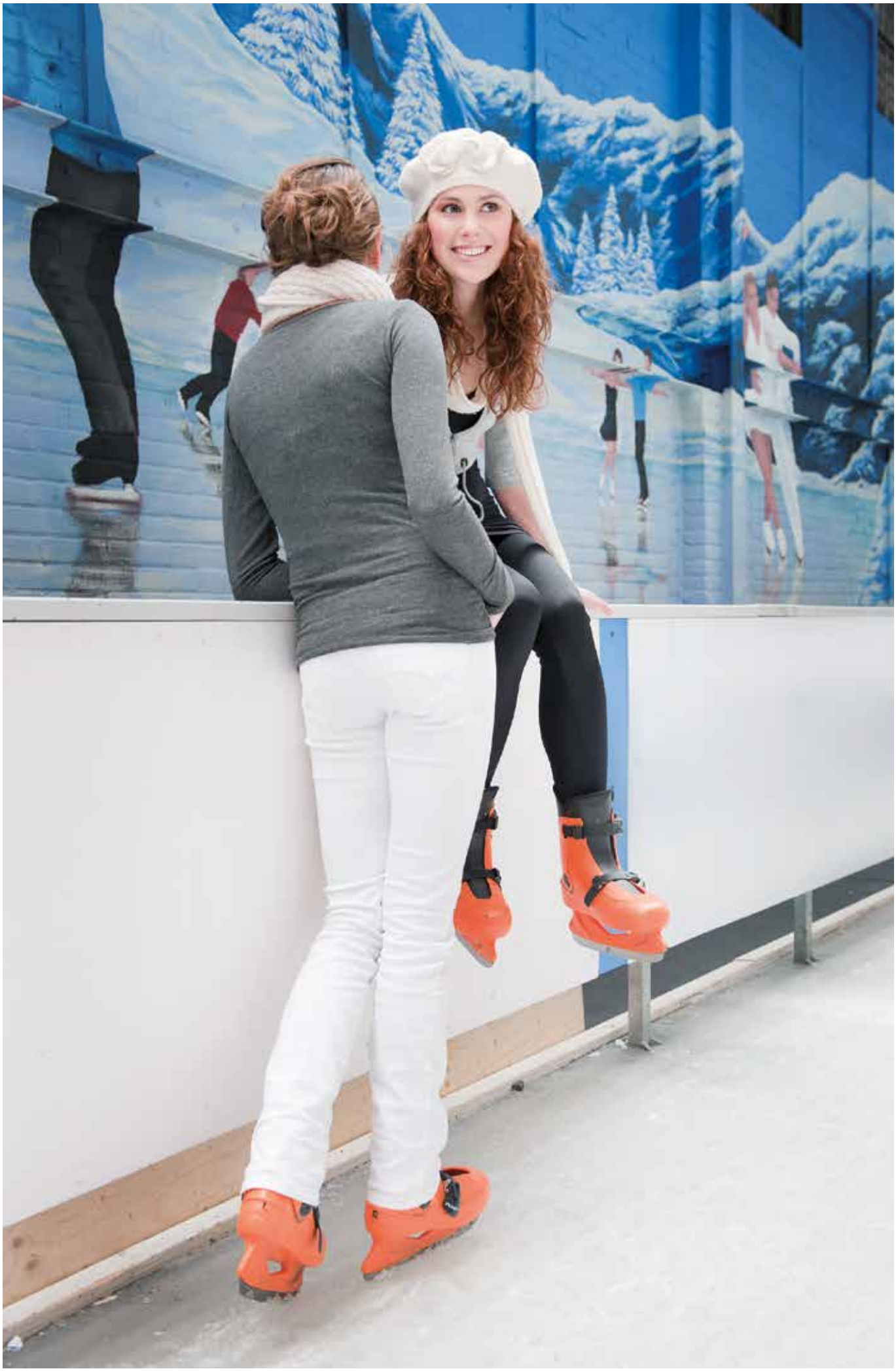
› More information about SERHQ-BW1

Heating & Cooling					SEHVX20BAW/ SERHQ020BAW1	SEHVX32BAW/ SERHQ032BAW1	SEHVX40BAW/ SERHQ020BAW1+SERHQ020BAW1	SEHVX64BAW/ SERHQ032BAW1+SERHQ032BAW1
Cooling capacity	Nom.			kW	21.2 (1)	31.8 (1)	42.3 (1)	63.3 (1)
Heating capacity	Nom.			kW	20.8 (2)	31.2 (2)	41.7 (2)	62.7 (2)
Power input	Cooling	Nom.		kW	7.47 (1)	12.7 (1)	15.1 (1)	25.5 (1)
	Heating	Nom.		kW	6.76 (2)	10.6 (2)	13.7 (2)	21.4 (2)
EER					2.84	2.5	2.8	2.48
COP					3.07	2.93	3.03	2.93
Space heating	Average climate water outlet 35°C	General	SCOP		3.93	3.53	3.80	3.53
			ηs (Seasonal space heating efficiency)	%	154	138	149	138
			Seasonal space heating eff. class		A++	A+		

Unit for indoor installation					SEHVX20BAW	SEHVX32BAW	SEHVX40BAW	SEHVX64BAW
Dimensions	Unit	Height		mm	1,573			
		Width		mm	766			
		Depth		mm	396			
Weight	Unit			kg	97.0	105	137	153
	Packed unit			kg	109	117	149	165
Water side Heat exchanger	Type				Brazed plate			
	Water volume			l	3	5	6	9
	Water flow rate	Cooling	Nom.	l/min	60 (3)	90 (3)	120 (3)	181 (3)
		Heating	Nom.	l/min	60 (2)	90 (2)	120 (2)	181 (2)
Sound power level	Nom.			dBA	63.0		66.0	
Operation range	Cooling	Ambient	Min.~Max.	°CDB	-5~43			
		Water side	Min.~Max.	°CDB	5 (4)~20			
	Heating	Ambient	Min.~Max.	°CDB	-15~35			
		Water side	Min.~Max.	°CDB	25~50			
Refrigerant	Type / GWP				R-410A / 2,087.5			
	Circuits	Quantity			1		2	
	Control				Electronic expansion valve			
Water circuit	Piping connections diameter			inch	1-1/4" (female)		2" (female)	
	Piping			inch	1-1/4"		1-1/2"	
	Water pressure drop	Cooling	Nom.	kPa	17 (7)	24 (7)	19 (7)	29 (7)
	Total water volume			l	4.2 (8)	5.8 (8)	7.9 (8)	11.0 (8)
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400			

Outdoor Unit					SERHQ020BAW1	SERHQ032BAW1
Dimensions	Unit	Height		mm	1,680	
		Width		mm	765	
		Depth		mm	930	1,240
Weight	Unit			kg	240	316
	Packed unit			kg	273	356
Compressor	Quantity				2	3
	Type				Hermetically sealed scroll compressor	
Fan	Type				Axial	
	Quantity				1	2
	Air flow rate	Cooling	Nom.	m^3/min	185	233
		Heating	Nom.	m^3/min	185	233

(1) Cooling: entering evaporator water temp. 12°C; leaving evaporator water temp. 7°C; ambient air temp. 35°C (2) Condition: Ta DB/WB 7°C/6°C - LWC 45°C (Dt=5°C) (3) Condition: Ta 35°C - LWE 7°C (DT = 5°C) (4) Water can be used above 5°C. Between 0°C and 5°C a 30% glycol solution (propylene or ethylene) has to be used. Between 0°C and -10°C a 40% glycol solution (propylene or ethylene) has to be used (see installation manual and information related to OPZL option) (5) Excluding water volume in the unit. In most applications this minimum water volume will have a satisfying result. In critical processes or in rooms with a high heat load though, extra water volume might be required. Refer to operation range for more info. (6) Excluding the water volume in the unit. This volume will guarantee suficient defrost energy for all applications, however, this volume can be multiplied by 0,66 if the heating sepoint is ≥ 45° C (eg. Fan coils) (7) This is PD between inlet & outlet connections of unit. It includes the water side heat exchanger pressure drop. (8) Including piping + PHE; excluding expansion vessel



Air cooled multi-scroll heat pump, high efficiency, standard sound

› Single refrigerant circuit (2 scroll compressors) with single evaporator
› Compact design
› Partial and total heat recovery option available
› Stainless steel plate heat exchanger
› MicroTech III controller with superior control logic and easy interface

› More information about EWYQ-G-XS

Heating & Cooling				EWYQ-G-XS	075	085	100	110	120	140	160
Cooling capacity	Nom.			kW	77.8	88.1	101	117	127	147	165
Heating capacity	Nom.			kW	82.2	91.2	110	127	138	156	170
Power input	Cooling	Nom.		kW	27.0	31.5	36.0	39.5	44.7	50.2	57.8
	Heating	Nom.		kW	26	29	34	39	43	50	54
Capacity control	Method				Step						
	Minimum capacity			%	50	44	50	44	50	43	50
EER					2.88	2.80	2.81	2.97	2.84	2.92	2.85
COP					3.14	3.12	3.24	3.25	3.20	3.11	3.13
IPLV					4.40	4.47	4.40	4.49	4.40	4.50	
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	131	129	142	140	142	138	140
			SCOP		3.35	3.31	3.62	3.58	3.63	3.53	3.58
Dimensions	Unit	Height		mm	1,800						
		Width		mm	1,195						
		Depth		mm	2,826			3,426		4,026	
Weight	Unit			kg	850	912	1,077	1,183	1,213	1,333	1,394
	Operation weight			kg	858	921	1,088	1,194	1,224	1,344	1,411
Water heat exchanger	Type				Brazed plate						
	Water flow rate	Cooling	Nom.	l/s	3.7	4.2	4.8	5.6	6.1	7.0	7.9
		Heating	Nom.	l/s	4.0	4.4	5.3	6.1	6.7	7.5	8.2
	Water pressure drop	Cooling	Nom.	kPa	8.40	8.30	8.70	11.6	13.7	18.2	19.9
		Heating	Nom.	kPa	9.50	9.10	11.20	14.40	17.20	21.70	22.50
	Water volume			l	8.10	9.40	10.8				16.7
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler						
Compressor	Type				Scroll compressor						
	Quantity				2						
Fan	Type				Direct propeller						
	Quantity				6			8		10	
	Air flow rate	Nom.		l/s	10,042		9,861	13,148		16,435	
	Speed			rpm	1,360						
Sound power level	Cooling	Nom.		dBA	84	85	87	89			
Sound pressure level	Cooling	Nom.		dBA	66	68	70	71			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45						
		Heating	Min.~Max.	°CDB	-10~45						
	Water side	Cooling	Min.~Max.	°CDB	-10~15						
		Heating	Min.~Max.	°CDB	-10~15						
Refrigerant	Type / GWP				R-410A / 2,087.5						
	Circuits	Quantity			1						
Refrigerant charge	Per circuit			kg	15.0		18.0	23.0		30.0	
				TCO_2eq	31.3		37.6	48.0		62.6	
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2						
Unit	Starting current	Max		A	210	261	267	316	323	363	377
	Running current	Cooling	Nom.	A	52	56	60	69	76	88	95
		Max		A	66	72	78	87	95	111	125
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Air cooled multi-scroll heat pump, high efficiency, reduced sound

EWYQ-G-XS/XR

MicroTech III

› More information about EWYQ-G-XR

Heating & Cooling				EWYQ-G-XR	075	085	100	110	120	140	160
Cooling capacity	Nom.			kW	75.2	84.5	95.0	111	120	139	155
Heating capacity	Nom.			kW	82.2	91.2	110	127	138	156	170
Power input	Cooling	Nom.		kW	27.7	32.7	38.6	41.5	47.4	52.8	61.5
	Heating	Nom.		kW	26	29	34	39	43	50	54
Capacity control	Method				Step						
	Minimum capacity			%	50	44	50	44	50	43	50
EER					2.71	2.59	2.46	2.68	2.52	2.64	2.51
COP					3.14	3.12	3.24	3.25	3.20	3.11	3.13
IPLV					4.35	4.41	4.29	4.42	4.27	4.40	4.35
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	131	129	142	140	142	138	140
			SCOP		3.35	3.31	3.62	3.58	3.63	3.53	3.58
Dimensions	Unit	Height		mm	1,800						
		Width		mm	1,195						
		Depth		mm	2,826			3,426		4,026	
Weight	Unit			kg	880	942	1,107	1,213	1,243	1,363	1,424
	Operation weight			kg	888	951	1,118	1,224	1,254	1,374	1,441
Water heat exchanger	Type				Brazed plate						
	Water flow rate	Cooling	Nom.	l/s	3.6	4.0	4.5	5.3	5.7	6.7	7.4
		Heating	Nom.	l/s	4.0	4.4	5.3	6.1	6.7	7.5	8.2
	Water pressure drop	Cooling	Nom.	kPa	7.90	7.70	7.60	10.5	12.1	16.4	17.5
		Heating	Nom.	kPa	9.50	9.10	11.2	14.4	17.2	21.7	22.5
	Water volume			l	8.10	9.40	10.8				16.7
Air heat exchanger	Type				High efficiency fin and tube type						
Compressor	Type				Scroll compressor						
	Quantity				2						
Fan	Type				Direct propeller						
	Quantity				6			8		10	-
	Air flow rate	Nom.		l/s	7,859		7,101	9,468		11,835	
	Speed			rpm	1,108						
Sound power level	Cooling	Nom.		dBA	80	82	84	86			
Sound pressure level	Cooling	Nom.		dBA	62	65	66	68		67	
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45						
		Heating	Min.~Max.	°CDB	-17~20						
	Water side	Cooling	Min.~Max.	°CDB	-10~15						
		Heating	Min.~Max.	°CDB	25~50						
Refrigerant	Type / GWP				R-410A / 2,087.5						
	Circuits	Quantity			1						
Refrigerant charge	Per circuit			kg	17.0	17.7	23.5	29.4	28.3	32.0	34.9
				TCO_2eq	35.5	36.9	49.1	61.4	59.1	66.8	72.9
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2						
Unit	Starting current	Max		A	213	264	270	319	327	367	381
	Running current	Cooling	Nom.	A	54	60	65	71	80	90	103
		Max		A	70	75	81	91	99	116	131
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Air cooled multi-scroll heat pump, high efficiency, standard/low sound

- Class A efficiency in heating mode
- Extended operation range: ambient temperatures from -10°C up to +46°C in cooling mode and down to -17°C in heating mode
- 2 truly independent refrigerant circuits
- Reduced footprint thanks to the V-shaped frame (EWYQ160-230F-XS/XL & EWYQ160-220F-XR)
- Reliable and efficient scroll compressors with high EER values
- Chiller series design entirely based on new European directives (EN14511, EN14825)
- Top serviceability level thanks to reduced weight, compact footprint and optimized components accessibility
- The unit can be equipped with a hydraulic module optimizing installation time, space and cost
- Wide range of available options and accessories
- Inverter fans management for enhanced part load efficiencies
- Nordic kit option to improve the chiller working conditions in heating mode
- MicroTech III controller with superior control logic and easy interface

› More information about EWYQ-F-XS

› More information about EWYQ-F-XL

Heating & Cooling				EWYQ-F-XS/XL	160	190	210	230	310	340	380	400	430	510	570	630
Cooling capacity	Nom.			kW	164	184	205	231	304	335	376	401	427	502	565	624
Heating capacity	Nom.			kW	173	197	227	254	329	362	404	429	463	535	607	674
Power input	Cooling	Nom.		kW	57.6	63.3	70.3	79.3	102	114	129	138	145	172	195	214
	Heating	Nom.		kW	54.0	61.6	70.5	79.2	101	113	126	133	140	167	190	210
Capacity control	Method				Step											
	Minimum capacity			%	25.0									17.0		
EER					2.84	2.91	2.92		2.99	2.93	2.91	2.90	2.94	2.92	2.90	2.91
COP					3.20		3.22	3.21	3.24	3.21		3.23	3.30	3.21	3.20	3.21
IPLV					4.45	4.47	4.55	4.38	4.56	4.61	4.38	4.50	4.70	4.71	4.56	4.74
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	128	134	129		143	147	-					
			SCOP		3.28	3.42	3.31	3.30	3.64	3.75	-					
Dimensions	Unit	Height		mm	2,270				2,220							
		Width		mm	1,200				2,258							
		Depth		mm	4,370		5,270		4,125			5,025		5,925		6,825
Weight (XS)	Unit			kg	1,430	1,850	2,300	2,350	2,900	2,910	2,920	3,730	3,750	4,250	4,280	4,670
	Operation weight			kg	1,470	1,890	2,340	2,390	2,980	2,990	3,000	3,840	3,850	4,370	4,400	4,780
Weight (XL)	Unit			kg	1,520	1,940	2,400	2,440	3,060	3,070	3,080	3,890	3,900	4,400	4,440	4,820
	Operation weight			kg	1,570	1,980	2,440	2,480	3,130	3,150	3,160	3,990	4,010	4,520	4,550	4,940
Water heat exchanger	Type				Plate heat exchanger											
	Water flow rate	Cooling	Nom.	l/s	7.8	8.8	9.8	11.1	14.6	16.0	18.0	19.2	20.4	24.0	27.1	29.9
		Heating	Nom.	l/s	8.3	9.5	10.9	12.2	15.9	17.5	19.5	20.7	22.3	25.8	29.3	32.5
	Water pressure drop	Cooling	Nom.	kPa	22	28	36	40	21	27	30	29	34	37	42	56
		Heating	Nom.	kPa	25	32	43	50	25	31	37	33	40	43	50	66
	Water volume			l	18				44			60		70		
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler											
Compressor	Type				Scroll compressor											
	Quantity				4									6		
Fan	Type				Direct propeller											
	Quantity				4		5		8			10		12		14
	Air flow rate	Nom.		l/s	22,577	21,593	26,992		43,187			55,213	53,983	64,780		75,577
	Speed			rpm	900											
Sound power level (XS)	Cooling	Nom.		dBA	92	94	95		97		98	99			100	
Sound power level (XL)	Cooling	Nom.		dBA	89	92	93		95			96		97		98
Sound pressure level (XS)	Cooling	Nom.		dBA	72	74	75	76	77		78		79			80
Sound pressure level (XL)	Cooling	Nom.		dBA	70	73		74	75				76	77		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~46											
		Heating	Min.~Max.	°CDB	-17~20											
	Water side	Cooling	Min.~Max.	°CDB	-13~15											
		Heating	Min.~Max.	°CDB	25~50											
Refrigerant	Type / GWP				R-410A / 2,087.5											
	Circuits	Quantity			2											
Refrigerant charge	Per circuit			kg	16.0	20.0		24.0	35.0	36.0	35.0	46.0		55.0	52.5	68.0
				TCO_2eq	33.4	41.8		50.1	73.1	75.2	73.1	96.0		114.8	109.6	142.0
Piping connections	Evaporator water inlet/outlet (OD)				2.5"				3"							
Unit	Starting current	Max		A	282	536	353	560	600	516	637	659	666	648	787	827
	Running current	Cooling	Nom.	A	115	140	128	162	193	205	235	251	257	307	353	384
		Max		A	138	165	164	196	246	264	295	316	330	396	442	491
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400											

Air cooled multi-scroll heat pump, high efficiency, reduced sound

EWYQ-F-XS/XL/XR

MicroTech III

› More information about EWYQ-F-XR

Heating & Cooling				EWYQ-F-XR	160	180	200	220	300	330	360	390	420	490	550	610
Space cooling	A Condition 35°C	Pdc		kW	-											606.1
	ηs,c			%	-											171.8
SEER					-											4.371
Cooling capacity	Nom.			kW	158	178	199	223	296	326	363	389	415	487	546	606
Heating capacity	Nom.			kW	173	197	227	254	329	362	404	429	463	535	607	674
Power input	Cooling	Nom.		kW	56.2	62.3	68.4	77.9	97.4	111	127	134	141	167	191	210
	Heating	Nom.		kW	54.0	61.6	70.5	79.2	101	113	126	133	140	167	190	210
Capacity control	Method				Step											Staged
	Minimum capacity			%	25.0									17.0		
EER					2.81	2.86	2.92	2.87	3.04	2.93	2.86	2.90	2.93	2.91	2.85	2.89
COP					3.20		3.22	3.21	3.24	3.21		3.23	3.30	3.21	3.20	3.21
IPLV					5.11	5.18	5.22	4.96	5.25	5.35	4.97	5.08	5.25	5.54	5.13	5.36
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	128	134	129		143	147	-					
			SCOP		3.28	3.42	3.31	3.30	3.64	3.75	-					
Dimensions	Unit	Height		mm	2,270				2,220							
		Width		mm	1,200				2,258							
		Depth		mm	4,370		5,270		4,125			5,025		5,925		6,825
Weight	Unit			kg	1,520	1,940	2,400	2,440	3,060	3,070	3,080	3,890	3,900	4,400	4,440	4,820
	Operation weight			kg	1,570	1,980	2,440	2,480	3,130	3,150	3,160	3,990	4,010	4,520	4,550	4,940
Water heat exchanger	Type				Plate heat exchanger											
	Water flow rate	Cooling	Nom.	l/s	7.5	8.5	9.6	10.7	14.2	15.6	17.4	18.6	19.8	23.3	26.1	29.0
		Heating	Nom.	l/s	8.3	9.5	10.9	12.2	15.9	17.5	19.5	20.7	22.3	25.8	29.3	32.5
	Water pressure drop	Cooling	Nom.	kPa	20	26	34	38	20	25	28	27	32	35	39	53
		Heating	Nom.	kPa	25	32	43	50	25	31	37	33	40	43	50	66
	Water volume			l	18				44			60		70		
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler											
Compressor	Type				Scroll compressor											
	Quantity				4									6		
Fan	Type				Direct propeller											
	Quantity				4		5		8			10		12		14
	Air flow rate	Nom.		l/s	17,380	16,564	20,706		33,129			42,431	41,411	49,693		57,975
	Speed			rpm	700											
Sound power level	Cooling	Nom.		dBA	83	84	86		88		89	90		92		
Sound pressure level	Cooling	Nom.		dBA	64	65	66	67	69			70		71		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~46											
		Heating	Min.~Max.	°CDB	-17~20											
	Water side	Cooling	Min.~Max.	°CDB	-13~15											
		Heating	Min.~Max.	°CDB	25~50											
Refrigerant	Type / GWP				R-410A / 2,087.5											
	Circuits	Quantity			2											
Refrigerant charge	Per circuit			kg	16.0	18.0	20.0	24.0	35.0	36.0	35.0	46.0		55.0		68.0
				TCO_2eq	33.4	37.6	41.8	50.1	73.1	75.2	73.1	96.0		114.8		142.0
Piping connections	Evaporator water inlet/outlet (OD)				2.5"				3"							
Unit	Starting current	Max		A	276	530	346	553	589	505	626	645	652	631	770	807
	Running current	Cooling	Nom.	A	114	138	126	160	187	201	232	245	252	301	350	379
		Max		A	133	160	157	189	235	253	283	302	316	379	425	471
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400											

Air cooled screw inverter heat pump, standard efficiency, standard sound

› Ideal solution for commercial comfort cooling and/or heating applications
› 2-3 truly independent refrigerant circuits
› Low starting current
› DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
› Standard electronic expansion valve
› Optimised defrost cycles
› Partial and total heat recovery option available
› Power factor up to 0.95
› PID microprocessor control

› More information about EWYD-BZSS

Heating & Cooling				EWYD-BZSS	250	270	290	320	340	370	380	410	440	460	510	520	580
Cooling capacity	Nom.			kW	253	272	291	323	337	363	380	411	433	455	502	519	580
Heating capacity	Nom.			kW	271	298	325	334	350	380	412	445	465	477	533	561	618
Power input	Cooling	Nom.		kW	91.3	101	110	117	125	135	144	154	165	163	182	189	218
	Heating	Nom.		kW	91.4	100	108	118	126	133	143	157	167	165	178	186	208
Capacity control	Method				Stepless												
	Minimum capacity			%	13.0									9.0			
EER					2.77	2.70	2.65	2.75	2.69	2.68	2.63	2.66	2.62	2.79	2.76	2.74	2.67
COP					2.96	2.97	3.00	2.82	2.78	2.85	2.88	2.83	2.79	2.88	2.99	3.01	2.97
IPLV					4.58	4.62		4.75	4.64	4.71	4.67	4.73	4.69	4.85	4.89	4.85	4.78
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	125							-					
			SCOP		3.21		3.20		3.21			-					
Dimensions	Unit	Height		mm	2,335									2,280			
		Width		mm	2,254												
		Depth		mm	3,547			4,428				5,329		6,659			
Weight	Unit			kg	3,410	3,455	3,500	3,870		3,940	4,010	4,390		5,015	5,495	5,735	
	Operation weight			kg	3,550	3,595	3,640	4,010		4,068	4,138	4,518		5,255	5,724	5,964	5,953
Water heat exchanger	Type				Single pass shell & tube												
	Water flow rate	Cooling	Nom.	l/s	12.1	13.0	13.9	15.5	16.2	17.4	18.2	19.7	20.8	21.8	24.1	24.9	27.8
		Heating	Nom.	l/s	13.1	14.4	15.7	16.1	16.9	18.3	19.8	21.4	22.4	23.0	25.6	27.0	29.7
	Water pressure drop	Cooling	Nom.	kPa	40	46	44	50	55	60	65	74	80	47	85	91	61
		Heating	Nom.	kPa	30	35	52	37	40	45	51	59	64	42	63	69	59
	Water volume			l	138			133		128				240	229		218
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler												
Compressor	Type				Single screw compressor												
	Quantity				2									3			
Fan	Type				Direct propeller												
	Quantity				6			8				10		12			
	Air flow rate	Nom.		l/s	31,729	31,422	31,115	42,306		42,337	41,487	52,882		63,458	62,640	61,652	62,231
	Speed			rpm	900												
Sound power level	Cooling	Nom.		dBA	101							102		104			
Sound pressure level	Cooling	Nom.		dBA	82							83		84			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45												
		Heating	Min.~Max.	°CDB	-10~20												
	Water side	Cooling	Min.~Max.	°CDB	-8~15												
		Heating	Min.~Max.	°CDB	35~55												
Refrigerant	Type / GWP				R-134a / 1,430												
	Circuits	Quantity			2									3			
Refrigerant charge	Per circuit			kg	43.0	44.0	43.0	46.0		46.5	47.0	50.0		47.0			49.0
				TCO_2eq	61.5	62.9	61.5	65.8		66.5	67.2	71.5		67.2			70.1
Piping connections	Evaporator water inlet/outlet (OD)				139.7mm									219.1mm			
Unit	Starting current	Max		A	150			181		204		224	238	245	300	323	
	Running current	Cooling	Nom.	A	137	150	164	176	188	202	214	229	244	246	270	281	322
		Max		A	211		212	254		288		316	336	329	398	432	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

Air cooled screw inverter heat pump, standard efficiency, low sound

EWYD-BZSS/SL MicroTech II

› More information about EWYD-BZSL

Heating & Cooling				EWYD-BZSL	250	270	290	320	330	360	370	400	430	450	490	510	570
Cooling capacity	Nom.			kW	247	265	290	315	330	353	370	401	423	446	490	507	565
Heating capacity	Nom.			kW	271	298	325	334	350	380	412	445	465	477	533	561	618
Power input	Cooling	Nom.		kW	89.5	99.5	110	115	123	134	144	151	163	158	177	186	216
	Heating	Nom.		kW	91.4	100	108	118	126	133	143	157	167	165	178	186	208
Capacity control	Method				Stepless												
	Minimum capacity			%	13.0									9.0			
EER					2.76	2.66	2.62	2.75	2.68	2.64	2.57	2.66	2.59	2.83	2.77	2.73	2.61
COP					2.96	2.97	3.00	2.82	2.78	2.85	2.88	2.83	2.79	2.88	2.99	3.01	2.97
IPLV					4.90	4.96	4.91	5.17	5.08	5.12	5.06	5.22	5.13	5.07	5.03	4.99	4.90
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	125							-					
			SCOP		3.21		3.20		3.21			-					
Dimensions	Unit	Height		mm	2,335									2,280			
		Width		mm	2,254												
		Depth		mm	3,547			4,428				5,329		6,659			
Weight	Unit			kg	3,750	3,795	3,840	4,210		4,280	4,350	4,730		5,525	6,005	6,245	
	Operation weight			kg	3,888	3,933	3,978	4,343		4,408	4,478	4,858		5,765	6,234	6,474	6,463
Water heat exchanger	Type				Single pass shell & tube												
	Water flow rate	Cooling	Nom.	l/s	11.8	12.7	13.9	15.1	15.8	16.9	17.7	19.2	20.3	21.4	23.5	24.3	27.1
		Heating	Nom.	l/s	13.1	14.4	15.7	16.1	16.9	18.3	19.8	21.4	22.4	23.0	25.6	27.0	29.7
	Water pressure drop	Cooling	Nom.	kPa	38	44	42	48	53	57	62	71	77	45	82	87	58
		Heating	Nom.	kPa	30	35	52	37	40	45	51	59	64	42	63	69	59
	Water volume			l	138			133		128				240	229		218
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler												
Compressor	Type				Single screw compressor												
	Quantity				2									3			
Fan	Type				Direct propeller												
	Quantity				6			8				10		12			
	Air flow rate	Cooling	Nom.	l/s	24,432	24,264	24,095	32,576		32,628	32,127	40,720		48,863	48,415	47,732	48,191
	Speed			rpm	700												
Sound power level	Cooling	Nom.		dBA	94			95						97			
Sound pressure level	Cooling	Nom.		dBA	76									77			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45												
		Heating	Min.~Max.	°CDB	-10~20												
	Water side	Cooling	Min.~Max.	°CDB	-8~15												
		Heating	Min.~Max.	°CDB	35~55												
Refrigerant	Type / GWP				R-134a / 1,430												
	Circuits	Quantity			2									3			
Refrigerant charge	Per circuit			kg	43.0	44.0	43.0	46.0		46.5	47.0	50.0		47.0			49.0
				TCO_2eq	61.5	62.9	61.5	65.8		66.5	67.2	71.5		67.2			70.1
Piping connections	Evaporator water inlet/outlet (OD)				139.7mm									219.1mm			
Unit	Starting current	Max		A	145		146	176		199		217	231	234	288	311	305
	Running current	Cooling	Nom.	A	134	148	163	171	184	199	212	224	240	238	263	275	319
		Max		A	202		203	243		277		302	322	313	381	415	406
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

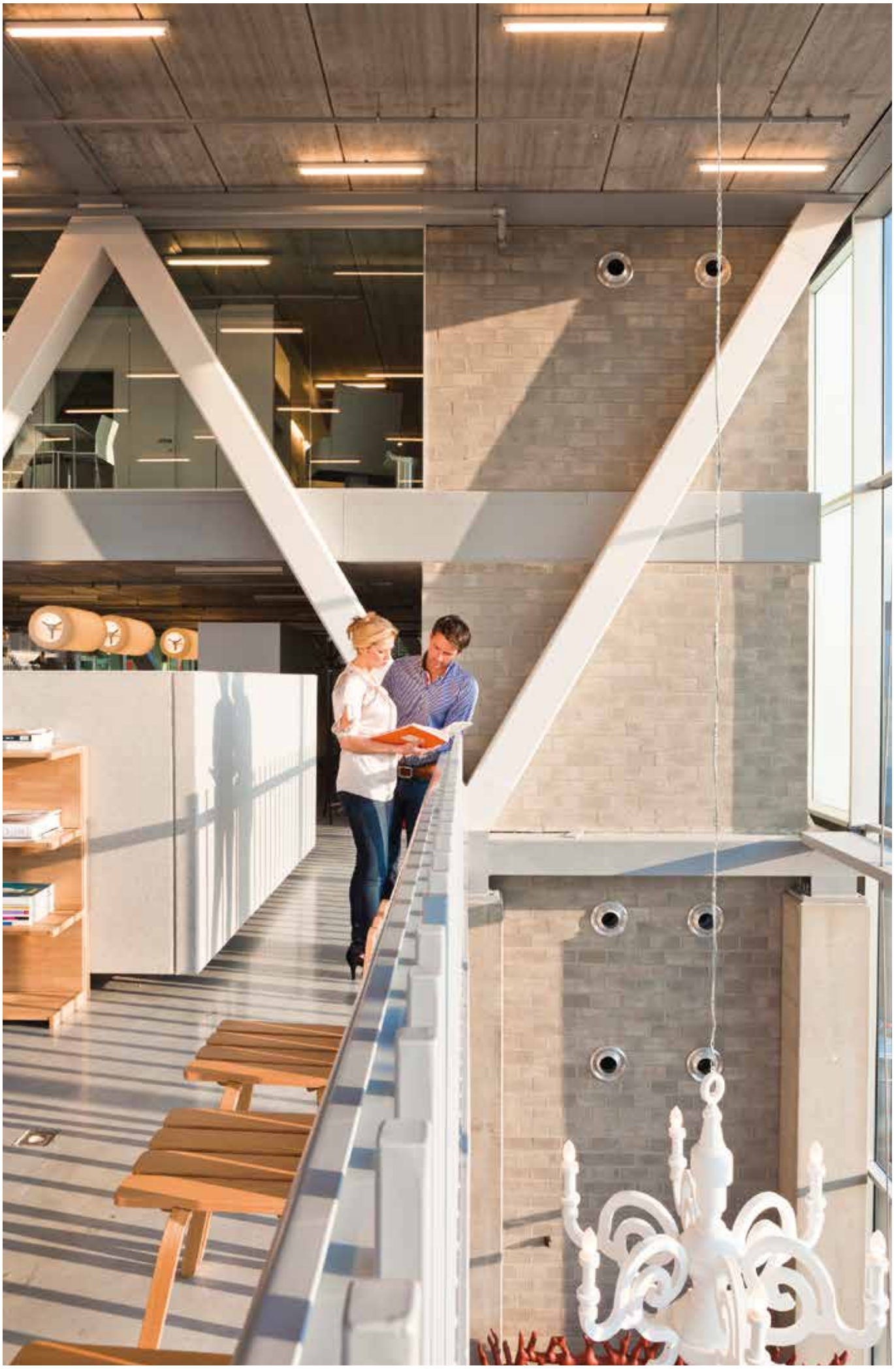


Table of content
Condensing Unit

Please consult the Webbased Selection Software Tool for detailed technical information.

Air cooled screw condensing unit, standard efficiency, standard sound

› One refrigerant circuit with single screw compressor
› Compact design
› Large operation range (ambient temperature down to -18°C)
› Extensive option list (heat recovery option available)

› More information about ERAD-E-SS

Cooling only				ERAD-E-SS	120	140	170	200	220	250	310	370	440	490
Cooling capacity	Nom.			kW	121	144	165	196	219	251	309	370	435	488
Power input	Cooling	Nom.		kW	42.1	51.2	57.7	65.6	74.2	77.0	93.8	123	148	161
Capacity control	Method				Stepless									
	Minimum capacity			%	25.0									
EER					2.88	2.82	2.86	2.99	2.95	3.27	3.30	3.02	2.95	3.02
Dimensions	Unit	Height		mm	2,273						2,223			
		Width		mm	1,292						2,236			
		Depth		mm	2,165		3,065		3,965		3,070			
Weight	Unit			kg	1,584		1,741		1,936		2,679			
	Operation weight			kg	1,617		1,781		1,981		2,756			
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler									
Compressor	Type				Single screw compressor									
	Quantity				1									
Fan	Type				Direct propeller									
	Air flow rate	Nom.		l/s	10,924	10,576	16,386	15,865	21,848	21,153	32,772		31,729	
	Quantity				2		3		4		6			
	Speed	Cooling	Nom.	rpm	900									
Sound power level	Cooling	Nom.		dBA	92				93	94		95		
Sound pressure level	Cooling	Nom.		dBA	74					75				76
Operation range	Saturated suction temp.			°C	-9~12									
	Condenser inlet temp.			°C	-18~48									
Refrigerant	Type / GWP				R-134a / 1,430									
	Circuits	Quantity			1									
Piping connections	Evaporator water inlet/outlet (OD)				76mm							139.7mm		
Unit	Maximum starting current			A	151		195		288		330	410		
	Nominal running current (RLA)		Cooling	A	72	88	98	110	125	129	158	204	244	266
	Maximum running current			A	86	103	119	132	157	164	198	242	284	298
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400									

Air cooled screw condensing unit, standard efficiency, low sound

ERAD-E-SS/SL

MicroTech III

› More information about ERAD-E-SL

Cooling only				ERAD-E-SL	120	140	160	190	210	240	300	350	410	460
Cooling capacity	Nom.			kW	116	137	159	187	209	243	298	352	409	462
Power input	Cooling	Nom.		kW	42.4	52.5	57.7	66.3	73.9	78.1	91.9	122	150	167
Capacity control	Method				Stepless									
	Minimum capacity			%	25.0									
EER					2.74	2.61	2.75	2.83		3.11	3.24	2.88	2.73	2.76
Dimensions	Unit	Height		mm	2,273						2,223			
		Width		mm	1,292						2,236			
		Depth		mm	2,165		3,065		3,965		3,070			
Weight	Unit			kg	1,684		1,841		2,036		2,789			
	Operation weight			kg	1,717		1,881		2,081		2,886			
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler									
Compressor	Type				Single screw compressor									
	Quantity				1									
Fan	Type				Direct propeller									
	Air flow rate	Nom.		l/s	8,373	8,144	12,560	12,216	16,747	16,288	25,120		24,432	
	Quantity				2		3		4		6			
	Speed	Cooling	Nom.	rpm	700									
Sound power level	Cooling	Nom.		dBA	89		90		91	92				93
Sound pressure level	Cooling	Nom.		dBA	71					73				74
Operation range	Saturated suction temp			°C	-9~12									
	Condenser inlet temp			°C	-18~48									
Refrigerant	Type / GWP				R-134a / 1,430									
	Circuits	Quantity			1									
Piping connections	Evaporator water inlet/outlet (OD)				76mm							139.7mm		
Unit	Maximum starting current			A	151		195		288		330	410		
	Nominal running current (RLA)		Cooling	A	73	90	98	112	125	131	155	204	249	275
	Maximum running current			A	83	100	115	128	151	158	189	234	276	290
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400									

Options - Air cooled Chillers

Options - Small chillers

Chiller series	Integrated hydronics	Electrical
	Single pump	Evaporator heater tape
	OPSP	OP10
EWAQ-BVP	STD	STD
EWYQ-BVP	STD	STD
EWAQ-ACV3	STD	STD
EWAQ-ACW1	STD	STD
EWYQ-ACV3	STD	STD
EWYQ-ACW1	STD	STD

Options - Medium and large Air cooled chillers (Part 1)

Description	Code	EWAQ-CW EWYQ-CW	EWAQ-G-	EWYQ-G-	EWYQ-F-XS EWYQ-F-XL	EWYQ-F-XR
Total heat recovery	01		Option			
Total heat recovery (1 circuit)	02					
Partial heat recovery	03a		Option	Option	CF	CF
Evaporator 1 Pass	03b					
Direct on line starter (DOL)	04		STD	STD	STD	STD
WyeDelta compressor starter (YD)	05					
Soft starter	06		Option	Option	Option	Option
Heat pump version	07					
Heat pump version (including pursuit mode)	07a (4)					
Brine version	08 (1)	Option	Option	Option	Option	Option
Low temperature brine	08d					
Brine version (on-off fans)	08e					
Brine version (inverter fans)	08f					
Brine version (brushless fans)	08g					
Double setpoint	10		STD	STD	STD	STD
Compressor thermal overload relays	11				Option	Option
Fans thermal relays	12					
Phase monitor	13					
Inverter compressor starter	14					
Under / Over voltage control	15		Option	Option	Option	Option
Energy meter	16				Option	Option
Energy meter (including current limit)	16a					
Capacitors for power factor correction	17		Option	Option	Option	Option
Capacitors for power factor correction (single-V)	17b					
Current limit	19					
Evaporator victaulic kit	20		STD	STD	STD	STD
Evaporator flange kit	21					
Evaporator marine waterbox victaulic (2 passes)	22					
Evaporator marine waterbox victaulic (1 pass)	22a					
Evaporator marine waterbox flanged (2 passes)	24					
Evaporator marine waterbox flanged (1 pass)	24a					
Condenser double flanges kit	26					
Evaporator water side design pressure (10 Bar)	27					
Evaporator water side design pressure (16 Bar)	28					
20mm evaporator insulation	29		STD	STD	STD	STD
Axial fans (100 Pa lift)	30					
Axial fans (250 Pa lift)	32					
20mm condenser insulation	33					
Condenser victaulic kit	36					
Condenser marine waterbox victaulic (2 passes)	38					
Condenser marine waterbox victaulic (1 pass)	38a					
Condenser marine waterbox flanged (2 passes)	40					
Condenser marine waterbox flanged (1 pass)	40a					
Speedtrol (fan speed control device ON/OFF up to 18°C)	42					
Speedtrol (fan speed control device ON/OFF down to 10°C in cooling)	42a				Option	
Condenser coil guards	43				Option	Option
Evaporator area guards	44				Option	Option
CuCu condenser coil	45				Option	Option
CuCuSn condenser coil	46				Option	Option
Condenser water side design pressure (16 Bar)	47					
Condenser water side design pressure (10 Bar)	47a					
Alucoat fins coil	49			STD	STD	STD
CuNi 9010 condenser tubes	50					
Condenser 1 pass (ΔT 48 °C)	51					
Condenser 2 passes (ΔT 48 °C)	52					
Condenser 2 passes (ΔT 915 °C)	53					
Condenser 3 passes	53b					
Condenser 4 passes	54					
Water pressure differential switch on condenser	55					
Water pressure differential switch on evaporator	56					
Evaporator electric heater	57	Option	STD	STD	STD	STD
Evaporator flow switch	58		Option	Option	STD	STD
Condenser flow switch	59					
Electronic expansion valve	60		STD	STD	STD	STD
Discharge line shutoff valve	61				Option	Option
Suction line shutoff valve	62				Option	Option

(1) Option 08 includes option 29 and option 146 - (2) Option 99(a) includes 'Fan overload protection' - (3) Piping between the inertial tank and the unit is not included. Electric heater power supply has to be provided from external source - (4) Option 07a includes option 33 (20mm condenser insulation) - (5) Option 111 contains option 07a (Heat pump version, including pursuit mode) and option 33 (20mm condenser insulation) - (6) Only available for some models - (7) incompatibility with opt 134, 135, 136, 137, 120e / f / g / h on EWAT-B- and vice-versa (8) Option 171 includes 61; 62; 99; 99a - (9) Option 172 includes 61; 99; 99a - (10) Option 173 includes 61; 99; 99a
CF = Contact the factory - STD = Standard - SO = Specify at Order entry - NC = No additional cost

Options - Medium and large Air cooled chillers (Part 1)

EWAD-TZB	EWAH-TZB	EWAD-T	EWAT-B-	EWAD-CF	EWYD-BZSS	EWYD-BZSL	ERAD-E-
Option	Option	Option	Option (7)				Option
Option	Option	Option	Option		Option	Option	Option
			STD				
		STD		STD			STD
		Option	Option	Option			Option
		Option		Option	Option	Option	Option
Option							
Option	Option						
Option	Option						
STD	STD	STD	STD	STD	STD	STD	STD
STD	STD	Option	Option (6)	Option			Option
STD	STD	STD		STD	STD	STD	STD
STD	STD				STD	STD	
STD	STD	Option	Option	Option	Option	Option	Option
		Option	Option	Option	Option	Option	Option
Option	Option						
		Option	Option (6)	Option			Option
			Option (6)				
		Option		Option	Option	Option	Option
STD	STD	STD	STD		STD	STD	
Option	Option	Option	Option	STD			
STD	STD	STD	OPTION	STD	Option	Option	
Option	Option (6)	Option	Option				Option
				Option	Option	Option	Option
				Option			
				Option	Option	Option	Option
				Option	Option	Option	Option
				Option	Option	Option	Option
STD	STD	Option	STD	STD	STD	STD	
Option	Option		Option	Option	Option	Option	
STD	STD	STD	STD	STD	STD	STD	
STD	STD	STD	Option	STD	STD	STD	STD
STD	STD	Option	Option	Option	STD	STD	STD

Options - Medium and large Air cooled chillers (Part 2)

Description	Code	EWAQ-CW EWYQ-CW	EWAQ-G-	EWYQ-G-	EWYQ-F-XS EWYQ-F-XL	EWYQ-F-XR
High pressure side manometers	63				Option	Option
Low pressure side manometers	64				Option	Option
Ambient outside temperature sensor and setpoint reset	67		STD	STD	STD	STD
Hour run meter	68		STD	STD	STD	STD
General fault contactor	69		STD	STD	STD	STD
Alarm from external device	70					
Container Kit	71		Option	Option	Option	Option
Rubber anti vibration mounts	75		Option	Option	Option	Option
Sound proof system	76					
Sound proof system (integral)	76-a					
Sound proof system (compressor)	76-b					
Spring anti vibration mounts	77		Option	Option	Option	Option
One centrifugal pump (low lift)	78	Option	Option	Option		
One centrifugal pump --- SPK1	78-a				Option	Option
One centrifugal pump --- SPK2	78-b				Option	Option
One centrifugal pump --- SPK3	78-c				Option	Option
One centrifugal pump --- SPK4	78-d				Option	Option
One centrifugal pump --- SPK1a	78-l				Option	Option
One centrifugal pump --- SPK1b	78-m				Option	Option
One centrifugal pump --- SPK1c	78-n				Option	Option
One centrifugal pump (high lift)	79	Option	Option	Option		
Two centrifugal pump (low lift)	80		Option	Option		
Two centrifugal pump (high lift)	81		Option	Option		
External tank without cabinet (500 L)	83 (3)		Option	Option	Option	Option
External tank without cabinet (1000 L)	84 (3)		Option	Option	Option	Option
External tank with cabinet (500 L)	87 (3)		Option	Option	Option	Option
External tank with cabinet (1000 L)	88 (3)		Option	Option	Option	Option
Acoustic test	89					
Setpoint reset, Demand limit and Alarm from external device	90				Option	Option
Double pressure relief valve with diverter	91		Option	Option	Option	Option
PW COMPRESSOR - PART WINDING START	92					
Low ambient kit for 1 circuit	93					
Low ambient kit for 2 circuits	94					
Compressors circuit breakers	95		Option	Option	Option	Option
Fans circuit breakers	96		Option	Option	Option	
Main switch interlock door	97		STD	STD	STD	STD
Emergency stop	98					
Fans speed regulation (+ fan silent mode)	99 (2)					
Fans speed regulation (inverter)	99a (2)				Option	STD
Refrigerant recovery unit	100					
Evaporator right water connections	101					
Ground fault relay	102				Option	Option
Liquid receiver	105					
Rapid restart	110					
High temperature kit	111 (5)					
Transport kit	112		Option	Option	Option	
Optimized free cooling (VFD fans regulation)	113-a					
Optimized free cooling (On/Off fans)	113-b					
Nordic kit	114			Option	Option	Option
Water filter	115		Option	Option	STD	STD
Condenser coil protection panels	116				Option	Option
Blygold coil treatment	117			Option	Option	Option
Inverter kit for 1 centr pump low lift	120e		Option			
Inverter kit for 1 centr pump high lift	120f		Option			
Inverter kit for 2 centr pumps low lift	120g					
Inverter kit for 2 centr pumps high lift	120h					
Refrigerant leak detection	121					
Discharge and suction line shut-off valve	126		Option	Option		
High and low pressure side manometers	127		Option	Option		
Master/slave	128		STD	STD	STD	STD
One centrifugal pump (low lift) + tank	134		Option	Option		
One centrifugal pump (high lift) + tank	135		Option	Option		
Two centrifugal pump (low lift) + tank	136		Option	Option		
Two centrifugal pump (high lift) + tank	137		Option	Option		
Coil guard	138		Option	Option		
E-coating microchannel coils	139		Option			
Unit guards (to cover unit access)	140					
Side panels on coil ends	141					
High ambient kit (operatin 46°C)	142					
High ambient kit	142a					
High ambient kit (operation above 46°C on-off fans)	142b					
High ambient kit (operation above 46°C Brushless fans)	142c					
Variable primary flow	143					
Diff pressure transd (shipped loose)	144					
EC motor fans	145					
Compressor thermal insulation	146					
Knock-down electrical panel	147					
Automatic transfer switch (free standing)	149					
Inverter EN61800-3 class C2 compliant	150					
Rubber pads	152					
Blue coat	153					
Evaporator Optimized for high delta T	154					
Daikin on site modem (with antenna)	155					
AC 9000 rpm fans	156					
AC 700 rpm fans	157					
Brushless fans up to 900 rpm	158					
Brushless fans up to 700 rpm	159					
100 PA ESP fans	160			Option		
100 Pa ESP (on-off fans)	160a					
100 Pa ESP (inverter fans)	160b					
100 Pa ESP (brushless fans)	160c					
100 Pa ESP (on-off high power fans)	160d					
200 PA ESP fans	161					
200 Pa ESP (on-off high power fans)	161a					
200 Pa ESP (brushless fans)	161b					
Cu-Ni Evaporator tubes	164					
Marine version	167					
120 Pa ESP fans	168				Option	
Portable touch screen	169					
Nitrogen holding charge on water side heat exchangers	170					
Free cooling migration - Light	171 (8)					
Free cooling migration - Full	172 (9)					
Free cooling migration - Ful with hydro kit	173 (10)					

EWAD-TZB	EWAH-TZB	EWAD-T	EWAT-B-	EWAD-CF	EWYD-BZSS	EWYD-BZSL	ERAD-E-
Option	Option	Option	Option	Option	Option	Option	Option
Option	Option	Option	Option	Option	Option	Option	
STD	STD	STD	STD	STD	STD	STD	STD
STD	STD	STD	STD	STD	STD	STD	STD
STD	STD	STD	STD	STD	STD	STD	STD
			STD				
Option	Option	Option	Option		Option	Option	Option
Option	Option	Option	Option	Option	Option	Option	Option
Option	Option	Option	Option	Option	Option	Option	Option
Option	Option	Option	Option		Option		
				Option			
				Option			
Option	Option	Option	Option		Option		
Option	Option	Option	Option		Option		
Option	Option	Option	Option		Option		
Option	Option	Option	Option		Option	Option	
Option	Option	Option	Option		Option	Option	
Option	Option	Option	Option		Option	Option	
Option	Option	Option	Option		Option	Option	
STD	STD	STD		STD	Option	Option	STD
Option	Option	Option	Option	Option	Option	Option	Option
Option	Option	Option	Option	Option			Option
STD	STD	STD	Option	STD	STD	STD	STD
STD	STD	STD	STD	STD			STD
				STD			
			STD (6)	STD	Option	STD	Option
Option	Option (6)	Option	Option (6)				
Option	SO	SO		SO	Option	SO	
Option	Option	Option	Option	Option			
Option	Option	Option		Option			
Option	Option	Option	Option		Option	Option	Option
				Option			
				Option			
					Option	Option	
STD	STD (6)		Option				
				Option	Option	Option	Option
				Option			Option
Option	Option	Option	Option				
Option	Option	Option	Option				
Option	Option	Option	Option				
Option	Option	Option	Option				
Option	Option (6)		Option				
			Option				
			Option				
STD	STD	STD	STD				
			Option				
			Option				
			Option				
			Option				
Option	Option	Option	Option				
Option	Option	Option	Option				
Option	Option	Option	Option				
		Option					
			Option				
Option	Option						
Option	Option						
Option	Option		Option				
Option	Option		Option				
Option							
Option	Option	Option	Option				
Option	Option						
Option	Option	Option	Option				
Option	STD (6)						
Option	STD (6)						
Option	Option (6)						
Option	Option						
	Option (6)		Option (6)				
Option	Option						
Option	Option						
Option	Option						
Option							
			Option (6)				
Option	Option						
Option	Option						
Option	CF						
			Option				
			Option				
			Option				

Accessories - Air cooled chillers

	Air-cooled chillers							
Panels	**EWAQ~BVP EWYQ~BVP**	**EWAQ~AC EWYQ~AC**	**EWAQ-CW EWYQ-CW**	**EWYQ-F-**	**EWYD~4Z**	**EWAD~TZ (&B)**	**EWAH-TZB**	**EWAD~T- (B)**
EKDICMPAB (a) (b) iCM Primary Basic						●	●	●
EKDICMPAL (a) (b) iCM Primary for evaporator peripherals Light						●	●	●
EKDICMPAF (a) (b) iCM Primary for evaporator peripherals Full						●	●	●
EKTSMS Temperature sensor for master/slave configuration				●				
EKRUMCL1 User Interface	●							

	Air-cooled chillers							
Serial Cards & Communication Modules	**EWAQ~BVP EWYQ~BVP**	**EWAQ~AC EWYQ~AC**	**EWAQ-CW EWYQ-CW**	**EWYQ-F-**	**EWYD~4Z**	**EWAD~TZ (&B)**	**EWAH-TZB**	**EWAD~T- (B)**
EKAC200J Serial Card RS485/Modbus								
EKACBAC Ethernet Card BACnet								
EKACLONP Serial Card LON FTT10								
EKACRS232 Serial Card RS232 Modem Interface (single unit only)								
EKACWEB Web Server Card								
EKACBACMSTP Serial Card BACnet MSTP								
EKCM200J ModBus RTU communication module				●	●	●	●	●
EKCMLON LON communication module				●	●	●	●	●
EKCMBACMSTP BACnet/MSTP communication module				●	●	●	●	●
EKCMBACIP BACnet/IP communication module				●	●	●	●	●

	Air-cooled chillers							
Other Systems & Accessories	**EWAQ~BVP EWYQ~BVP**	**EWAQ~AC EWYQ~AC**	**EWAQ-CW EWYQ-CW**	**EWYQ-F-**	**EWYD~4Z**	**EWAD~TZ (&B)**	**EWAH-TZB**	**EWAD~T- (B)**
EKCON Converter RS485 to RS232								
EKCONUSB Converter RS485 to USB								
EKMODEM Fixed modem								
EKGSMOD GSM modem								
EKRUPCJ Remote display kit								
EKRUPCS Local/remote display HMI				●	●	●	●	●
EKPWPROEXT PlantWatchPro I/O extension module for hardwiring and retrofit								
EKGWWEB Gateway web (Ethernet LAN SNMP)								
EKGWMODEM Gateway for modem								
EKRP1AHT Digital input/output PCB			●					
EKRUAHTB Remote user interface			●					
DTA104A62 External control adapter			●					
BHGP26A1 Digital pressure gauge kit			●					
EKQDP2M016 (h) Differential Pressure Sensor 4-20 mA 0-160 kPa						●	●	●
EKQDP2M020 (h) Differential Pressure Sensor 4-20 mA 0-250 kPa						●	●	●
EKQDP2M040 (h) Differential Pressure Sensor 4-20 mA 0-400 kPa						●	●	●
EKQDP2M060 (h) Differential Pressure Sensor 4-20 mA 0-600 kPa						●	●	●
EKDAPCONT Containerization of one unit				●	●	●	●	●
EKDAPSTF Containerization of additional units in the same container				●	●	●	●	●

Notes:
(a) Price does not include commissioning of panel; if commissioning is required please refer to RN17-041
(b) iCM panels work in cooling mode only; heat pump versions and total heat recovery options on A/C and W/C chillers are not compatible
(c) in case you are ordering iCM panels please contact factory
(d) For 45/55/65 Hp-units 2 pieces are needed

EWAT-B	ERAD~E-	EWAQ~G-	EWYQ~G-	EWAD~CF (c)
●		●		●
●		●		●
●		●		●
●		●	●	

EWAT-B	ERAD~E-	EWAQ~G-	EWYQ~G-	EWAD~CF (c)
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●

EWAT-B	ERAD~E-	EWAQ~G-	EWYQ~G-	EWAD~CF (c)
●	●	●	●	●
●		●		●
●		●		●
●		●		●
●		●		●
●	●	●	●	●
●	●	●	●	●

(e) Only available for modulare units (EWWP~KAW1M)
(f) For 009/010/011/013 units (price available in SAP system)
(g) Price available in SAP system
(h) Differential pressure sensor are specific for iCM panels in variable primary flow management

Why choose for a water cooled chiller?

Daikin's efficient, profitable and maintenance-friendly water cooled chillers are especially suitable for critical industrial applications where a temperature control accuracy of ±0.5°C is required. Water cooled chillers are typically intended for indoor installation and operation. Water cooled chillers are available with different compressor types:

Water cooled scroll chillers

These units are among the most efficient, quiet and reliable chillers available today. Units can be easily integrated with the HVAC system of your choice.

Water cooled screw chillers

The Daikin water cooled screw chillers provide the ideal solution for sound sensitive environments. Applications range from comfort cooling to ice making.

Water cooled centrifugal chillers

Small footprint, quiet compressor, easy integration with existing HVAC system… This chiller offers you a return on investment throughout its life cycle. Ideal solution for large cooling requirements (e.g. district cooling).

Large product line-up

Thanks to an extensive product line-up in medium- to large-scale facilities (from 13 kW up to 10,900 kW), you can select the optimum model for your application.

Application versatility

Daikin delivers energy efficiency to a wide range of process and comfort climate applications, for all conditions and cooling or heating requirements. These chillers generate cold and hot water, which can be used for chilling, heating or even both at the same time.

Outstanding durability

The latest technology for magnetic bearings is used in the compressor, the heart of the centrifugal chiller. Result? Outstanding durability for lower maintenance costs.

Installation flexibility

Water cooled chillers can be installed indoors and require only very limited space in a machine room.

Table of content
Water cooled

Please consult the Webbased Selection Software Tool for detailed technical information.

Water cooled scroll heat pump

- One of the most compact units on the market: 600mm x 600mm x 600mm
- Low energy consumption
- Low operating sound level
- Low refrigerant volume
- Stainless steel plate heat exchanger
- Extension possible to 183kW
- Easy installation and maintenance
- Remote cooling or heating selection
- Water/water heat pump, with water reversibility
- Standard integrated: water filter, flow switch, air purge, pressure ports
- Advanced µC²SE controller for direct connection to a Modbus based BMS or to a remote user interface

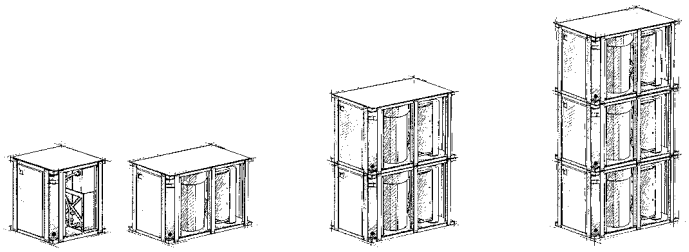
EWWQ-KBW1N µC²SE

› More information about EWWQ-KBW1N

Cooling only/Heating only				EWWQ-KBW1N	014	025	033	049	064	098	113	128	147	162	177	192
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	171	177	186	180	189				-			
			Seasonal space heating eff. class				A+++						-			
Cooling capacity	Nom.			kW	13.25	23.9	30.4	47.15	60.98	94	108	122	142	155	169	183
Power input	Cooling	Nom.		kW	3.15	5.72	7.3	11.42	14.58	22.7	25.8	28.9	33.9	37	40.1	43.2
Capacity control	Method						Fixed						-			
	Minimum capacity			%		100		50			25			16		
EER					4.209	4.177	4.164	4.127	4.182	4.17	4.19	4.22	4.18	4.2	4.22	4.24
IPLV					5.13	5.27	5.41	5.36	5.47	5.36	5.42	5.47	5.36	5.4	5.44	5.47
Dimensions	Unit	Height		mm			600				1,200			1,800		
		Width		mm							600					
		Depth		mm		600						1,200				
Weight	Unit			kg	120	170	175	310	340	620	650	680	930	960	990	1,020
	Operation weight			kg	123	175	182	320	353	640	673	707	960	993	1,026	1,060
Water heat exchanger - evaporator	Type										Brazed plate					
	Water volume			l	1.23	1.93	2.68	4.5	5.93	9	10	12	14	15	16	18
	Water flow rate	Nom.		l/s	0.64	1.15	1.46	2.26	2.92	4.5	5.2	5.8	6.8	7.4	8.1	8.8
	Water pressure drop	Cooling	Nom.	kPa	19.6	28.5	25.7	24.3	25.3	24.3	25.2		24.3	25.2		
Water heat exchanger - condenser	Type										Brazed plate					
	Water volume			l	1.83	2.93	4.03	5.45	7.35	10.9	12.8	14.69	16.35	18.25	20.15	22.04
	Water flow rate	Nom.		l/s	0.78	1.41	1.83	2.78	3.61	5.57	6.39	7.21	8.35	9.17	10	10.8
	Water pressure drop	Cooling	Nom.	kPa	13.2	18.3	18.5	26.9	28.5	26.9	28.5		26.9	28.5		
Compressor	Type										Scroll compressor					
	Quantity					1		2			4			6		
Sound power level	Cooling	Nom.		dBA		64.0	71.0	67.0	74.0	71.0	75.0	77.0	73.0	77.0	78.0	79.0
Sound pressure level	Cooling	Nom.		dBA		50.0	57.0	53.0	60.0	55.70	59.70	61.70	56.9	60.9	61.9	62.9
Operation range	Evaporator	Cooling	Min.~Max.	°CDB							-10~20					
	Condenser	Cooling	Min.~Max.	°CDB							20~55					
Refrigerant	Type										R-410A					
	Charge			kg	1.2	2	3.1	4.6	5.6	9.4	10.2	11.2	13.8	14.8	15.8	16.8
	Circuits	Quantity				1		2			4			6		
Piping connections	Evaporator water inlet/outlet (OD)					G1"		G1" 1/2			2 x 2x G1" 1/2			3 x 3x G1" 1/2		
	Condenser water inlet/outlet (OD)					G1"		G1" 1/2			2 x 2x G1" 1/2			3 x 3x G1" 1/2		
Unit	Starting current	Max		A	61.8	101.9	137.9	117.55	158.63	148.86	189.93	200.09	180.16	221.24	231.39	241.54
	Running current	Cooling	Nom.	A	5.99	9.29	12.98	18.69	26.08	37.37	44.75	52.12	56.06	63.44	70.81	78.18
		Max		A	9.47	15.65	20.73	31.31	41.46	62.61	72.76	82.91	93.92	104.07	114.22	124.37
Power supply	Phase/Frequency/Voltage			Hz/V							3~/50/400					

Water cooled scroll chiller

Combination table



		Single Module					2 x Modules			3 x Modules			
Unit Index		**014**	**025**	**033**	**049**	**064**	**098**	**113**	**128**	**147**	**162**	**177**	**192**
Capacity (kW)		**13**	**24**	**31**	**49**	**64**	**98**	**113**	**128**	**147**	**162**	**177**	**192**
Unit + control factory mounted	EWWQ014KBW1N	1	-	-	-	-	-	-	-	-	-	-	-
	EWWQ025KBW1N	-	1	-	-	-	-	-	-	-	-	-	-
	EWWQ033KBW1N	-	-	1	-	-	-	-	-	-	-	-	-
	EWWQ049KBW1N	-	-	-	1	-	-	-	-	-	-	-	-
	EWWQ064kBW1N	-	-	-	-	1	-	-	-	-	-	-	-
Modular unit (controller available as accessory)	EWWQ049KAW1M	-	-	-	-	-	2	1	-	3	2	1	-
	EWWQ064KAW1M	-	-	-	-	-	-	1	2	-	1	2	3
Controller for modular unit	ECB2MUAW	-	-	-	-	-	1	1	1	-	-	-	-
	ECB3MUAW	-	-	-	-	-	-	-	-	1	1	1	1

Note 1: the above combination table is also valid for standard models with OPZL or OPZH.

Note 2: condenserless versions are only available as single modules only.

Water cooled multi-scroll chiller reversing on refrigerant side, standard efficiency, standard sound

- Single refrigerant circuit (2 scroll compressors) with single evaporator
- Heat pump version with reversibility on refrigerant side available, ideal for geothermal applications
- Compact design to allow easy indoor installation or retrofit operations
- Conceived for stacked installation of two single circuit units to reduce the footprint
- High efficiency and reliable scroll compressor
- High flexibility for a wide variety of applications
- Allows sequencing control (up to 4 units) without any external device
- Stainless steel plate heat exchanger
- Pump (low 100 kPa and high 200 kPa lift) available for evaporator and condenser
- MicroTech III controller with superior control logic and easy interface

EWHQ-G-SS

Microtech III

› More information about EWHQ-G-SS

Heating & Cooling				EWHQ-G-SS	100	120	130	150	160	190	210	240	270	340	400
Cooling capacity	Nom.			kW	87.3	100.0	111	127	141	160	181	208	232	291	352
Heating capacity	Nom.			kW	112	128	144	162	179	205	233	266	299	375	454
Capacity control	Method				Step										
	Minimum capacity			%	50.0	43.0	50.0	44.0	50.0	45.0	50.0	43.0	50.0	40.0	50.0
Power input	Cooling	Nom.		kW	22.4	25.3	28.5	32.0	35.6	41.1	46.0	53.3	59.1	73.7	88.4
	Heating	Nom.		kW	27.0	30.9	35.2	39.3	43.6	50.4	56.6	64.7	72.2	90.3	109
EER					3.90	3.95	3.91	3.96	3.95	3.90	3.93	3.90	3.92	3.95	3.98
COP					4.15	4.16	4.09	4.12	4.11	4.07	4.11	4.10	4.14	4.16	4.18
IPLV					6.02	6.14	5.66	5.84	5.73	5.84	5.81	5.87	5.71	5.86	5.79
Dimensions	Unit	HeightxWidthxDepth		mm	1,066x928x2,432		1,066x928x2,264			1,066x928x2,432				1,186x928x2,432	
Weight	Unit			kg	519	608	728	770	808	838	880	930	941	1,090	1,203
	Operation weight			kg	558	654	782	830	873	908	995	1,019	1,031	1,202	1,334
Water heat exchanger - evaporator	Type				Plate heat exchanger										
	Water volume			l	6	8		10	12	13	15	17		27	34
	Water flow rate	Cooling	Nom.	l/s	4.2	4.8	5.3	6.1	6.7	7.7	8.7	10.0	11.1	13.9	16.9
		Heating	Nom.	l/s	4.1	4.7	5.2	5.9	6.5	7.4	8.5	9.6	10.9	13.7	16.6
	Water pressure drop	Cooling	Nom.	kPa	44		35	30	29	31	33	31	38	42	43
		Heating	Nom.	kPa	42		33	28	27	29	32	29	37	41	42
Water heat exchanger - condenser	Type				Plate heat exchanger										
	Water volume			l	6	8		10	12	13	15	17		27	34
	Water flow rate	Cooling	Nom.	l/s	5.2	6.0	6.7	7.7	8.5	9.7	10.9	13.7	13.9	17.4	21.1
		Heating	Nom.	l/s	5.4	6.2	7.0	7.8	8.7	9.9	11.2	12.5	14.3	18.0	21.8
	Water pressure drop	Cooling	Nom.	kPa	69		55	49	48	51	54	32	39	66	69
		Heating	Nom.	kPa	73		59	51	50	53	57	33	42	70	73
Compressor	Type				Scroll compressor										
	Quantity				2										
Sound power level	Cooling	Nom.		dBA	80	83	85	87	88			90	92	93	
Sound pressure level	Cooling	Nom.		dBA	64	67	69	70	72			74	76		77
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-8~15										
		Heating	Min.~Max.	°CDB	-8~15										
	Condenser	Cooling	Min.~Max.	°CDB	25~55										
		Heating	Min.~Max.	°CDB	25~55										
Refrigerant	Type/GWP				R-410A/2,087.5										
	Circuits	Quantity			1										
Refrigerant charge				kg/TCO2Eq	9.0/18.8		10.0/20.9		13.0/27.1	11.0/23.0	13.0/27.1	15.0/31.3		19.0/39.7	
Piping connections	Evaporator water inlet/outlet (OD)				1" 1/2		2" 1/2							3"	
	Condenser water inlet/outlet (OD)				1" 1/2		2" 1/2							3"	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										
Unit	Starting current	Max		A	204	255	261	308	316	354	368	466	481	640	677
	Running current	Cooling	Nom.	A	43	46	50	56	63	71	78	88	97	123	148
		Max		A	59	66	72	80	88	102	116	131	145	183	221

Water cooled multi-scroll chiller, standard efficiency, standard sound

EWWQ-G-SS MicroTech III

- Single refrigerant circuit (2 scroll compressors) with single evaporator
- Heat pump version available
- Compact design to allow easy indoor installation or retrofit operations
- Conceived for stacked installation of two single circuit units to reduce the footprint
- High efficiency and reliable scroll compressor
- High flexibility for a wide variety of applications
- Allows sequencing control (up to 4 units) without any external device
- Stainless steel plate heat exchanger
- Pump (low 100 kPa and high 200 kPa lift) available for evaporator and condenser
- MicroTech III controller with superior control logic and easy interface

› More information about EWWQ-G-SS

Cooling Only				EWWQ-G-SS	090	100	120	130	150	170	190	210	240	300	360
Space cooling	A Condition 35°C	Pdc		kW	93.7	105.6	119	135.9	150	172.1	193.8	220.7	246.1	314.3	370.4
	ηs,c			%	209.08	215.32	233.52	227.68	233.04	233.36	220.32	235.56	231.84	236.64	211.36
SEER					5.427	5.583	6.038	5.892	6.026	6.034	5.708	6.089	5.996	6.116	5.484
Cooling capacity	Nom.			kW	93.7	105.6	119	135.9	150	172.1	193.8	220.7	246.1	314.3	370.4
Power input	Cooling	Nom.		kW	21.3	24	26.9	30.5	33.9	38.9	43.8	50.74	56.1	70.2	84
Capacity control	Method				Fixed										
	Minimum capacity			%	50	43	50	44	50	45	50	43	50	40	50
EER					4.399	4.4	4.424	4.456	4.425	4.424	4.425	4.349	4.387	4.477	4.41
IPLV					6.71	6.79	6.22	6.36	6.22	6.32	6.3	6.31	6.1	6.28	6.16
Dimensions	Unit	Height		mm	1,066									1,186	
		Width		mm	928										
		Depth		mm	2,432			2,264		2,432					
Weight	Unit			kg	516	606	728	762	795	832	871	921	934	1,083	1,181
	Operation weight			kg	554.9	652.4	781.6	821.4	859	901.4	945.9	1,009.6	1,023.2	1,194.7	1,311.1
Water heat exchanger - evaporator	Type				Plate heat exchanger										
	Water volume			l	6	8		10	12	13	15	17		27	34
	Water flow rate	Nom.		l/s	4.5	5.07	5.7	6.51	7.18	8.24	9.28	10.57	11.79	15.06	17.74
	Water pressure drop	Cooling	Nom.	kPa	48.8	49	39.1	33	32.6	34.5	36.7	33.8	41.8	46.8	
Water heat exchanger - condenser	Type				Plate heat exchanger										
	Water volume			l	6	8		10	12	13	15	17		27	34
	Water flow rate	Nom.		l/s	5.52	6.23	7.05	8.04	8.87	10.17	11.43	13.02	14.53	18.46	21.81
	Water pressure drop	Cooling	Nom.	kPa	72	73	60	50		52	56	46	57	69	71
Compressor	Type				Driven vapour compression										
	Quantity				2										
Sound power level	Cooling	Nom.		dBA	80	83	85	87	88			90	92	93	
Sound pressure level	Cooling	Nom.		dBA	64	67	69	70	72			74	76		77
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~15										
		Heating	Min.~Max.	°CDB	-10~15										
	Condenser	Cooling	Min.~Max.	°CDB	25~55										
		Heating	Min.~Max.	°CDB	25~55										
Refrigerant	Type/GWP				R-410A/2,087.5										
	Charge			kg	10		11		12		15	16	17	19	20
	Circuits	Quantity			1										
Refrigerant charge				TCO2Eq	20.88		22.96		25.05		31.31	33.40	35.49	39.66	41.75
Piping connections	Evaporator water inlet/outlet (OD)				1" 1/2		2" 1/2							3"	
	Condenser water inlet/outlet (OD)				1" 1/2		2" 1/2							3"	
Unit	Starting current	Max		A	204	255	261	308	316	354	368	466	481	640	677
	Running current	Cooling	Nom.	A	42	45	48	54	61	68	76	86	95	118	143
		Max		A	59	66	72	80	88	102	116	131	145	183	221
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

Water cooled multi-scroll chiller, standard efficiency, standard sound

EWWQ-L-SS MicroTech III

- Dual refrigerant circuit (4 scroll compressors) with single evaporator
- Heat pump version available
- Compact design to allow easy indoor installation or retrofit operations
- High efficiency and reliable scroll compressor
- Stainless steel plate heat exchanger
- High flexibility for a wide variety of applications
- Allows sequencing control (up to 4 units) without any external device
- Pump (low 100 kPa and high 200 kPa lift) available for evaporator and condenser
- MicroTech III controller with superior control logic and easy interface

› More information about EWWQ-L-SS

Cooling only/Heating only				EWWQ-L-SS	180	205	230	260	290	330	380	430	480	540	600	660	720
Space cooling	A Condition 35°C	Pdc		kW	187.4	215.1	244.3	272.6	303.2	344.5	386.8	430.2	475.6	548.8	610.9	663	721
	ηs,c			%	211.72	222.72	232.76	230.32	236.76	233.32	224.84	239.12	230.6	235.92	236.2	228	228.4
SEER					5.493	5.768	6.019	5.958	6.119	6.033	5.821	6.178	5.965	6.098	6.105	5.9	5.91
Cooling capacity	Nom.			kW	187.4	215.1	244.3	272.6	303.2	344.5	386.8	430.2	475.6	548.8	610.9	663	721
Power input	Cooling	Nom.		kW	41.7	47.3	53.1	60.2	67.1	77.1	87	97.9	109.5	123.5	139.7	153.8	166.9
Capacity control	Method				Fixed												
	Minimum capacity			%	25	21	25	22	25	23	25	21	25	22	20	18	25
EER					4.494	4.548	4.601	4.528	4.519	4.468	4.446	4.394	4.343	4.444	4.373	4.311	4.32
IPLV					6.77	6.84	6.35	6.38	6.31	6.32	6.36	6.37	6.16	6.29	6.23	6.2	6.18
Dimensions	Unit	Height		mm	1,970									2,090	2,210		
		Width		mm	928												
		Depth		mm	2,801												
Weight	Unit			kg	877	1,062	1,285	1,347	1,439	1,498	1,559	1,673	1,722	1,842	1,926	2,105	2,229
	Operation weight			kg	957	1,156	1,401	1,469	1,575	1,641	1,723	1,851	1,918	2,044	2,145	2,346	2,405
Water heat exchanger - evaporator	Type				Plate heat exchanger												
	Water volume			l	35	41	53		65		76	92			115		
	Water flow rate	Nom.		l/s	8.97	10.29	11.69	13.04	14.5	16.48	18.51	20.58	22.77	26.29	29.26	31.77	34.57
	Water pressure drop	Cooling	Nom.	kPa	28	27.6	22.6	28	25.1	32.2	31.9	32.8	40.4	51.4	49.5	59.1	69.4
Water heat exchanger - condenser	Type				Plate heat exchanger												
	Water volume			l	19	22	29		35		41	49			62		
	Water flow rate	Nom.		l/s	11.02	12.66	14.4	16.12	17.9	20.38	22.8	25.4	28.08	32.3	36.02	39.16	42.66
	Water pressure drop	Cooling	Nom.	kPa	72	73	61	49	50	51	55	46	57	66	67	68	
Compressor	Type				Driven vapour compression												
	Quantity				4												
Sound power level	Cooling	Nom.		dBA	83	86	88	90	91		93	95			96		
Sound pressure level	Cooling	Nom.		dBA	65	68	70	72	74		73	76	77		78		
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~15												
		Heating	Min.~Max.	°CDB	-10~15												
	Condenser	Cooling	Min.~Max.	°CDB	25~55												
		Heating	Min.~Max.	°CDB	25~55												
Refrigerant	Type/GWP				R-410A/2,087.5												
	Charge			kg	20		22		24		30	32	34		38	40	
	Circuits	Quantity			2												
Refrigerant charge				kg/TCO2Eq	10.0/20.9		11.0/23.0		12.0/25.1		15.0/31.3	16.0/33.4	17.0/35.5		19.0/39.7	20.0/41.8	
Piping connections	Evaporator water inlet/outlet (OD)				3"												
	Condenser water inlet/outlet (OD)				1" 1/2		2" 1/2							3"			
Unit	Starting current	Max		A	263	320	333	388	403	456	484	597	626	785	822	860	898
	Running current	Cooling	Nom.	A	83	89	96	109	121	137	151	171	189	210	236	260	284
		Max		A	118	131	144	160	175	205	232	262	290	328	366	403	441
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

Water cooled screw chiller, standard efficiency, standard sound

- Compact design to allow easy indoor installation or retrofit operations
- Daikin semi-hermetic single screw stepless compressor
- High energy efficiency both at full and part load conditions
- Chilled water temperatures down to -10°C on standard unit
- Optimised for use with R-134a
- MicroTech III controller with superior control logic and easy interface

EWWD-J-SS

Microtech III

› More information about EWWD-J-SS

Cooling & Heating				EWWD-J-SS	120	140	150	180	210	250	280
Cooling capacity	Nom.			kW	120	146	154	177	207	255	284
Heating capacity	Nom.			kW	148	180	194	223	258	315	354
Capacity control	Method				Stepless						
	Minimum capacity			%	25.0						
Power input	Cooling	Nom.		kW	28.0	34.0	39.5	45.3	50.4	59.9	70.0
	Heating	Nom.		kW	28.0	34.0	39.5	45.3	50.4	59.9	70.0
EER					4.28	4.29	3.90	3.91	4.11	4.26	4.06
COP					5.28	5.29	4.90	4.91	5.11	5.26	5.06
IPLV					5.18	5.06		5.05	5.16	5.70	4.88
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	168	166	158		162	170	160
			SCOP		4.40	4.34	4.14	4.15	4.24	4.46	4.21
		A Condition (-7°CDB/-8°CWB)	COPd		0.90						
			PERd	%	144.7	176.0	190.2	218.3	252.8	309.1	347.8
			Pdh	kW	5.2		4.8		5.0	5.2	5.0
Dimensions	Unit	HeightxWidthxDepth		mm	1,020x913x2,684						
Weight	Unit			kg	1,177	1,233	1,334	1,366	1,416	1,600	1,607
	Operation weight			kg	1,211	1,276	1,378	1,415	1,473	1,663	1,675
Water heat exchanger - evaporator	Type				Plate heat exchanger						
	Water volume			l	14	18	14	17	20	26	
	Water flow rate	Nom.		l/s	5.7	7.0	7.4	8.5	9.9	12.2	13.6
	Water pressure drop	Cooling	Nom.	kPa	15	14	43	40	35	28	34
		Heating	Nom.	kPa	15	14	43	40	35	28	34
Water heat exchanger - condenser	Type				Single pass shell and tube						
	Water volume			l	20		23	25	29		32
	Water flow rate	Nom.		l/s	7.1	8.6	9.3	10.7	12.4	15.2	17.0
	Water pressure drop	Cooling	Nom.	kPa	19		12		11	16	26
		Heating	Nom.	kPa	19		12		11	16	26
Compressor	Type				Single screw compressor						
	Quantity				1						
Sound power level	Cooling	Nom.		dBA	89						
Sound pressure level	Cooling	Nom.		dBA	79						
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~15						
	Condenser	Cooling	Min.~Max.	°CDB	23~60						
Refrigerant	Type/GWP				R-134a/1,430						
	Circuits	Quantity			1						
Refrigerant charge				kg/TCO2Eq	18.0/25.7	35.0/50.1	34.0/48.6	37.0/52.9		38.0/54.3	
Piping connections	Evaporator water inlet/outlet (OD)			mm	76.2						
	Condenser water inlet/outlet (OD)			mm	2" 1/2	4"					
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						
Unit	Starting current	Max		A	151		195			288	
	Running current	Cooling	Nom.	A	48	57	67	74	83	97	109
		Max		A	76	97	107	122	143	167	189

The highest peak in chiller technology

The EWWD-VZ chiller series were developed and manufactured to answer the growing market demands on high efficient chiller series.
Thanks to the continuous evolution in components' technology, we are the first to reach the highest peak in chiller efficiency and technology.

ALSO WITH HFO R-1234ze

EWWD-VZ at a glance

Single compressor

450 kW - 1,053 kW

Dual compressor & dual circuit unit

1,200 kW - 2,100 kW

of everything:
2 compressors,
2 expansion valves,
2 condensers,...

VZ CHILLER SERIES

Full inverter water cooled chiller

INVERTER

New condenser design with integral oil separator

High efficient flooded heat exchangers

Highest efficiency in the market in its category

TOP CLASS EFFICIENCY

Unique Daikin single screw compressor technology

UNIQUE SOLUTION

Why choose EWWD-VZ chiller series?

1 **Top class efficiency: SEER up to 9 – EER up to 5.8**

Thanks to:

- New generation Daikin inverter screw compressors
- New generation high efficiency heat exchangers
- Variable volume ratio technology
- Optimized refrigerant circuit design

2 **Compact unit : 40% footprint reduction**

Thanks to:

- New single pass condenser technology
- New integrated oil separator technology
- Optional knock down panel which reduces the unit width

3 **Application flexibility : widest operating envelope in its range**

4 **Connectivity : Daikin on site cloud platform**

5 **Future readiness: Choose for today's best solution and be ready for the future!**

Supporting tools

Product video

Check on

YouTube
www.youtube.com/DaikinEurope

Marketing material

All marketing material can be downloaded from the business portal.
Asset finder > Campaign > VZ chiller series

Product profile

Want to know more about this product?
Have a look at our website and download the product profile:

Water cooled screw inverter chiller, standard efficiency, standard sound

EWWD-VZSS Microtech III

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› More information about EWWD-VZSS

Cooling only/Heating only					EWWD-VZSS	600	700	760	890	C10	C12	C13	C14	C16	C17	C19	C21
Space cooling	A Condition (35°C) Pdc				kW	609.91	704.22	756.52	894.23	1,039.49	1,173.02	1,288.02	1,381.01	1,552.02	1,722.02	1,875.55	2,051.2
	ηs,c				%	340		337.2	331.6	332	337.2	331.6	331.2	320.8	338.8	322	338.8
SEER						8.7		8.63	8.49	8.5	8.63	8.49	8.48	8.22	8.67	8.25	8.67
Cooling capacity	Nom.				kW	610	704	757	894	1,039	1,173	1,288	1,381	1,552	1,722	1,876	2,051
Power input	Cooling	Nom.			kW	110	132	142	162	196	231	252	276	315	339	380	404
Capacity control	Method					Variable											
	Minimum capacity				%	20					10						
EER						5.5	5.31	5.3	5.52	5.29	5.07	5.11	5	4.93	5.08	4.93	5.08
IPLV						9.43	9.36	9.4	9.37	9.4	9.52	9.56	9.57	9.36	9.7	9.38	9.65
Dimensions	Unit	Height			mm	2,123			2,292	2,487	2,296				2,350	2,338	2,498
		Width			mm	1,178	1,179		1,233	1,303	1,484	1,487		1,484	1,580	1,627	1,753
		Depth			mm	3,722	3,750		3,690	3,822	4,792				4,508		4,750
Weight	Unit				kg	2,892	2,928	2,941	3,451	4,237	5,570	5,790	5,820	6,220	6,890	7,260	8,260
	Operation weight				kg	2,977	3,033	3,053	3,611	4,488	5,980	6,220	6,290	6,690	7,480	7,830	9,070
Water heat exchanger - evaporator	Type					Flooded shell and tube											
	Water volume				l	88		96	134	156	230		270		320		380
	Water flow rate	Cooling	Nom.		l/s	29.2	33.8	36.3	42.9	49.9	56.2	61.7	66.1	74.4	82.5	89.9	98.2
	Water pressure drop	Cooling	Nom.		kPa	79	106	88	98	102	69	84	70	89	78	92	80
Water heat exchanger - condenser	Type					Shell and tube											
	Water volume				l	81	102		126	217	180	200			270	250	430
	Water flow rate	Cooling	Nom.		l/s	35.3	41	44.1	51.9	60.6	69.1	75.8	81.5	91.9	101	111	120
	Water pressure drop	Cooling	Nom.		kPa	31	29	33	29	33	44	39	45	66	42	55	37
Compressor	Type					Driven vapour compressor											
	Quantity					1					2						
Sound power level	Cooling	Nom.			dBA	101	105		107	106		107		108		110	
Sound pressure level	Cooling	Nom.			dBA	82	86		88	87		88		89		90	
Operation range	Evaporator	Cooling	Min.~Max.		°CDB	-3~20											
	Condenser	Cooling	Min.~Max.		°CDB	16~63											
Refrigerant	Type/GWP					R-134a/1,430											
	Charge				kg	100	110		170	180	250	260	290		320		350
	Circuits	Quantity				1					2						
Piping connections	Evaporator water inlet/outlet (OD)				mm	139.7			168.3	219.1							
	Condenser water inlet/outlet (OD)				mm	168.3			219.1		168.3 / 168.3				219.1 / 219.1		
Unit	Starting current	Max			A	179	214	245	295	344	-						
	Running current	Cooling	Nom.		A	171	202	220	249	300	349	379	414	470	508	566	604
		Max			A	256	306	350	421	491	553	555	612	727	810	926	1,009
Power supply	Phase/Frequency/Voltage				Hz/V	3~/50/400											

Water cooled screw inverter chiller, high efficiency, standard sound

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EWWD-VZXS Microtech III

› More information about EWWD-VZXS

Cooling only/Heating only					EWWD-VZXS	450	500	610	710	800	900	C11	C12	C13	C14	C16	C17	C19	C21
Space cooling	A Condition (35°C) Pdc			kW		448.83	500.51	612.77	713.11	793.52	901.21	1,053.02	1,194.03	1,305.01	1,406.98	1,593.03	1,748.03	1,912.01	2,074.02
	ηs,c			%		324.8	329.2	347.2	350	345.6	337.6	344.4	347.6	342.4	348	347.2	347.6	337.2	344.4
SEER						8.32	8.43	8.88	8.95	8.84	8.64	8.81	8.89	8.76	8.9	8.88	8.89	8.63	8.81
Cooling capacity	Nom.			kW		449	501	613	713	794	901	1,053	1,194	1,305	1,407	1,593	1,748	1,912	2,074
Power input	Cooling	Nom.		kW		81.2	89.7	108	128	146	159	192	221	244	262	296	329	365	394
Capacity control	Method					Variable													
	Minimum capacity			%		20							10						
EER						5.53	5.58	5.64	5.54	5.43	5.67	5.46	5.38	5.34	5.36	5.38	5.31	5.23	5.25
IPLV						9.42	9.59	9.52	9.66	9.64	9.48	9.58	9.66	9.67	9.76	9.74	9.82	9.68	9.7
Dimensions	Unit	Height		mm		2,135		2,123	2,235		2,487		2,296		2,301	2,350	2,500	2,469	2,493
		Width		mm		1,178		1,179	1,189		1,303		1,484	1,639	1,579	1,580	1,610	1,704	1,769
		Depth		mm		3,722		3,750	3,690		3,822		4,792		4,508		4,750	4,874	
Weight	Unit			kg		2,968	2,911	3,102	3,470	3,451	4,257	4,552	5,860	6,240	6,520	6,920	7,530	7,790	8,670
	Operation weight			kg		3,098	3,006	3,274	3,648	3,611	4,518	4,860	6,370	6,760	7,130	7,530	8,300	8,560	9,630
Water heat exchanger - evaporator	Type					Flooded shell and tube													
	Water volume			l		70	88	136	134		168	199	270		320		380	480	
	Water flow rate	Cooling	Nom.	l/s		21.5	24	29.3	34.1	38	43.2	50.4	57.1	62.5	67.3	76.3	83.6	91.4	99.2
	Water pressure drop	Cooling	Nom.	kPa		89	63	59	63	55	67	59	52	62	52	67	58	49	58
Water heat exchanger - condenser	Type					Shell and tube													
	Water volume			l		81	92	126	145	126	217	241	240	250	290		390	290	480
	Water flow rate	Cooling	Nom.	l/s		26.4	29.4	35.3	41.2	46.1	52	61	69.8	76.3	82.2	93.2	102	112	121
	Water pressure drop	Cooling	Nom.	kPa		31	28	22	20	24	25		28		21	32	27	37	28
Compressor	Type					Driven vapour compressor													
	Quantity					1							2						
Sound power level	Cooling	Nom.		dBA		97	99	101	105			107	106		107		108	109	110
Sound pressure level	Cooling	Nom.		dBA		78	80	82	86			88	87		88		89		90
Operation range	Evaporator	Cooling	Min.~Max.	°CDB		-3~20													
	Condenser	Cooling	Min.~Max.	°CDB		16~65													
Refrigerant	Type/GWP					R-134a/1,430													
	Charge			kg		95		100	110	170		180	250	260	290		320		350
	Circuits	Quantity				1							2						
Piping connections	Evaporator water inlet/outlet (OD)			mm		139.7			168.3				219.1					273	
	Condenser water inlet/outlet (OD)			mm		168.3			219.1				168.3 / 219.1		219.1 / 219.1				
Unit	Starting current	Max		A		155	173	179	214	256	295	344	-						
	Running current	Cooling	Nom.	A		126	140	171	201	229	249	299	340	372	400	450	498	554	596
		Max		A		222	247	256	306	366	421	491	553	555	612	727	810	926	1,009
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/400													

Water cooled screw inverter chiller, premium efficiency, standard sound

EWWD-VZPS Microtech III

› Premium energy efficiency both at full and part load conditions
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› One or two truly independent refrigerant circuits for outstanding reliability

› More information about EWWD-VZPS

Cooling only/Heating only					EWWD-VZPS	505	715	910	C12	C16	C18
Space cooling	A Condition (35°C)	Pdc			kW	505.02	717.71	908.11	1,201.02	1,604.03	1,757.01
		ηs,c			%	339.6	355.2	344.4	353.6	354	350
SEER						8.69	9.08	8.81	9.04	9.05	8.95
Cooling capacity	Nom.				kW	505	718	908	1,201	1,604	1,757
Power input	Cooling	Nom.			kW	85.1	124	153	218	291	326
Capacity control	Method					Variable					
	Minimum capacity				%	20			10		
EER						5.93	5.77	5.91	5.49	5.5	5.39
IPLV						9.61	9.68	9.57	9.79	9.82	9.92
Dimensions	Unit	Height			mm	2,108	2,430	2,487	2,302	2,500	2,493
		Width			mm	1,179	1,287	1,303	1,579	1,610	1,769
		Depth			mm	3,750	3,822		4,508	4,750	4,874
Weight	Unit				kg	3,247	4,082	4,346	6,310	7,530	8,250
	Operation weight				kg	3,375	4,349	4,660	6,900	8,300	9,200
Water heat exchanger - evaporator	Type					Flooded shell and tube					
	Water volume				l	96	168	199	320	380	480
	Water flow rate	Cooling	Nom.		l/s	24.2	34.3	43.4	57.4	76.7	84
	Water pressure drop	Cooling	Nom.		kPa	55	42	44	38	49	41
Water heat exchanger - condenser	Type					Shell and tube					
	Water volume				l	126	217	241	270	390	470
	Water flow rate	Cooling	Nom.		l/s	29.4	41.3	52.1	69.9	93.4	102
	Water pressure drop	Cooling	Nom.		kPa	16	17	19	21		28
Compressor	Type					Driven vapour compressor					
	Quantity					1			2		
Sound power level	Cooling	Nom.			dBA	99	105		106	107	109
Sound pressure level	Cooling	Nom.			dBA	80	86		87	88	89
Operation range	Evaporator	Cooling	Min.~Max.		°CDB	-3~20					
	Condenser	Cooling	Min.~Max.		°CDB	16~65					
Refrigerant	Type/GWP					R-134a/1,430					
	Charge				kg	100	150	180	290	320	350
	Circuits	Quantity				1			2		
Piping connections	Evaporator water inlet/outlet (OD)				mm	139.7	219.1				273
	Condenser water inlet/outlet (OD)				mm	219.1			219.1 / 219.1		
Unit	Starting current	Max			A	173	214	295	-		
	Running current	Cooling	Nom.		A	138	200	247	338	447	497
		Max			A	247	306	421	553	727	810
Power supply	Phase/Frequency/Voltage				Hz/V	3~/50/400					

Water cooled screw inverter chiller, standard efficiency, standard sound

EWWH-VZSS MicroTech III

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- HFO R1234zeE Refrigerant with Ozone Depletion Potential equal to zero and extremely low Global Warming Potential

HFO R-1234ze

› More information about EWWH-VZSS

Cooling Only				EWWH-VZSS	445	515	550	660	770	860	940	C10	C12	C13	C14	C15
Space cooling	A Condition (35°C)	Pdc		kW	443	512	548.51	657.51	767.8	865.2	940.6	1,011.7	1,142.46	1,271.38	1,396.11	1,524.83
		ηs,c		%	336.4	338.4	336.8	348.4	345.2	318.4	327.2	339.6	331.2	340	345.6	353.2
SEER					8.61	8.66	8.62	8.91	8.83	8.16	8.38	8.69	8.48	8.7	8.84	9.03
Cooling capacity	Nom.			kW	443	512	549	658	768	865	941	1,012	1,142	1,271	1,396	1,525
Power input	Cooling	Nom.		kW	82.8	98.1	107	123	149	172	188	205	235	254	282	302
Capacity control	Method				Variable											
	Minimum capacity			%	20					10						
EER					5.35	5.22	5.15	5.34	5.14	5.02	5	4.93	4.87	5.01	4.95	5.04
IPLV					9.25		9.24	9.48	9.32	8.94	9.08	9.13	9.14	9.3	9.13	9.34
Dimensions	Unit	Height		mm	2,123			2,292	2,487	2,296				2,350	2,338	2,498
		Width		mm	1,178	1,179		1,233	1,303	1,484	1,487		1,484	1,580	1,627	1,753
		Depth		mm	3,722	3,750		3,690	3,822	4,792				4,508		4,750
Weight	Unit			kg	2,892	2,928	2,941	3,451	4,237	5,570	5,790	5,820	6,220	6,890	7,260	8,260
	Operation weight			kg	2,977	3,033	3,053	3,611	4,488	5,980	6,220	6,290	6,690	7,480	7,830	9,070
Water heat exchanger - evaporator	Type				Flooded shell and tube											
	Water volume			l	88		96	134	156	230		270		320		380
	Water flow rate	Cooling	Nom.	l/s	21.2	24.5	26.2	31.5	36.8	41.4	45	48.4	54.6	60.8	66.8	72.9
	Water pressure drop	Cooling	Nom.	kPa	46	61	52	59	64	39	46	39	50	44	53	45
Water heat exchanger - condenser	Type				Shell and tube											
	Water volume			l	81	102		126	217	180	200			270	250	430
	Water flow rate	Cooling	Nom.	l/s	25.5	29.6	31.8	38.1	44.8	50.3	54.8	59	66.8	74	81.4	88.7
	Water pressure drop	Cooling	Nom.	kPa	19	17	20	19	17	25	22	25	38	25	32	18
Compressor	Type				Driven vapour compression											
	Quantity				1					2						
Sound power level	Cooling	Nom.		dBA	101	105		107		106		107		108		110
Sound pressure level	Cooling	Nom.		dBA	82	86		88		87		88		89		90
Refrigerant	Type/GWP				R-1234(ze)/7											
	Charge			kg	100	110		170	180	250	260	290		320		350
	Circuits	Quantity			1					2						
Refrigerant circuit	Charge			kg	100	110		170	180	250	260	290		320		350
Piping connections	Evaporator water inlet/outlet (OD)			mm	139.7			168.3	219.1							
	Condenser water inlet/outlet (OD)			mm	168.3			219.1		168.3 / 168.3				219.1 / 219.1		
Unit	Running current	Cooling	Nom.	A	131.0	153.0	167.0	188.0	227.0	264.0	287.0	312.0	353.0	385.0	426.0	458.0
		Max		A	213.0	246.0	265.0	277.0	404.0	445.0	458.0	491.0	523.0	649.0	744.0	807.0
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400											

Water cooled screw inverter chiller, high efficiency, standard sound

EWWH-VZXS MicroTech III

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HFO R-1234ze

› More information about EWWH-VZXS

Cooling Only				EWWH-VZXS	335	365	450	525	580	670	800	875	950	C11	C12	C13	C14	C15
Space cooling	A Condition (35°C)	Pdc	kW		329.01	364.52	448	520.61	579.19	665.41	788.2	877.36	952.01	1,028.81	1,169.3	1,288.48	1,421.75	1,540.03
	ηs,c		%		296	307.2	343.6	347.2	343.2	356	354.4	326	334	346.8			358	356.8
SEER					7.6	7.88	8.79	8.88	8.78	9.1	9.06	8.35	8.55	8.87			9.15	9.12
Cooling capacity	Nom.		kW		329	365	448	521	579	665	788	877	952	1,029	1,169	1,288	1,422	1,540
Power input	Cooling	Nom.	kW		60.5	66.6	81	96	109	121	147	168	185	198	224	248	276	298
Capacity control	Method				Variable													
	Minimum capacity		%		20							10						
EER					5.44	5.48	5.53	5.42	5.29	5.49	5.37	5.23	5.16	5.19	5.22	5.19	5.16	
IPLV					8.51	8.79	9.46	9.51	9.47	9.63	9.65	9.19	9.27	9.46	9.37	9.52	9.23	9.5
Dimensions	Unit	Height	mm		2,135		2,123	2,235		2,487		2,296		2,301	2,350	2,500	2,469	2,493
		Width	mm		1,178		1,179	1,189		1,303		1,484	1,639	1,579	1,580	1,610	1,704	1,769
		Depth	mm		3,722		3,750	3,690		3,822		4,792		4,508		4,750	4,874	
Weight	Unit		kg		2,968	2,911	3,102	3,470	3,451	4,257	4,552	5,860	6,240	6,520	6,920	7,530	7,790	8,670
	Operation weight		kg		3,098	3,006	3,274	3,648	3,611	4,518	4,860	6,370	6,760	7,130	7,530	8,300	8,560	9,630
Water heat exchanger - evaporator	Type				Flooded shell and tube													
	Water volume		l		70	88	136	134		168	199	270		320		380	480	
	Water flow rate	Cooling	Nom.	l/s	15.8	17.5	21.4	24.9	27.7	31.8	37.7	41.9	45.5	49.1	55.9	61.6	67.9	73.6
	Water pressure drop	Cooling	Nom.	kPa	54	38	35	37	31	39	36	29	34	28	37	32	28	33
Water heat exchanger - condenser	Water volume			l	81	92	126	145	126	217	241	240	250	290		390	290	480
	Water flow rate	Cooling	Nom.	l/s	18.9	20.9	25.7	30	33.5	38.4	45.7	50.7	55.1	59.6	67.6	74.6	82.3	89.3
	Water pressure drop	Cooling	Nom.	kPa	19	16	13	12	15	13		16		13	19	16	23	16
Compressor	Type				Driven vapour compression													
	Quantity				1							2						
Sound power level	Cooling	Nom.		dBA	97	99	101	105			107	106		107		108	109	110
Sound pressure level	Cooling	Nom.		dBA	78	80	82	86			88	87		88		89		90
Refrigerant	Type/GWP				R-1234(ze)/7													
	Charge			kg	95		100	110	170		180	250	260	290		320		350
	Circuits	Quantity			1							2						
Piping connections	Evaporator water inlet/outlet (OD)			mm	139.7			168.3				219.1					273	
	Condenser water inlet/outlet (OD)			mm	168.3			219.1				168.3 / 219.1		219.1 / 219.1				
Unit	Running current	Cooling	Nom.	A	96.0	106.0	129.0	151.0	173.0	187.0	226.0	259.0	284.0	304.0	341.0	379.0	421.0	454.0
		Max		A	178.0	199.0	213.0	246.0	275.0	277.0	404.0	445.0	458.0	491.0	523.0	649.0	744.0	807.0
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

Water cooled screw inverter chiller, premium efficiency, standard sound

EWWH-VZPS MicroTech III

- Premium energy efficiency both at full and part load conditions
- Compact footprint through stacked heat exchanger lay-out
- Heat pump version with reversibility on water side (up to 65°C hot water production)
- Multiple options available: sound proof cabinet, rapid restart, removable electrical panel, etc. to adapt the unit to your specific application and need
- Thanks to a large operating envelope, the unit is suitable for all possible process and comfort applications
- High efficient flooded type heat exchanger allowing maximum unit performances
- One or two truly independent refrigerant circuits for outstanding reliability
- HFO R1234zeE Refrigerant with Ozone Depletion Potential equal to zero and extremely low Global Warming Potential

HFO R-1234ze

› More information about EWWH-VZPS

Cooling Only				EWWH-VZPS	370	530	680	880	C12	C13
Space cooling	A Condition (35°C) Pdc			kW	369.3	525.1	677.11	883.79	1,180.43	1,295.36
	ηs,c			%	316.8	352.8	363.6	334.4	352.4	348.8
SEER					8.12	9.02	9.29	8.56	9.01	8.92
Cooling capacity	Nom.			kW	369	525	677	884	1,180	1,295
Power input	Cooling	Nom.		kW	64.7	94.9	119	166	221	247
Capacity control	Method				Variable					
	Minimum capacity			%	20				10	
EER					5.71	5.53	5.67	5.34	5.35	5.25
IPLV					9.13	9.68	9.96	9.37	9.56	9.61
Dimensions	Unit	Height		mm	2,108	2,430	2,487	2,302	2,500	2,493
		Width		mm	1,179	1,287	1,303	1,579	1,610	1,769
		Depth		mm	3,750	3,822		4,508	4,750	4,874
Weight	Unit			kg	3,247	4,082	4,346	6,310	7,530	8,250
	Operation weight			kg	3,375	4,349	4,660	6,900	8,300	9,200
Water heat exchanger - evaporator	Type				Flooded shell and tube					
	Water volume			l	96	168	199	320	380	480
	Water flow rate	Cooling	Nom.	l/s	17.7	25.1	32.3	42.2	56.4	61.9
	Water pressure drop	Cooling	Nom.	kPa	32	25	27	20	26	23
Water heat exchanger - condenser	Type				Shell and tube					
	Water volume			l	126	217	241	270	390	470
	Water flow rate	Cooling	Nom.	l/s	21.1	30.1	38.9	50.9	68	74.9
	Water pressure drop	Cooling	Nom.	kPa	9		12	13	12	16
Compressor	Type				Driven vapour compression					
	Quantity				1				2	
Sound power level	Cooling	Nom.		dBA	99	105		106	107	109
Sound pressure level	Cooling	Nom.		dBA	80	86		87	88	89
Refrigerant	Type/GWP				R-1234(ze)/7					
	Charge			kg	100	150	180	290	320	350
	Circuits	Quantity			1				2	
Refrigerant circuit	Charge			kg	100	150	180	290	320	350
Piping connections	Evaporator water inlet/outlet (OD)			mm	139.7	219.1				273
	Condenser water inlet/outlet (OD)			mm	219.1			219.1 / 219.1		
Unit	Running current	Cooling	Nom.	A	104.0	150.0	185.0	257.0	338.0	378.0
		Max		A	199.0	246.0	277.0	445.0	523.0	649.0
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400					

DZ CHILLER SERIES

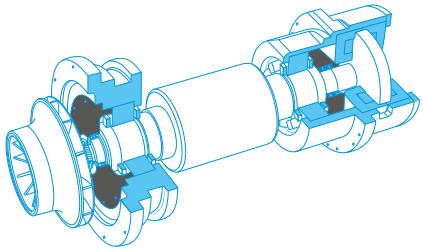
ALSO WITH HFO R-1234ze

Why choose DZ chiller series?

The DZ chiller series incorporates a number of advanced technology features that are unique in the market.

Magnetic Bearing Technology

Fitted with centrifugal compressors utilizing frictionless magnetic bearings for oil-free operation, integrated variable-frequency drives, and high-speed direct drive technology



Industry leading part load efficiency

The high efficiency compressor is matched with highly efficient heat exchangers to make an impressive chiller

Increased reliability

The frictionless magnetic bearing design needs no oil management system, resulting in increased reliability and reduced maintenance

Green building design

Developed to achieve maximum efficiency and is future-proofed to comply with existing design and regulatory standards as well as longer-term EU energy goals

Application flexibility

The DZ Series includes models suitable for both high condensing operation (Dry Cooler application) and low condensing operation (Cooling Tower applications)

Designed for compactness

Footprint reduced to the minimum levels thanks to a unique design with stacked heat exchangers.

Option flexibility

Wide range of options, such as the **Rapid Re-Start**, allowing the unit to restart after a power failure within 26 seconds following power restoration, an automatic transfer switch to backup generator. Comprehensive solution for data centers applications.

Low noise solution with dedicated Compressor sound proof cabinet to ensure outstanding flexibility to match any specific application.

Hot Gas Bypass (HGBP).
The hot gas bypass (HGBP) reduces compressor cycling in order to stabilize the chilled water temperature at very low loads. The HGBP is a control capacity device that feeds the discharge gas directly into the evaporator in order to extend the minimum power range limit. This hot gas provides a stable refrigerant flow and keeps the chiller from short cycling under reduced load conditions combined with high lift. It also reduces surge potential on heat pump mode units.

Heat Pump Version.
The Heat Pump Version including Pursuit Mode and allow reversibility on the water side. Cooling or heating mode operation can be selected by means of a dedicated switch installed on the unit electrical panel. If communication card is selected, cooling or heating mode operation can be managed by BMS. It includes HGBP always and additional 20 mm insulation.

Connectivity

Enabled for operation via the Daikin on Site platform The DZ can be monitored remotely, allowing the system to be accessed with one click, for system optimization and preventative maintenance.

Enabled for operation with an App specifically designed to operate on the unit by remote smart device (tablet, smartphone, PC). App is characterized by and easy-to-access data, and it allows an effective graphical representation of the main data and displaying the unit operating parameters.

Water cooled centrifugal chiller, high efficiency, standard sound

› No friction loss, no oil contamination, no additional oil management systems and an increased equipment life thanks to the magnetic bearing technology
› Excellent part load efficiency
› Totally oil-free operation resulting in reduced maintenance costs and increased reliability
› Compact footprint through stacked heat exchanger lay-out
› Increased installation flexibility thanks to limited dimensions
› Easy handling: thanks to its compact size, it can easily pass through the doorway
› MicroTech III controller with superior control logic and easy interface
› A wide portfolio of options is available to meet different requirements.
› The compressor vibration levels are extremely low as a result of the high-speed design
› Optimized for highly efficient R134a refrigerant and compatible with next generation refrigerants

› More information about EWWD-DZXS

Cooling Only				EWWD-DZXS	320	440	530	610	640	700	880	C10	C13	C14	C15	C21
Space cooling	A Condition Pdc			kW	320.01	443.01	528	610.02	638.01	699.97	883.01	1,056	1,325.26	1,402	1,564.57	2,070.42
	ηs,c			%	334	314	324	344	349	342	350	363	349.8	362	360.6	365.4
SEER					8.56	8.05	8.29	8.81	8.92	8.75	8.95	9.27	8.82	9.26	9.09	9.21
Cooling capacity	Nom.			kW	320	443	528	610	638	700	883	1,056	1,325	1,402	1,565	2,070
Power input	Cooling	Nom.		kW	66.5	88.5	102	124.7	131	126	176	205	272	256	310	391
Capacity control	Method				Variable											
	Minimum capacity			%	30	21		16	15	18	11		7	9	8	6
EER					4.81	5	5.14	4.89	4.85	5.53	5.01	5.15	4.88	5.46	5.04	5.3
IPLV					9.5	9.43	9.8	9.4	9.6	9.97	9.62	10.02	9.22	10.2	9.54	9.47
Dimensions	Unit	Height		mm	1,865			1,985				2,200	2,083	2,200	2,225	2,290
		Width		mm	1,055			1,160				1,270	1,510	1,270	1,510	
		Depth		mm	3,625				3,585			3,580	4,793	3,580	4,768	4,812
Weight	Unit			kg	1,700	1,900	2,000	2,850		2,600	2,900	3,600	4,350	3,800	4,750	5,500
	Operation weight			kg	1,973	2,216	2,347	3,197	3,344	3,102	3,458	4,292	5,020	4,579	5,540	6,570
Water heat exchanger - evaporator	Type				Flooded shell and tube											
	Water volume			l	70	96	107		134		156	199	271.8	229	317.4	444.3
	Water flow rate	Nom.		l/s	15.3	21.2	25.3	29.1	30.5	33.5	42.3	50.6	63.4	67.2	74.9	99.1
	Water pressure drop	Cooling	Nom.	kPa	47.4	40.6	45	59.1	51	61.3	64	60.4	60.1	74	61.1	71.9
Water heat exchanger - condenser	Type				Flooded Shell & Tube											
	Water volume			l	83	100	120		170	188	211	263	359.9	320	442.6	603.6
	Water flow rate	Nom.		l/s	18.3	25.3	30.1	35.1	36.7	39.4	50.5	60.1	76.1	79.1	89.5	117
	Water pressure drop	Cooling	Nom.	kPa	49.2	59.5	54.5	74	46.2	41.6	50.9	50.3	56	52.9	43	57
Compressor	Type				Driven vapour compressor											
	Quantity				1			2		1	2		3	2	3	
Sound power level	Cooling	Nom.		dBA	87.9	88.9	89.9	91.1	91	91.1	92	93.3	99	94.3	100	101
Sound pressure level	Cooling	Nom.		dBA	69.6	70.6	71.6	72.6			73.6	74.6	80	75.6	81	82
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	4~20											
	Condenser	Cooling	Min.~Max.	°CDB	20~55		20~42	20~55		20~42	20~55	20~42	20~55	20~42		
Refrigerant	Type/GWP				R-134a/1,430											
	Charge			kg	120				180			230	320	230	340	390
	Circuits	Quantity			1											
Refrigerant charge				TCO2Eq	172				257			329	458	329	486	558
Piping connections	Evaporator water inlet/outlet (OD)			mm	139.7				168.3			219.1				
	Condenser water inlet/outlet (OD)			mm	139.7				168.3					219.1		
Unit	Running current	Cooling	Nom.	A	100.55	138.22	155.23	203.41	200.56	190.23	274.86	309.17	445	383.87	471.7	588
		Max		A	134	208	166	267		196	417	331	631	392	511	589
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400											

Water cooled centrifugal chiller, high efficiency, standard sound. With economizer

EWWD-DZXE/XS dual

EWWD-DZXE/XS triple

EWWD-DZXE/XS

MicroTech III

› More information about EWWD-DZXE

Cooling Only				EWWD-DZXE	340	470	570	670	680	740	950	C10	C11	C14	C15	C17	C22
Space cooling	A Condition Pdc			kW	341.01	474.02	566	670	682	741.96	946	1,038.18	1,130	1,436.52	1,477.93	1,684.76	2,172.91
	ηs,c			%	335	316	326	345	349	346	352	339.8	365	350.6	366	359	370.2
SEER					8.57	8.09	8.34	8.82	8.93	8.86	9	8.57	9.32	8.84	9.35	9.05	9.33
Cooling capacity	Nom.			kW	341	474	566	670	682	742	946	1,038	1,130	1,437	1,478	1,685	2,173
Power input	Cooling	Nom.		kW	69.9	93.5	108	138.4	138	131	186	210	216	288	263	329	393
Capacity control	Method				Variable												
	Minimum capacity			%	29	20		15		17	10			7	9	7	6
EER					4.88	5.07	5.22	4.84	4.91	5.65	5.08	4.94	5.23	4.98	5.6	5.12	5.53
IPLV					9.37	9.37	9.78	9.24	9.45	10.01	9.55	9.34	9.95	9.18	10.2	9.47	9.42
Dimensions	Unit	Height		mm	1,865			1,985				2,082	2,200	2,083	2,200	2,225	2,290
		Width		mm	1,055			1,160				1,510	1,270	1,510	1,270	1,510	
		Depth		mm	3,625				3,585			4,688	3,580	4,793	3,580	4,768	4,812
Weight	Unit			kg	1,750	1,950	2,050	2,850		2,650	3,000	4,400	3,700	4,700	3,900	5,100	5,900
	Operation weight			kg	2,033	2,276	2,407	3,197	3,354	3,162	3,568	4,970	4,412	5,370	4,699	5,890	6,920
Water heat exchanger - evaporator	Type				Flooded shell and tube												
	Water volume			l	70	96	107		134		156	207.3	199	317.4	229	317.4	444.3
	Water flow rate	Nom.		l/s	16.4	22.7	27.1	32	32.7	35.6	45.3	49.1	54.1	68	70.9	80.4	103
	Water pressure drop	Cooling	Nom.	kPa	54.2	46.5	51.5	71.4	58.3	68.7	73.2	61.4	68.9	70.7	82	70.7	78.9
Water heat exchanger - condenser	Type				Flooded Shell & Tube												
	Water volume			l	83	100	120		170	188	211	326.4	263	359.9	320	442.6	603.6
	Water flow rate	Nom.		l/s	19.6	27	32.1	38.6	39.1	41.6	53.9	58.9	64.1	81.4	83	95.8	121
	Water pressure drop	Cooling	Nom.	kPa	56.4	68.4	62.4	90	52.9	46.7	58.3	44	57.6	66	58.5	50	62
Compressor	Type				Driven vapour compressor												
	Quantity				1			2		1	2	3	2	3	2	3	
Sound power level	Cooling	Nom.		dBA	87.9	88.9	89.9	91.1	91	91.1	92	98	93.3	99	94.3	100	101
Sound pressure level	Cooling	Nom.		dBA	69.6	70.6	71.6	72.6			73.6	79	74.6	80	75.6	81	82
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	4~20												
	Condenser	Cooling	Min.~Max.	°CDB	20~55		20~42	20~55		20~42	20~55		20~42	20~55	20~42		
Refrigerant	Type/GWP				R-134a/1,430												
	Charge			kg	130			120	200	190	200	350	250	400	250	420	470
	Circuits	Quantity			1												
Refrigerant charge				TCO2Eq	186			172	286	272	286	501	358	572	358	672	
Piping connections	Evaporator water inlet/outlet (OD)			mm	139.7				168.3					219.1			
	Condenser water inlet/outlet (OD)			mm	139.7				168.3						219.1		
Unit	Running current	Cooling	Nom.	A	105.42	144.7	162.48	212.9	210.15	196	287.44	318.3	323.53	425.9	392	496	588
		Max		A	134	208	166	267		196	417	406	331	631	392	511	589
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

Water cooled centrifugal chiller, high efficiency, standard sound

- No friction loss, no oil contamination, no additional oil management systems and an increased equipment life thanks to the magnetic bearing technology
- Excellent part load efficiency
- Totally oil-free operation resulting in reduced maintenance costs and increased reliability
- Compact footprint through stacked heat exchanger lay-out
- HFO R1234zeE Refrigerant with Ozone Depletion Potential equal to zero and extremely low Global Warming Potential
- Increased installation flexibility thanks to limited dimensions
- Easy handling: thanks to its compact size, it can easily pass through the doorway
- MicroTech III controller with superior control logic and easy interface
- A wide portfolio of options is available to meet different requirements.
- The compressor vibration levels are extremely low as a result of the high-speed design

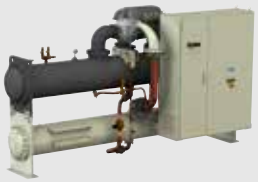
› More information about EWWH-DZXS

Cooling Only				EWWH-DZXS	230	320	380	430	455	460	640	755	920	950	C11	C13
Space cooling	A Condition			kW	227.08	318.33	376.33	429	454.66	461	637.15	752.27	917.79	945.8	1,126	1,352
	ηs,c			%	330	346		342		339	352	354	353	360.2	359.4	364.2
SEER					8.46	8.84		8.74		8.58	8.99	9.04	9.03	9.08	9.06	9.18
Cooling capacity	Nom.			kW	227	318	376	429	455	461	637	752	918	945.8	1,126	1,352
Power input	Cooling	Nom.		kW	45.6	60.5	71.4	83.4	90.6	79.3	120.5	142.1	158.8	181	216.5	237.7
Capacity control	Method				Variable											
	Minimum capacity			%	24	21	20	13	12	20	11	10		11		16
EER					4.98	5.27		5.14	5.02	5.81	5.29		5.78	5.22	5.2	5.69
IPLV					9.47	9.62	9.66	9.44	9.6	9.62	9.84	9.89	9.85	9.6	9.67	9.76
Dimensions	Unit	Height		mm	1,865			1,985				2,200		2,083	2,225	2,290
		Width		mm	1,055			1,160				1,270		1,510		
		Depth		mm	3,625				3,585			3,580		4,793	4,768	4,812
Weight	Unit			kg	1,700	1,900	2,000	2,850		2,600	2,900	3,600	3,800	4,350	4,750	5,500
	Operation weight			kg	1,973	2,216	2,347	3,197	3,344	3,102	3,458	4,292	4,579	5,020	5,540	6,570
Water heat exchanger - evaporator	Type				Flooded shell and tube											
	Water volume			l	70	96	107		134		156	199	229	271.8	317.4	444.3
	Water flow rate	Cooling	Nom.	l/s	10.8	15.2	18	20.5	21.7	22	30.4	35.9	43.9	45.2	53.8	64.6
	Water pressure drop	Cooling	Nom.	kPa	28.2	24.6	26.8	31.7	27.8	28.6	35.9	33	34.3	30	31	
Water heat exchanger - condenser	Type				Flooded Shell & Tube											
	Water volume			l	83	100	120		170	188	211	263	320	359.9	442.6	603.6
	Water flow rate	Cooling	Nom.	l/s	13	18.1	21.4	24.5	26.1	25.8	36.2	42.7	51.4	53.8	64.2	76
	Water pressure drop	Cooling	Nom.	kPa	24	30	27	35	23	17	25		22	27	26	24
Compressor	Type				Driven vapour compressor											
	Quantity					1		2		1	2			3		
Sound power level	Cooling	Nom.		dBA	87.9	88.9	89.9	91.1	91	91.1	92	93.3	94.3	99	100	101
Sound pressure level	Cooling	Nom.		dBA	69.6	70.6	71.6	72.6			73.6	74.6	75.6	80	81	82
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	4~20											
	Condenser	Cooling	Min.~Max.	°CDB	20~55		20~42	20~55		20~42	20~55	20~42		20~55	20~42	
Refrigerant	Type/GWP				R-1234(ze)/7											
	Charge			kg	120			180				230		320	340	390
	Circuits	Quantity			1											
Refrigerant charge				TCO2Eq	1							2		458	486	558
Piping connections	Evaporator water inlet/outlet (OD)			mm	139.7				168.3			219.1				
	Condenser water inlet/outlet (OD)			mm	139.7				168.3				219.1	168.3	219.1	
Unit	Running current	Cooling	Nom.	A	72	99	112	133	144	125	198	222	249	297.8	339.2	374.1
		Max		A	95	150	123	190		142	300	246	284	451	370	448
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400											

Water cooled centrifugal chiller, high efficiency, standard sound. With economizer.

EWWH-DZXE/XS dual

EWWH-DZXE/XS triple



EWWH-DZXS/XE

Microtech III

HFO R-1234ze

› More information about EWWH-DZXE

Cooling Only					EWWH-DZXE	245	345	405	470	480	490	685	740	810	955	C10	C12	C14
Space cooling	A Condition			kW		241.98	339.33	401.93	469	483.83	486.57	678.69	741	802.77	944.73	1,033	1,226	1,417
	ηs,c			%		331	350		335	345	344	356	344.6	358	356	364.2		371.8
SEER						8.48	8.95	8.94	8.81	8.67	8.83	9.11	8.69	9.16	9.1	9.18		9.37
Cooling capacity	Nom.			kW		242	339	402	469	474	484	679	741	803	945	1,033	1,226	1,417
Power input	Cooling	Nom.		kW		47.9	63.4	75.1	90.3	79.5	95.1	126.3	144.6	149.4	159.2	192.9	229.5	238.3
Capacity control	Method					Variable												
	Minimum capacity			%		24	20	19	12	20	12	10	12	9	10	11		17
EER						5.05	5.35		5.19	5.97	5.09	5.37	5.13	5.37	5.93	5.35	5.34	5.94
IPLV						9.35	9.56	9.61	9.37	9.6	9.45	9.76	9.43	9.82	9.84	9.57	9.65	9.79
Dimensions	Unit	Height		mm		1,865			1,985				2,082	2,200		2,083	2,225	2,290
		Width		mm		1,055			1,160				1,510	1,270		1,510		
		Depth		mm		3,625				3,585			4,688	3,580		4,793	4,768	4,812
Weight	Unit			kg		1,750	1,950	2,050	2,850	2,650	2,850	3,000	4,400	3,700	3,900	4,700	5,100	5,900
	Operation weight			kg		2,033	2,276	2,407	3,197	3,162	3,354	3,568	4,970	4,412	4,699	5,370	5,890	6,920
Water heat exchanger - evaporator	Type					Flooded shell and tube												
	Water volume			l		70	96	107		134		156	207.3	199	229	317.4		444.3
	Water flow rate	Cooling	Nom.	l/s		11.6	16.2	19.2	22.4	22.6	23.1	32.4	34.9	38.4	45.2	48.7	57.9	67
	Water pressure drop	Cooling	Nom.	kPa		29.7	28.4		37.8	30.8	32	41.3	31	38.1	36.9	37	38	33
Water heat exchanger - condenser	Type					Flooded Shell & Tube												
	Water volume			l		83	100	120		188	170	211	326.4	263	320	359.9	442.6	603.6
	Water flow rate	Cooling	Nom.	l/s		13.9	19.2	22.8	26.7	26.4	27.7	38.5	41.8	45.5	52.8	57.8	68.8	78.4
	Water pressure drop	Cooling	Nom.	kPa		28	34	31	42	18	26	29	21	28	23	33	30	26
Compressor	Type					Driven vapour compressor												
	Quantity						1		2	1	2		3	2		3		
Sound power level	Cooling	Nom.		dBA		87.9	88.9	89.9	91.1		91	92	98	93.3	94.3	99	100	101
Sound pressure level	Cooling	Nom.		dBA		69.6	70.6	71.6	72.6			73.6	79	74.6	75.6	80	81	82
Operation range	Evaporator	Cooling	Min.~Max.	°CDB		4~20												
	Condenser	Cooling	Min.~Max.	°CDB		20~55		20~42	20~55	20~42	20~55			20~42		20~55	20~42	
Refrigerant	Type/GWP					R-1234(ze)/7												
	Charge			kg		130			120	190	200		350	250		400	420	470
	Circuits	Quantity				1												
Refrigerant charge				TCO2Eq		1							501	2		572	601	672
Piping connections	Evaporator water inlet/outlet (OD)			mm		139.7				168.3				219.1				
	Condenser water inlet/outlet (OD)			mm		139.7				168.3					219.1	168.3	219.1	
Unit	Running current	Cooling	Nom.	A		75	103	117	142	125	150	205	277	232	249	311	249	
		Max		A		95	150	123	190	142	190	300	286	246	284	451	370	448
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/400												

Water cooled centrifugal chiller, high efficiency, standard sound

- Optional Variable Frequency Drive (VFD) to improve the part load efficiency
- High efficiency flooded type shell and tube evaporator/ condensers
- Lower equipment, installation and annual operating costs than two single compressor chillers (DWDC)
- Main components can be removed or repaired without shutting down the unit as the chiller has two of everything (compressors, lubrication systems, control systems and starters) (DWDC)
- Unloading to 5% (DWSC) or 10% (DWDC) of full load provides improved stability of the chilled water temperature and less harmful cycling of compressors
- Single stage centrifugal compressor (DWSC)

DWSC-DWDC MicroTech II

› More information about DWDC

› More information about DWSC

Cooling only		DWDC/DWSC	DWDC	DWSC
Cooling capacity	Min.	kW	600	300
	Max.	kW	9,000	4,500
Compressor	Type		Single stage centrifugal compressor	
Refrigerant	Type / GWP		R-134a / 1,430	
	Charge	kg	700 - 1,400	300 - 1,000
		TCO_2Eq	1,001 - 2,002	429 - 1,430

* not Eurovent certified

Options - Small water cooled chillers".

Chiller series	LWE	
	High Glycol	Low Glycol
	OPZH	OPZL
EWWQ-KBW1N	Option	Option

(1) Impossible option combination: OPZH+OPZL

Options - Water cooled chillers

Description	Code	EWWQ-G	EWWD-J-SS	EWWD-VZ	EWWH-VZ	EWLD-J-SS	EWLD-I-SS	EWWD-DZ EWWH-DZ
Total heat recovery	01			Option	Option (12)			
Total heat recovery (1 circuit)	02							
Partial heat recovery	03a	Option						
Evaporator 1 Pass	03b			Option				
Direct on line starter (DOL)	04	Option (12)						
WyeDelta compressor starter (YD)	05		STD			STD	STD	
Soft starter	06	Option (12)	Option(4)			Option(4)	Option	
Heat pump version	07							
Heat pump version (including pursuit mode)	07a (10)	Option	Option	Option	Option			Option
Brine version	08 (1)	Option	Option	Option	Option	Option	Option	
Low temperature brine	08d							
Double setpoint	10	STD	STD	STD	STD		STD	
Compressor thermal overload relays	11		Option	STD	STD		Option	
Fans thermal relays	12							
Phase monitor	13		STD	STD	STD	STD	STD	
Inverter compressor starter	14			STD	STD			STD
Under / Over voltage control	15	Option	Option	STD	STD	Option	Option	
Energy meter	16		Option			Option	Option	Option
Energy meter (including current limit)	16a			Option	Option			
Capacitors for power factor correction	17	Option	Option				Option	
Capacitors for power factor correction (single-V)	17b							
Current limit	19		Option			Option	Option	STD
Evaporator victaulic kit	20		STD	STD	STD	STD	STD	STD
Evaporator flange kit	21							
Evaporator marine waterbox victaulic (2 passes)	22							Option
Evaporator marine waterbox victaulic (1 pass)	22a							
Evaporator marine waterbox flanged (2 passes)	24							
Evaporator marine waterbox flanged (1 pass)	24a							
Condenser double flanges kit	26		Option	Option	Option			Option
Evaporator water side design pressure (10 Bar)	27			STD	STD		STD	STD
Evaporator water side design pressure (16 Bar)	28							
20mm evaporator insulation	29	STD	STD	STD	STD	STD	Option	STD
Axial fans (100 Pa lift)	30							
Axial fans (250 Pa lift)	32							
20mm condenser insulation	33	Option	Option	Option	Option			Option
Condenser victaulic kit	36		STD	STD	STD			STD
Condenser marine waterbox victaulic (2 passes)	38							Option
Condenser marine waterbox victaulic (1 pass)	38a							
Condenser marine waterbox flanged (2 passes)	40							
Condenser marine waterbox flanged (1 pass)	40a							
Speedtrol (fan speed control device ON/OFF up to 18°C)	42							
Speedtrol (fan speed control device ON/OFF down to 10°C in cooling)	42a							
Condenser coil guards	43							
Evaporator area guards	44							
CuCu condenser coil	45							
CuCuSn condenser coil	46							
Condenser water side design pressure (16 Bar)	47		STD					
Condenser water side design pressure (10 Bar)	47a			STD	STD			STD
Alucoat fins coil	49							
CuNi 9010 condenser tubes	50		Option(5)	Option	Option			Option (5)
Condenser 1 pass (ΔT 48 °C)	51			STD	STD			NC / SO
Condenser 2 passes (ΔT 48 °C)	52		STD					STD
Condenser 2 passes (ΔT 915 °C)	53							
Condenser 3 passes	53b							Option
Condenser 4 passes	54							
Water pressure differential switch on condenser	55							
Water pressure differential switch on evaporator	56							
Evaporator electric heater	57							
Evaporator flow switch	58	Option	STD	Option	Option	STD	Option	Option
Condenser flow switch	59	Option		Option	Option			Option
Electronic expansion valve	60	STD	STD	STD	STD	STD	STD	STD
Discharge line shutoff valve	61		STD	Option	Option	STD	Option	Option
Suction line shutoff valve	62		STD	Option	Option	STD	Option	Option
High pressure side manometers	63		Option	Option	Option	Option	Option	Option
Low pressure side manometers	64		Option	Option	Option	Option	Option	Option
Ambient outside temperature sensor and setpoint reset	67							
Hour run meter	68	STD	STD	STD	STD	STD	STD	STD
General fault contactor	69	STD	STD	STD	STD	STD	STD	STD
Alarm from external device	70							
Container Kit	71	Option	Option	Option	Option	Option	Option (8)	STD
Rubber anti vibration mounts	75	Option	Option			Option	Option	
Sound proof system	76							
Sound proof system (integral)	76-a						Option (7)	
Sound proof system (compressor)	76-b	Option	Option (6)	Option	Option	Option (6)		Option
Sound proof system (compressor jacket)	76-c	Option						
Spring anti vibration mounts	77							

(1) Option 08 includes option 29 and option 146 - (2) Option 99(a) includes 'Fan overload protection' - (3) Piping between the inertial tank and the unit is not included. Electric heater power supply has to be provided from external source - (4) The order of inverter compressor will have an impact on the delivery time: please contact the factory - (5) Unit performance will be affected; contact factory for information. It is mandatory to order the option 26 when selecting CU-Ni 90-10 condenser tubes - (6) Sound proof system - compressor enclosure - (7) Soundproof cabinet will be supplied in a separate kit and not assembled. For better performance the cabinet will be integral kind (around the whole chiller, not only around compressors). Cabinet assembly is not included in the supply (8) Special Transport is required (flat rack truck and open top) for model sizes as follows: EWLDC10I-SS - EWLDC17I-SS or EWWQC11B-SS - EWWQC20B-SS or EWWQC10B-XS, EWWQC12B-XS - EWWQC21B-XS - (9) Forklift loading-unloading operations are not allowed for model sizes as follows: EWLDC10I-SS - EWLDC17I-SS or EWWQC11B-SS - EWWQC20B-SS or EWWQC10B-XS, EWWQC12B-XS - EWWQC21B-XS - (10) Option 07a includes option 33 (20mm condenser insulation) - (11) Option 111 contains option 07a (Heat pump version, including pursuit mode) and option 33 (20mm condenser insulation) (12) Only available for some models

CF = Contact the factory - STD = Standard - SO = Specify at Order entry - NC = No additional cost

Description	Code	EWWQ-G	EWWD-J-SS	EWWD-VZ	EWWH-VZ	EWLD-J-SS	EWLD-I-SS	EWWD-DZ EWWH-DZ
Setpoint reset, Demand limit and Alarm from external device	90		STD	STD	STD	STD	STD	STD
Double pressure relief valve with diverter	91	Option	Option	STD	STD	Option	Option	STD
Pw compressor - part winding start	92							
Low ambient kit for 1 circuit	93							
Low ambient kit for 2 circuits	94							
Compressors circuit breakers	95	Option		Option	Option			Option
Fans circuit breakers	96							
Main switch interlock door	97	STD	STD	STD	OPTION	STD	STD	STD
Emergency stop	98		STD			STD	STD	
Fans speed regulation (+ fan silent mode)	99 (2)							
Fans speed regulation (inverter)	99a (2)							
Refrigerant recovery unit	100							
Evaporator right water connections	101							
Ground fault relay	102	Option	Option	Option	Option	Option	Option	Option
Evaporator 1 pass	103			Option	Option			NC / SO
Evaporator 2 passes	103a			STD	STD			STD
Evaporator 3 passes	103b			Option	Option			Option
Evaporator double flange kit	104			Option	Option		Option	Option
Liquid receiver	105					Option	Option	
Rapid restart	110			Option	Option			Option
High temperature kit	111(11)			Option	Option			
Transport kit	112	Option	Option	Option	Option	Option	Option (9)	Option
Optimized free cooling (VFD fans regulation)	113-a							
Optimized free cooling (On/Off fans)	113-b							
Nordic kit	114							
Water filter	115	Option						
Condenser coil protection panels	116							
Blygold coil treatment	117							
Inverter kit for 1 centr pump low lift	120e							
Inverter kit for 1 centr pump high lift	120f							
Inverter kit for 2 centr pumps low lift	120g							
Inverter kit for 2 centr pumps high lift	120h							
Refrigerant leak detection	121			Option	Option			Option
Evaporator single pump (low lift)	122	Option						
Evaporator single pump (high lift)	123	Option						
Condenser single pump (low lift)	124	Option						
Condenser single pump (high lift)	125	Option						
Discharge and suction line shut-off valve	126	Option						
High and low pressure side manometers	127	Option						
Master/slave	128	STD		STD	STD			STD
Evaporator and condenser victaulic kit	130	STD						
Part winding start	132	STD (12)						
Stacked installation	133	Option						
One centrifugal pump (low lift) + tank	134							
One centrifugal pump (high lift) + tank	135							
Two centrifugal pump (low lift) + tank	136							
Two centrifugal pump (high lift) + tank	137							
Coil guard	138							
E-coating microchannel coils	139							
Unit guards (to cover unit access)	140							
Side panels on coil ends	141							
High ambient kit (operatin 46°C)	142							
High ambient kit	142a							
Variable primary flow	143							
Diff pressure transd (shipped loose)	144							
EC motor fans	145							
Compressor thermal insulation	146			Option	Option			Option
Knock-down electrical panel	147			Option	Option			CF
Automatic transfer switch (free standing)	149			Option	Option			Option
Inverter EN61800-3 class C2 compliant	150			Option	Option			CF
Rubber pads	152			Option	Option			Option
Blue coat	153							
Evaporator Optimized for high delta T	154							
Daikin on site modem (with antenna)	155			Option	Option			Option
AC 9000 rpm fans	156							
AC 700 rpm fans	157							
Brushless fans up to 900 rpm	158							
Brushless fans up to 700 rpm	159							
100 PA ESP fans	160							
200 PA ESP fans	161							
Cu-Ni Evaporator tubes	164							
Marine version	167			Option				
120 Pa ESP fans	168				CF			
Portable touch screen	169							Option
Nitrogen holding charge on water side heat exchangers	170							Option
Low brine version	174		Option	Option				
Hot Gas Bypass	175							Option

Accessories - Water cooled chillers

Panels	Water-cooled chillers						Centrifugals	
	EWWQ~KB	EWLQ~KB	EW_Q-G EW_Q_-L	EWLD-I-	EWWD~J- EWLD~J-	EWWD-VZ A EWWH-VZ A	EWWD-DZ EWWH-DZ	DWSC & DWDC
EKDICMPAB (a) (b) iCM Primary Basic			●	●	●	●	●	●
EKDICMPAL (a) (b) iCM Primary for evaporator peripherals Light			●	●	●	●	●	●
EKDICMPAF (a) (b) iCM Primary for evaporator peripherals Full			●	●	●	●	●	●
EKTSMS Temperature sensor for master/slave configuration			●					
EKRUMCL1 User Interface								

Serial Cards & Communication Modules	Water-cooled chillers						Centrifugals	
	EWWQ~KB	EWLQ~KB	EW_Q-G EW_Q_-L	EWLD-I-	EWWD~J- EWLD~J-	EWWD-VZ A EWWH-VZ A	EWWD-DZ EWWH-DZ	DWSC & DWDC
EKAC200J Serial Card RS485/Modbus								●
EKACBAC Ethernet Card BACnet								
EKACLONP Serial Card LON FTT10								
EKACRS232 Serial Card RS232 Modem Interface (single unit only)								●
EKACWEB Web Server Card								●
EKACBACMSTP Serial Card BACnet MSTP								
EKACBACCERT Serial Card BACnet pre-loaded (centrifugal chillers)								●
EKACMSTPCERT Serial Card BACnet pre-loaded MSTP (centrifugal chillers)								●
EKCM200J ModBus RTU communication module			●	●	●	●	●	
EKCMLON LON communication module			●	●	●	●	●	
EKCMBACMSTP BACnet/MSTP communication module			●	●	●	●	●	
EKCMBACIP BACnet/IP communication module			●	●	●	●	●	

Other Systems & Accessories	Water-cooled chillers						Centrifugals	
	EWWQ~KB	EWLQ~KB	EW_Q-G EW_Q_-L	EWLD-I-	EWWD~J- EWLD~J-	EWWD-VZ A EWWH-VZ A	EWWD-DZ EWWH-DZ	DWSC & DWDC
EKCON Converter RS485 to RS232								●
EKCONUSB Converter RS485 to USB								●
EKMODEM Fixed modem								●
EKGSMOD GSM modem								●
EKRUPCJ Remote display kit								●
EKRUPCS Local/remote display HMI			●	●	●	●	●	
EKPWPROEXT PlantWatchPro I/O extension module for hardwiring and retrofit								●
EKGWWEB Gateway web (Ethernet LAN SNMP)								●
EKGWMODEM Gateway for modem								●
EKAC10C Address card for connection to BMS or Remote user interface	●	●						
EKRUMCA Remote installed user interface	●	●						
EKLS2 (d) Low noise kit 22/28/35/45/55/65 Hp-units	●	●						
ECB2MUBW (e) Controller kit	●							
ECB3MUBW (e) Controller kit	●							
EKRP1AHT Digital input/output PCB								
EKRUAHTB Remote user interface								
DTA104A62 External control adapter								
BHGP26A1 Digital pressure gauge kit								
EKQDP2M016 (h) Differential Pressure Sensor 4-20 mA 0-160 kPa			●	●	●	●	●	●
EKQDP2M020 (h) Differential Pressure Sensor 4-20 mA 0-250 kPa			●	●	●	●	●	●
EKQDP2M040 (h) Differential Pressure Sensor 4-20 mA 0-400 kPa			●	●	●	●	●	●
EKQDP2M060 (h) Differential Pressure Sensor 4-20 mA 0-600 kPa			●	●	●	●	●	●
EKDAPCONT Containerization of one unit			●	●	●	●	●	
EKDAPSTF Containerization of additional units in the same container			●	●	●	●	●	

Notes:
(a) Price does not include commissioning of panel; if commissioning is required please refer to RN17-041
(b) iCM panels work in cooling mode only; heat pump versions and total heat recovery options on A/C and W/C chillers are not compatible
(c) in case you are ordering iCM panels please contact factory
(d) For 45/55/65 Hp-units 2 pieces are needed

(e) Only available for modulare units (EWWP~KAW1M)
(f) For 009/010/011/013 units (price available in SAP system)
(g) Price available in SAP system
(h) Differential pressure sensor are specific for iCM panels in variable primary flow management

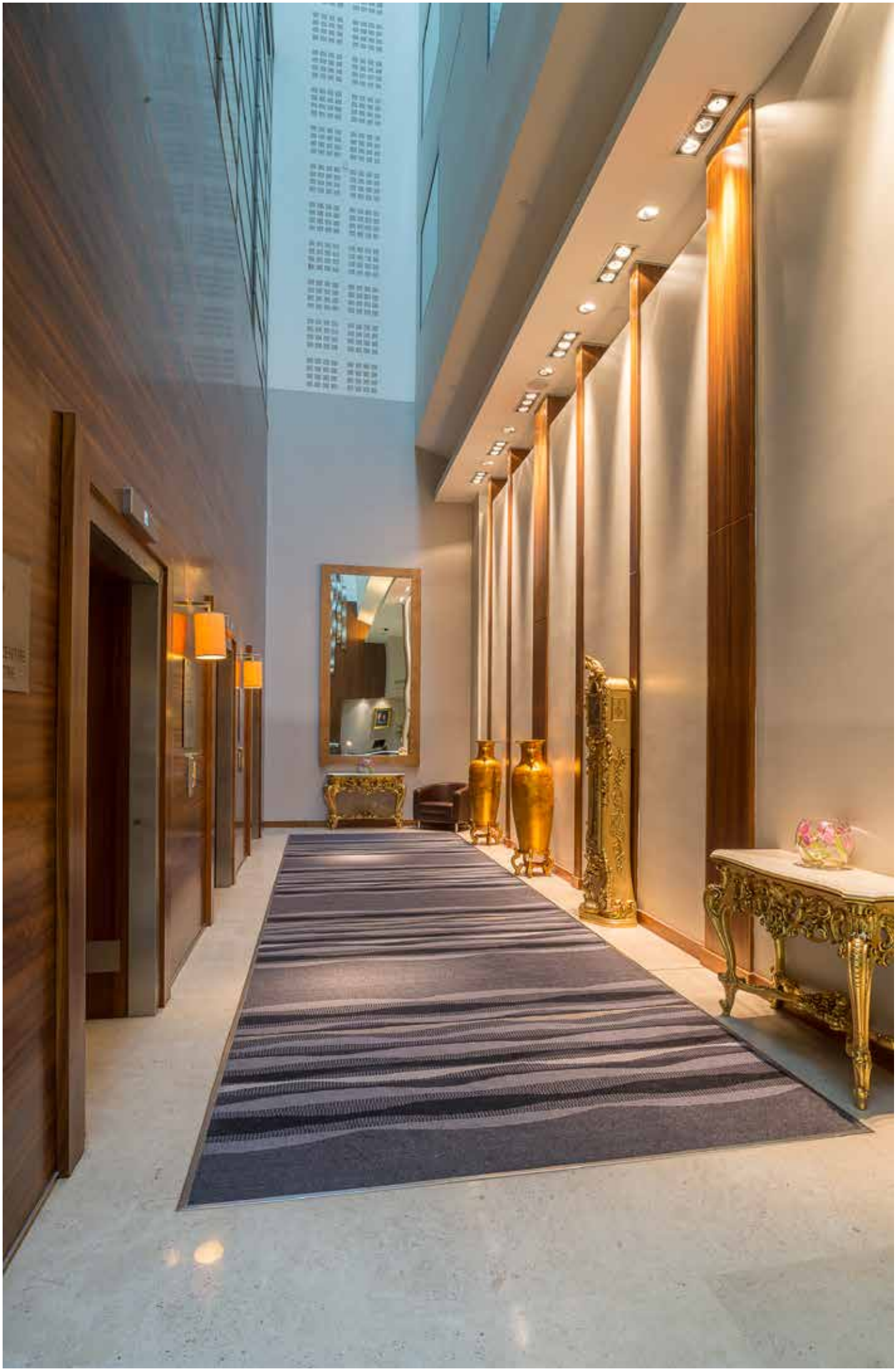


Table of content

Condenserless chiller

Please consult the Webbased Selection Software Tool for detailed technical information.

Condenserless scroll chiller

- One of the most compact units on the market: 600mm x 600mm x 600mm
- Low energy consumption
- Low operating sound level
- Easy installation and maintenance
- Stainless steel plate heat exchanger
- Low refrigerant volume
- Standard integrated: pressure ports, flow switch, filter, shut-off valves and air purge
- Advanced µC^{2}SE controller for direct connection to a Modbus based BMS or to a remote user interface

EWLQ-KBW1N µC^{2}SE

› More information about EWLQ-KBW1N

Cooling Only				EWLQ-KBW1N	014	025	033	049	064
Cooling capacity	Nom.			kW	12.05	21.87	27.96	43.4	56.71
Power input	Cooling	Nom.		kW	3.54	6.42	8.26	12.74	16.2
EER					3.402	3.406	3.386	3.406	3.501
Dimensions	Unit	Height		mm	600				
		Width		mm	600				
		Depth		mm	600			1,200	
Weight	Unit			kg	104	138	149	252	274
Water heat exchanger - evaporator	Type				Brazed plate				
	Water pressure drop	Cooling	Nom.	kPa	16.5	24.2	22.1	20	22.2
Compressor	Type				Scroll compressor				
	Quantity				1			2	
Sound power level	Cooling	Nom.		dBA	64		71	67	74
		Nom.		dBA	64		71	67	74
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~20				
	Condenser	Cooling	Min.~Max.	°CDB	25~60				
Refrigerant	Type				R-410A				
	Circuits	Quantity			1			2	
Piping connections	Evaporator water inlet/outlet (OD)				G1"			G1" 1/2	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400				

Condenserless multi-scroll chiller, standard efficiency, standard sound

- Single refrigerant circuit (2 scroll compressors) with single evaporator
- For chilled water production, to be combined with a remote condensing unit
- Compact design to allow easy indoor installation or retrofit operations
- Conceived for stacked installation of two single circuit units to reduce the footprint
- High efficiency and reliable scroll compressor
- Stainless steel plate heat exchanger

EWLQ-G-SS

› More information about EWLQ-G-SS

Cooling only				EWLQ-G-SS	090	100	120	130	150	170	190	210	240	300	360
Cooling capacity	Nom.			kW	86.5	98.4	110	125	139	160	181	206	231	290	346
Power input	Cooling	Nom.		kW	22.4	25.8	29.2	33.0	36.8	42.0	47.0	54.2	59.9	75.6	91.8
Capacity control	Method				Step										
	Minimum capacity			%	50.0	43.0	50.0	44.0	50.0	45.0	50.0	43.0	50.0	40.0	50.0
EER					3.86	3.81	3.78	3.79		3.80	3.86	3.80	3.85	3.84	3.77
Dimensions	Unit	Height		mm	1,066									1,186	
		Width		mm	928										
		Depth		mm	2,743										
Weight	Unit			kg	494	578	686	714	742	773	807	838	852	967	1,046
	Operation weight			kg	525	615	729	760	791	826	863	901	916	1,044	1,134
Water heat exchanger - evaporator	Type				Plate heat exchanger										
	Water volume			l	6	8		10	12	13	15	17		27	34
	Water flow rate	Nom.		l/s	4.2	4.7	5.3	6.0	6.7	7.7	8.7	9.8	11.1	13.9	16.6
	Water pressure drop	Cooling	Nom.	kPa	44		35	29		31	33	30	38	41	
Compressor	Type				Scroll compressor										
	Quantity				2										
Sound power level	Cooling	Nom.		dBA	80	83	85	87	88			90	92	93	
Sound pressure level	Cooling	Nom.		dBA	64	67	69	70	72			74	76		77
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~15										
	Condenser	Cooling	Min.~Max.	°CDB	30~60										
Refrigerant	Type / GWP				R-410A / 2,087.5										
	Circuits	Quantity			1										
Piping connections	Evaporator water inlet/outlet (OD)				1" 1/2		2" 1/2							3"	
Unit	Starting current	Max		A	204	255	261	308	316	354	368	466	481.0	640	677
	Running current	Cooling	Nom.	A	39	42	45	51	57	64	70	81	88	111	135
		Max		A	59	66	72	80	88	102	116	131	145	183	221
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

Condenserless multi-scroll chiller, standard efficiency, standard sound

- Dual refrigerant circuit (4 scroll compressors) with single evaporator
- For chilled water production, to be combined with a remote condensing unit
- Compact design to allow easy indoor installation or retrofit operations
- High efficiency and reliable scroll compressor
- Stainless steel plate heat exchanger

EWLQ-L-SS

› More information about EWLQ-L-SS

Cooling only				EWLQ-L-SS	180	205	230	260	290	330	380	430	480	540	600	660	720
Cooling capacity	Nom.			kW	173	197	224	249	279	317	361	409	459	511	571	624	676
Power input	Cooling	Nom.		kW	44.3	51.1	57.9	65.6	73.2	83.8	93.5	108	119	135	152	168	184
Capacity control	Method				Step												
	Minimum capacity			%	25.0	21.0	25.0	22.0	25.0	23.0	25.0	21.0	25.0	22.0	20.0	18.0	25.0
EER					3.91	3.86	3.87	3.79	3.81	3.78	3.86	3.79	3.84	3.78	3.76	3.71	3.67
Dimensions	Unit	Height		mm	1,970									2,090	2,210		
		Width		mm	928												
		Depth		mm	2,801												
Weight	Unit			kg	832	1,007	1,202	1,252	1,333	1,380	1,432	1,511	1,560	1,609	1,694	1,833	1,957
	Operation weight			kg	894	1,081	1,292	1,345	1,436	1,486	1,547	1,638	1,690	1,741	1,844	1,990	2,120
Water heat exchanger - evaporator	Type				Plate heat exchanger												
	Water volume			l	19	22	29		35		41	49			62		
	Water flow rate	Nom.		l/s	8.3	9.5	10.7	11.9	13.4	15.2	17.3	19.6	21.9	24.5	27.3	29.9	32.4
	Water pressure drop	Cooling	Nom.	kPa	25		20	25	22	29			36	45	44	52	62
Compressor	Type				Scroll compressor												
	Quantity				4												
Sound power level	Cooling	Nom.		dBA	83	86	88	90	91			93	95			96	
Sound pressure level	Cooling	Nom.		dBA	65	68	70	72	74		73	76	77		78		
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~15												
	Condenser	Cooling	Min.~Max.	°CDB	30~60												
Refrigerant	Type / GWP				R-410A / 2,087.5												
	Circuits	Quantity			2												
Piping connections	Evaporator water inlet/outlet (OD)				3"												
Unit	Starting current	Max		A	263	320	333	388	403	456	484	597	626	785	822	860	898
	Running current	Cooling	Nom.	A	78	84	90	102	114	128	141	161	176	199	223	246	269
		Max		A	118	131	144	160	175	205	232	262	290	328	366	403	441
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

Condenserless screw chiller, standard efficiency, standard sound

- Compact design to allow **easy indoor installation or retrofit operations**
- Daikin semi-hermetic single screw stepless compressor
- **High energy efficiency both at full and part load conditions**
- Chilled water temperatures **down to -10°C** on standard unit
- Optimised for use with **R-134a**
- MicroTech III controller with superior control logic and easy interface

EWLD-J-SS

MicroTech III

› More information about EWLD-J-SS

Cooling only				EWLD-J-SS	110	130	145	165	235	195	265
Cooling capacity	Nom.			kW	110	128	142	163	236	191	264
Power input	Cooling	Nom.		kW	31.2	38.4	43.8	50.4	66.0	56.0	75.3
Capacity control	Method				Stepless						
	Minimum capacity			%	25.0						
EER					3.51	3.33	3.25	3.24	3.58	3.42	3.51
Dimensions	Unit	Height		mm	1,020						
		Width		mm	913						
		Depth		mm	2,684						
Weight	Unit			kg	1,124	1,141	1,237	1,263	1,489	1,305	1,489
	Operation weight			kg	1,138	1,159	1,253	1,281	1,518	1,327	1,518
Water heat exchanger - evaporator	Type				Plate heat exchanger						
	Water volume			l	14	18	14	17	26	20	26
	Water flow rate	Nom.		l/s	5.2	6.1	6.8	7.8	11.3	9.2	12.6
	Water pressure drop	Cooling	Nom.	kPa	14	13	39	37	26	33	32
Compressor	Type				Single screw compressor						
	Quantity				1						
Sound power level	Cooling	Nom.		dBA	89						
Sound pressure level	Cooling	Nom.		dBA	79						
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~15						
	Condenser	Cooling	Min.~Max.	°CDB	25~60						
Refrigerant	Type / GWP				R-134a / 1,430						
	Circuits	Quantity			1						
Piping connections	Evaporator water inlet/outlet (OD)				76.2 mm						
Unit	Maximum starting current			A	151		195		288	195	288
	Nominal running current (RLA)		Cooling	A	52	62	72	81	107	91	120
	Maximum running current			A	76	97	107	122	167	143	189
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Condenserless screw chiller, standard efficiency, standard sound

› DX shell and tube evaporator – one pass refrigerant side for easy oil circulation and return
› Stepless single-screw compressor
› Standard electronic expansion valve
› Optimised for use with R-134a

EWLD-I-SS MicroTech III

› More information about EWLD-I-SS

Cooling only				EWLD-I-SS	320	400	420	500	600	650	750	800	850	900	950	C10	C11	C12	C13	C14	C15	C16	C17
Cooling capacity	Nom.			kW	315	374	437	509	607	670	740	802	865	935	975	1,029	1,097	1,144	1,210	1,278	1,330	1,381	1,433
Power input	Cooling	Nom.		kW	80.3	96.0	113	134	160	175	192	208	224	246	264	283	286	302	318	336	356	375	395
Capacity control	Method				Stepless																		
	Minimum capacity			%	25.0				12.5							8.3							
EER					3.93	3.89	3.88	3.79	3.80	3.82	3.86			3.81	3.69	3.64	3.83	3.79	3.80		3.74	3.68	3.63
Dimensions	Unit	Height		mm	1,899				2,325							2,415							
		Width		mm	1,464											2,135							
		Depth		mm	3,114				4,391							4,426							
Weight	Unit			kg	1,861		1,869	1,884	3,331	3,339	3,347	3,356	3,364	3,412		5,146	5,167		5,188	5,208			
	Operation weight			kg	2,054		2,052	2,056	3,602		3,603	3,604	3,605	3,645		5,667	5,671		5,677	5,680			
Water heat exchanger - evaporator	Type				Single pass shell and tube																		
	Water volume			l	193		183	172	271	263	256	248	241	233		504		489	472	504		489	472
	Water flow rate	Nom.		l/s	15.1	17.9	20.9	24.4	29.1	32.1	35.4	38.4	41.4	44.8	46.7	49.3	52.5	54.8	57.9	61.2	63.7	66.1	68.6
	Water pressure drop	Cooling	Total	kPa	34	46	49	56	50	40	52	49	40	49	36	54	47	51	43	53	57	61	65
Compressor	Type				Single screw compressor																		
	Quantity				1				2							3							
Sound power level	Cooling	Nom.		dBA	94	97					98	99	100			101			103				
Sound pressure level	Cooling	Nom.		dBA	75	76	78				79	80	81			80		81	83				
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-8~15																		
	Condenser	Cooling	Min.~Max.	°CDB	25~60																		
Refrigerant	Type / GWP				R-134a / 1,430																		
	Circuits	Quantity			1				2							3							
Piping connections	Evaporator water inlet/outlet (OD)				42mm																		
Unit	Maximum starting current			A	330	464			493	627	650	681		703		836		867	898		920	942	
	Nominal running current (RLA)		Cooling	A	131	157	181	214	260	287	313	338	361	391	420	448	470	493	517	542	571	601	631
	Maximum running current			A	204	233	271	299	407	436	465	504	542	570	597	670	698	737	775	814	841	868	896
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																		

Options - Condenserless chillers

Options - Small condenserless chillers

Chiller series	LWE	
	High Glycol	Low Glycol
	OPZH	OPZL
EWLQ-KBW1N	Option	Option

(1) Impossible option combination: OPZH+OPZL

Options - Medium and large chillers (Part 1)

Description	Code	EWLD-J-SS	EWLD-I-SS	EWLQ-G	EWLQ-L
Total heat recovery	01				
Total heat recovery (1 circuit)	02				
Partial heat recovery	03a			NA	
Evaporator 1 Pass	03b			STD (11)	
Direct on line starter (DOL)	04				STD (11)
WyeDelta compressor starter (YD)	05	STD	STD		
Soft starter	06	Option(4)	Option	Option (11)	Option (11)
Heat pump version	07				
Heat pump version (including pursuit mode)	07a (9)				
Brine version	08 (1)	Option	Option	Option	Option
Low temperature brine	08d				
Double setpoint	10		STD	STD	STD
Compressor thermal overload relays	11		Option		
Fans thermal relays	12				
Phase monitor	13	STD	STD		
Inverter compressor starter	14				
Under / Over voltage control	15	Option	Option		Option
Energy meter	16	Option	Option		
Energy meter (including current limit)	16a				
Capacitors for power factor correction	17		Option	Option	Option
Capacitors for power factor correction (single-V)	17b				
Current limit	19	Option	Option		
Evaporator victaulic kit	20	STD	STD	STD	STD
Evaporator flange kit	21				
Evaporator marine waterbox victaulic (2 passes)	22				
Evaporator marine waterbox victaulic (1 pass)	22a				
Evaporator marine waterbox flanged (2 passes)	24				
Evaporator marine waterbox flanged (1 pass)	24a				
Condenser double flanges kit	26				
Evaporator water side design pressure (10 Bar)	27		STD		
Evaporator water side design pressure (16 Bar)	28				
20mm evaporator insulation	29	STD	Option	STD	STD
Axial fans (100 Pa lift)	30				
Axial fans (250 Pa lift)	32				
20mm condenser insulation	33				
Condenser victaulic kit	36				
Condenser marine waterbox victaulic (2 passes)	38				
Condenser marine waterbox victaulic (1 pass)	38a				
Condenser marine waterbox flanged (2 passes)	40				
Condenser marine waterbox flanged (1 pass)	40a				
Speedtrol (fan speed control device ON/OFF up to 18°C)	42				
Speedtrol (fan speed control device ON/OFF down to 10°C in cooling)	42a				
Condenser coil guards	43				
Evaporator area guards	44				
CuCu condenser coil	45				
CuCuSn condenser coil	46				
Condenser water side design pressure (16 Bar)	47				
Condenser water side design pressure (10 Bar)	47a				
Alucoat fins coil	49				
CuNi 9010 condenser tubes	50				
Condenser 1 pass (ΔT 48 °C)	51				
Condenser 2 passes (ΔT 48 °C)	52				
Condenser 2 passes (ΔT 915 °C)	53				
Condenser 3 passes	53b				
Condenser 4 passes	54				
Water pressure differential switch on condenser	55				
Water pressure differential switch on evaporator	56				
Evaporator electric heater	57				
Evaporator flow switch	58	STD	Option	Option	Option
Condenser flow switch	59				
Electronic expansion valve	60	STD	STD	STD	STD
Discharge line shutoff valve	61	STD	Option		
Suction line shutoff valve	62	STD	Option		

(1) Option 08 includes option 29 and option 146 - (2) Option 99(a) includes 'Fan overload protection' - (3) Piping between the inertial tank and the unit is not included. Electric heater power supply has to be provided from external source - (4) The order of inverter compressor will have an impact on the delivery time: please contact the factory - (5) Sound proof system - compressor enclosure - (6) Soundproof cabinet will be supplied in a separate kit and not assembled. For better performance the cabinet will be integral kind (around the whole chiller, not only around compressors). Cabinet assembly is not included in the supply - (7) Special Transport is required (flat rack truck and open top) for model sizes as follows: EWLDC10I-SS - EWLDC17I-SS or EWWQC11B-SS - EWWQC20B-SS or EWWQC10B-XS, EWWQC12B-XS - EWWQC21B-XS - (8) Forklift loading-unloading operations are not allowed for model sizes as follows: EWLDC10I-SS - EWLDC17I-SS or EWWQC11B-SS - EWWQC20B-SS or EWWQC10B-XS, EWWQC12B-XS - EWWQC21B-XS - (9) Option 07a includes option 33 (20mm condenser insulation) - (10) Option 111 contains option 07a (Heat pump version, including pursuit mode) and option 33 (20mm condenser insulation) (11) Only available for some models.
CF = Contact the factory - STD = Standard - SO = Specify at Order entry - NC = No additional cost

Options - Medium and large chillers (Part 2)

Description	Code	EWLD-J-SS	EWLD-I-SS	EWLQ-G	EWLQ-L
High pressure side manometers	63	Option	Option		
Low pressure side manometers	64	Option	Option		
Ambient outside temperature sensor and setpoint reset	67				
Hour run meter	68	STD	STD	STD	STD
General fault contactor	69	STD	STD	STD	STD
Alarm from external device	70				
Container Kit	71	Option	Option (7)	Option	Option
Rubber anti vibration mounts	75	Option	Option	Option	Option
Sound proof system	76				
Sound proof system (integral)	76-a		Option (6)		
Sound proof system (compressor)	76-b	Option (5)		Option	Option
Sound proof system (compressor jacket)	76-c			Option (11)	Option (11)
Spring anti vibration mounts	77				
One centrifugal pump (low lift)	78				
One centrifugal pump (high lift)	79				
Two centrifugal pump (low lift)	80				
Two centrifugal pump (high lift)	81				
External tank without cabinet (500 L)	83 (3)				
External tank without cabinet (1000 L)	84 (3)				
External tank with cabinet (500 L)	87 (3)				
External tank with cabinet (1000 L)	88 (3)				
Acoustic test	89				
Setpoint reset, Demand limit and Alarm from external device	90	STD	STD		
Double pressure relief valve with diverter	91	Option	Option	Option	Option
PW COMPRESSOR - PART WINDING START	92				
Low ambient kit for 1 circuit	93				
Low ambient kit for 2 circuits	94				
Compressors circuit breakers	95			Option	Option
Fans circuit breakers	96				
Main switch interlock door	97	STD	STD	STD	STD
Emergency stop	98	STD	STD		
Fans speed regulation (+ fan silent mode)	99 (2)				
Fans speed regulation (inverter)	99a (2)				
Refrigerant recovery unit	100				
Evaporator right water connections	101				
Ground fault relay	102	Option	Option	Option	Option
Evaporator 1 pass	103				
Evaporator 2 passes	103a				
Evaporator 3 passes	103b				
Evaporator double flange kit	104		Option		
Liquid receiver	105	Option	Option		
Rapid restart	110				
High temperature kit	111 (10)				
Transport kit	112	Option	Option(8)	Option	Option
Optimized free cooling (VFD fans regulation)	113-a				
Optimized free cooling (On/Off fans)	113-b				
Nordic kit	114				
Water filter	115			Option	Option
Condenser coil protection panels	116				
Blygold coil treatment	117				
Inverter kit for 1 centr pump low lift	120e				
Inverter kit for 1 centr pump high lift	120f				
Inverter kit for 2 centr pumps low lift	120g				
Inverter kit for 2 centr pumps high lift	120h				
Refrigerant leak detection	121				
Evaporator single pump (Low Lift)	122			Option	
Evaporator single pump (High Lift)	123			Option	
Discharge and suction line shut-off valve	126			Option	Option
High and low pressure side manometers	127			Option	Option
Master/slave	128				STD
Part winding start	132			STD (11)	STD (11)
Stacked installation	133			Option	
One centrifugal pump (low lift) + tank	134				
One centrifugal pump (high lift) + tank	135				
Two centrifugal pump (low lift) + tank	136				
Two centrifugal pump (high lift) + tank	137				
Coil guard	138				
E-coating microchannel coils	139				
Unit guards (to cover unit access)	140				
Side panels on coil ends	141				
High ambient kit (operatin 46°C)	142				
High ambient kit	142a				
Variable primary flow	143				
Diff pressure transd (shipped loose)	144				
EC motor fans	145				
Compressor thermal insulation	146				
Knock-down electrical panel	147				
Automatic transfer switch (free standing)	149				
Inverter EN61800-3 class C2 compliant	150				
Rubber pads	152				
Blue coat	153				
Evaporator Optimized for high delta T	154				
Daikin on site modem (with antenna)	155				
AC 9000 rpm fans	156				
AC 700 rpm fans	157				
Brushless fans up to 900 rpm	158				
Brushless fans up to 700 rpm	159				
100 PA ESP fans	160				
200 PA ESP fans	161				
Cu-Ni Evaporator tubes	164				
Marine version	167				
120 Pa ESP fans	168				
Portable touch screen	169				
Nitrogen holding charge on water side heat exchangers	170				

Daikin air handling units, with their plug-and-play design and inherent flexibility, can be configured and combined specifically to meet the exact requirements of any building, no matter what it is used for or who is to work there. Our systems are designed to be the most environmentally friendly and the most energy efficient on the market, thus reducing their ecological impact, while, at the same time, keeping costs down through the minimisation of energy consumption.

When combined with the small physical footprint of the system, these features make our air handling units ideal for all markets.

Table of content

Air handling units

Daikin air handling units

Why choose Daikin air handling units?

- Maximum energy efficiency and indoor air quality
- Wide range of functions and options
- **High quality** components
- **Innovative** technology: Unique features and state of the art technology for short payback
- Operation **efficiency** and energy **savings**
- Outstanding **reliability** and **performance**
- Various applications are possible including air conditioning applications, industry-type process cooling, and large-scale district heat source systems.
- Plug and play concept for easy installation and commissioning
- Unique Daikin fresh air package available for connection of AHU to VRV or ERQ

Benefits for the installer

› Simple precise commissioning through pre-programmed DDC controller
› Reduced installation time thanks to internal electrical wiring and external terminal connections avoiding drilling into unit panels
› Flush mounted electrical control panel avoiding risk of damage during transport and installation

Benefits for the consultant

› Quick selection tool - in-house developed web software with improved user interface allowing for a professional report in a few clicks
› Unlimited configuration options

Benefits for the end user

› Energy efficient controls, allowing the user to determine a wide range of settings, resulting in excellent operational flexibility
› Safe operation - fully integrated electrical panel for units taller than 80cm
› Amazing tailor made capability to meet the specific customer needs

Marketing tools

› Watch the time-lapse video of a Daikin AHU construction on www.youtube.com/daikineurope

› Download our brochure on air handling units from my.daikin.eu

› Follow the wizard and select or modify your Modular or Professional AHU in a few clicks!

Packaged control solution for Daikin AHU

› Electrical control panel complete with Direct Digital Control (DDC) controller
› Internal fitting of all sensors and pressure measurement devices
› Built-in temperature, humidity and CO_2 sensors
› Internal electrical wiring for all components

Energy efficient while focusing on maximum comfort

› Set points can be specified for supply, return or room temperature
› Precise control of all AHU components such as mixing dampers, heat recovery wheels, water valves, pressure switches for filters and fans, fan motors and inverters

Plug and play design

› Low voltage fast connectors in between AHU sections

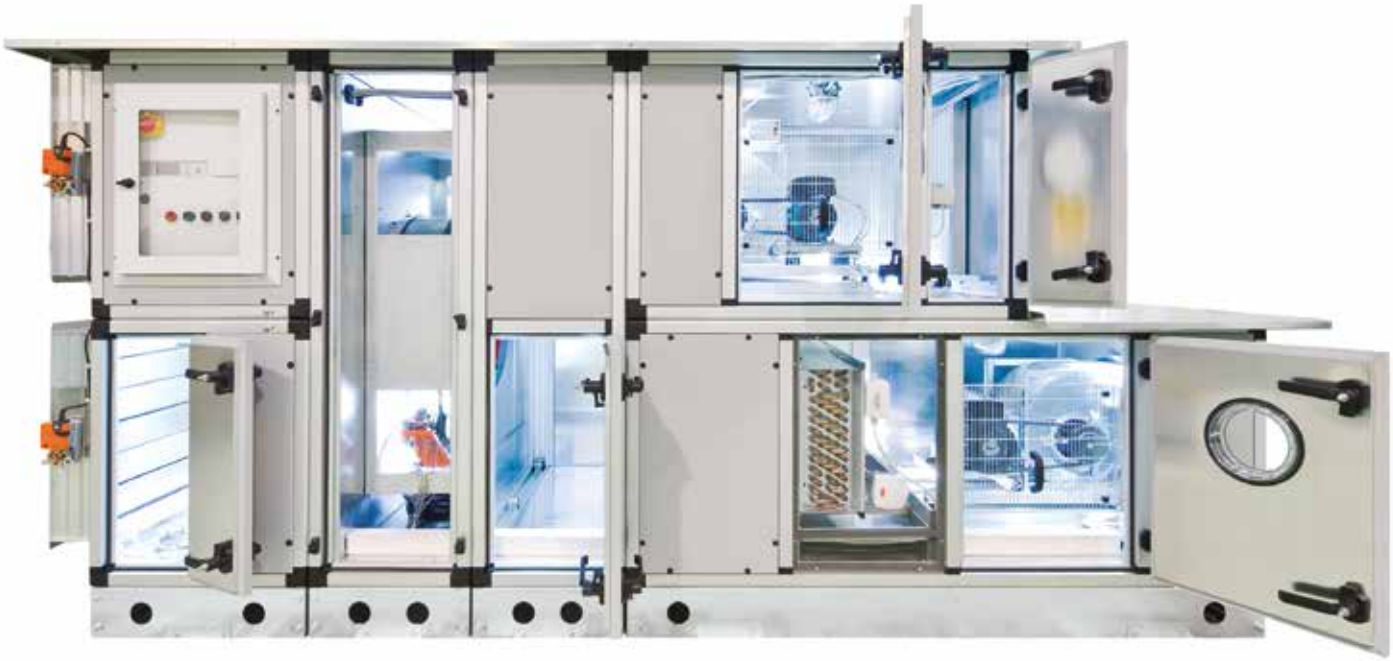
Easy start-up and commissioning

› Pre-programmed and factory-tested controls ensuring all wiring is installed correctly
› Reduced energy and operating costs

Daikin Fresh air package

Unique in the market

› Plug and play connection of Professional or Modular R AHU to Daikin VRV and ERQ
› Factory mounted package containis a.o. expansion valve, electronic interface and sensors
› Ensuring high efficiency and comfort



SMART CONTROLS

DAMPER AND EC FAN

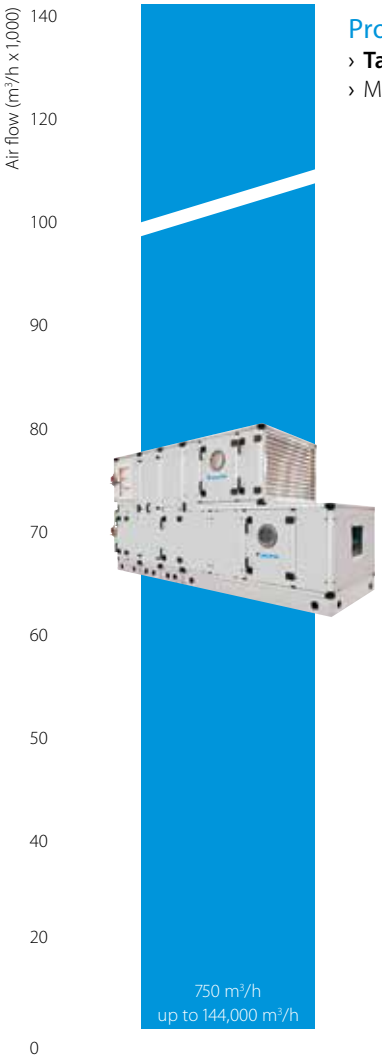
HEAT RECOVERY
WHEEL AND FILTER

D-AHU MODULAR R INSTALLATION

D-AHU PROFESSIONAL INSTALLATION

Products overview

D-AHU Professional



Professional

› **Tailored to the individual customer**
› Modular construction

Modular R

› Pre-configured sizes
› Plug and play concept
› EC fan technology
› **Heat recovery wheel (sorption and sensible**
› **technology)**
› **Compact design**

D-AHU Modular R

500 m³/h
up to 25,000 m³/h

Modular P

› Pre-configured sizes
› Plug and play concept
› EC Fan technology
› **High efficiency aluminium counter flow plate heat exchanger**
› **Compact design**

D-AHU Modular P

500 m³/h
up to 15,000 m³/h

Modular L

› Pre-configured sizes
› Plug and play concept
› EC Fan technology
› **High efficiency aluminium counter flow plate heat exchanger**
› **Low height unit**
› **For false ceiling applications**

D-AHU Modular L

150 m³/h
up to 3,450 m³/h

Selection software

ASTRA Web

› Quick AHU selection that will save you precious time, drastically reducing selection time through the new software interface.
› Very competitive solution available within the Wizard thanks to pre-uploaded parameters.
› High selection quality, thanks to the intelligence embedded within the software core.

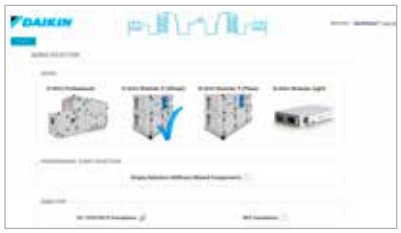
Quickly select your air handling unit by following the wizard:

1. Select the series: D-AHU Professional, D-AHU Modular R, D-AHU Modular P and Modular L
2. Insert the air flow supply and return
3. Insert the summer/winter air supply setpoint
4. Insert the summer/winter outdoor and extract temperature

You will get immediately your 3D result and it's ready to customize!

Now, you will be able to modify your unit (adding or changing components) in order to have a product that meets all your needs.

When finished a technical report, price list, fan curve chart and psychrometric chart can be generated. These final reports can be downloaded in different formats.



Eurovent certification

Daikin Applied Europe S.p.A. participates in the Eurovent Certified Performance programme for Air Handling Units.
Check ongoing validity of certificate:
www.eurovent-certification.com
or www.certiflash.com

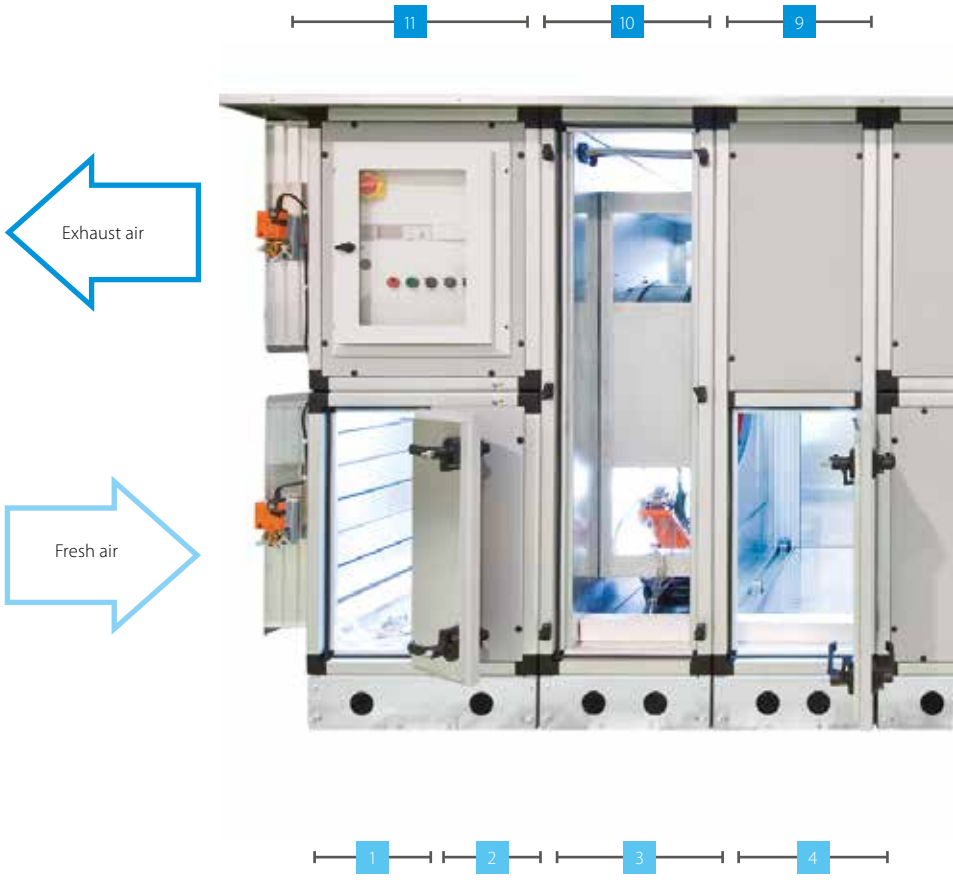
Energy TermiC® S2	Eurovent Classification according to EN1886					
D1	Casing strength class	D1	D2	D3		
	Max. relative deflection mm x m^{-1}	4.00	10.00	EXCEEDING10		
L1	Casing air leakage class at -400 Pa	L1	L2	L3		
	Max. leakage rate (f_{400}) l x s^{-1} x m^{-2}	0.15	0.44	1.32		
L1	Casing air leakage class	L1	L2	L3		
	Max. leakage rate (f_{700}) l x s^{-1} x m^{-2}	0.22	0.63	1.90		
F9	Filter bypass leakage class	F9	F8	F7	F6	G1 TO F5
	Max. filter bypass leakage rate k in % of the volume flow rate	0.50	1	2	4	6
T2	Thermal transmittance	T1	T2	T3	T4	T5
	(U) W/m^2 x K	U <= 0.5	0.5 < U <= 1	1 < U <= 1.4	1.4 < U <= 2	No requirements
TB2	Thermal bridging factor	TB1	TB2	TB3	TB4	TB5
	(kb) W x m^{-2} x K-1	0.75 < K_b <= 1	0.6 < K_b <= 0.75	0.45 < K_b <= 0.6	0.3 < K_b <= 0.45	No requirements

The working principle at a glance

Typical configurations for Daikin air handling units provide a versatile range of functions.
Our system offers numerous options for customisation through an extensive range of variations and added functionality.

Supply side

1. Damper section including ventilation grilles, factory-mounted actuators
2. Bag filter with factory-mounted differential pressure switch and hinged door
3. Heat recovery system (plate heat exchanger or rotative heat exchanger)
4. Mixing box with damper and factory-mounted actuators
5. Section with R-410A direct expansion coil with integrated Daikin expansion valve and drain pan
6. Supply air fan (with hinged door, opening, drive monitoring, mounted and cabled lighting and ON/OFF switch)



Fans
- EC plug fan
- Forward curved fan
- Backward curved fan
- Backward airfoil blades fan
- Plug fan

Exchangers
- Water coils
- Steam coils
- Direct expansion coil
- Superheated water coils
- Electric coils

Humidifiers
- Evaporative humidifier without pump (loss water)
- Evaporative humidifier with re-circulating pump
- Air washer without pump (loss water)
- Air washer with re-circulating pump
- Steam humidifier with direct steam production
- Steam humidifier with local distributor
- Atomized water spray humidifier

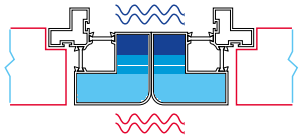
Control system on plug and play solution basis

› Air temperature control
› Chilled water and DX cooling system control
› Free cooling
› CO_2 automatic control

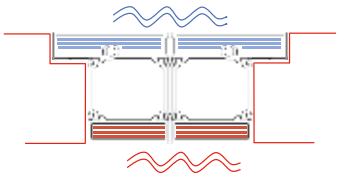
Unique section to section thermal break profile

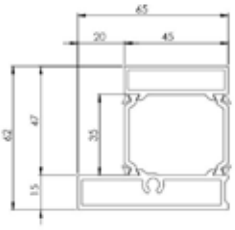
› Thermal bridge free for the entire AHU
› Smooth interior surface with improved IAQ (Indoor Air Quality)

Conventional design



Daikin design





Return side

7 Bag filter with factory-mounted differential pressure manometer and hinged door.

8 Exhaust air fan (with hinged door, opening, drive monitoring, mounted and cabled lighting and ON/OFF switch)

9 Mixing box with damper and factory-mounted actuators

10 Heat recovery system (plate heat exchanger or rotation exchanger)

11 Damper section including ventilation grilles, factory-mounted actuators

Heat recovery systems
› Heat wheel, sensible or sorption
› Plate heat exchanger (optional bypass)
› Run-around coils

Other section
› Attenuator section
› Mixing box section with actuators or manual controlled dampers
› Empty section

Filters
› Synthetic pleated filter
› Flat filter aluminium mesh
› Rigid bag filter
› Soft bag filter
› High efficiency filter
› Carbon absorption filter
› Carbon deodorizing filter

Accessories
› Control features
› Frost protection
› Manometers
› Drive guard
› Roof
› …

D-AHU Professional

External sheet material

Standard:
› Pre – coated galvanized steel (RC5 class)

Optional:
› Aluzinc (RC4 class)
› Aluminium
› AISI 304 Stainless steel
› AISI 316 Stainless steel

Internal sheet material

Standard:
› Aluzinc (RC4 class)

Optional:
› Pre – coated galvanized steel (RC5 class)
› Aluminium
› AISI 304 Stainless steel
› AISI 316 Stainless steel

Base Frame

› Aluminium up to 35.000 m^3/h
› Galvanized steel from 35.000 m^3/h

Profile

Standard:
› Anodized Aluminum

Optional:
› Anodized Aluminium with Thermal break

Other features

› Handles and corners made in glass glass fibre reinforced nylon

› Panel insulation of:
- Mineral wool (density 120 kg/m^3, conductivity 0.036 W/mK)
- Polyurethane foam (density 40 kg/m^3, conductivity 0,0224 W/mK)

Outstanding Corrosion Resistance

Professional

Flexible solution for custom applications

Flexible design

Daikin Professional air handlers are tailored to your needs, optimizing always the unit for the most cost-effective selection and manufacturing standardization.

› Air flow from 500 m^3/h up to 144,000 m^3/h.
› All the units can be modularly designed to facilitate the transport and the assembly on site.
› Controls: Optional Daikin Plug & Play solution

D-AHU Professional series highlights

› The most flexible AHU available on the market directly from Selection Software
› All Heat recovery systems selectable
› Outdoor or Indoor installation
› Panel Insulation: Mineral wool and Polyurethane
› Panel Thickness: 42mm or 62mm
› Anodized Aluminum and Thermal break Profile optional
› Aluzinc, Aluminum, Preprinted, AISI 304, AISI 316L
› Several thickness of external metal sheet from 0.7 up to 1.5mm

Applications

Pharmaceutical

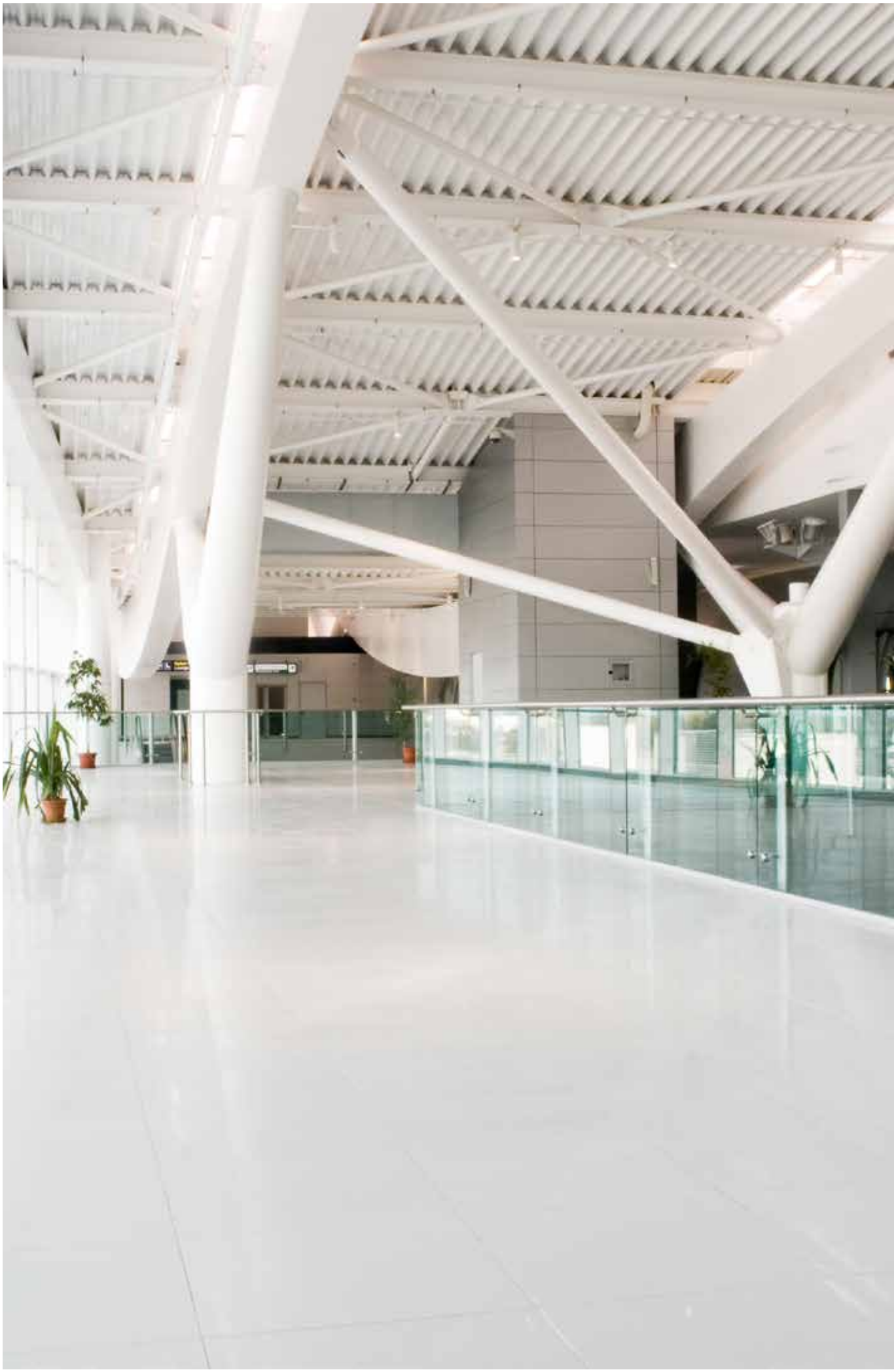
Oil & Gas

Data Center

Hospital

Plug and play: More control, more flexibility

The plug and play control system allows for more precise control than ever before, allowing the user to determine a wide range of settings, resulting in excellent operational flexibility.
The factory-fitted electrical control panel, complete with Direct Digital Control (DDC) is combined with in-built temperature, humidity and CO_2 sensors to control mixing dampers, heat recovery wheels, water valves, pressure switches for filters and fans, fan motors and inverters.
All these components are wired internally and individual AHU modules are linked by fast connectors.
The AHU control system can manage the chilled water coil, hot water coil, DX cooling and/or heating coil(s) (in conjunction with ERQ/VRV) of single or multiple refrigerant circuits (up to a maximum of four circuits per DX coil).



Modular R

High-end solution with heat recovery

Energy efficiency and indoor air quality

- Predefined sizes
- IE4 premium efficiency motor
- High efficiency heat wheel (heat recovery)
- Compact design
- Advanced control features
- Easy installation
- Indoor air quality compliant with VDI 6022 hygiene guideline
- Operating limits from -25 °C, -40 °C with electric heaters, up to +46 °C ambient temperature
- VRV IV and ERQ coupling capability
- Indoor and outdoor versions
- Free cooling capability
- Economy and Night mode operation
- Monitoring and control through Daikin ITM

Construction main benefit

- Eurovent certified performances
- No cross contamination and low internal leakage
- Best class in corrosion resistance
- Polyurethane foam or Mineral wool selectable as insulation materials

Applications

Hotel

Office

Commercial

D-AHU Modular R			1	2	3	4	5	6	7	8	9	10
Airflow		m^3/h	1200	1700	2700	4100	5500	6100	7000	9100	11500	15000
Temp. efficiency winter		%	80	79,7	80,1	80,2	80,7	80,1	80,7	80,8	80,5	80,6
External static pressure	Nom.	Pa	200	200	200	200	200	200	200	200	200	200
Current	Nom.	A	2,26	3,09	2,82	4,33	5,29	6,31	7,22	8,73	11,57	15,68
Power input	Nom.	kW	0,52	0,71	1,13	1,73	2,12	2,52	2,89	3,49	4,63	6,27
SFPv		$kW/m^3/s$	1,557	1,504	1,503	1,521	1,385	1,490	1,485	1,381	1,449	1,505
Electrical supply	Phase	ph	1	1	3 + N	3 + N	3 + N	3 + N	3 + N	3 + N	3 + N	3 + N
	Frequency	Hz	50	50	50	50	50	50	50	50	50	50
	Voltage	V	230	230	400	400	400	400	400	400	400	400
Dimensions unit	Width	mm	720	820	990	1200	1400	1400	1600	1940	1940	2300
	Height	mm	1320	1320	1540	1740	1740	1920	1920	2180	2460	2570
	Length	mm	1700	1700	1800	1920	2080	2280	2400	2450	2280	2400
Weight unit		kg	325	350	475	575	750	790	950	1330	1410	1750

Modular P

AHU with plate heat exchanger

Highlights

› 10 Predefined sizes
› Compliant with VDI 6022
› Operating limits from -25 C, -40C with electric heaters
› Plug & Play Controls
› Monitoring and control through Daikin ITM
› Easy installation and commissioning

Construction main benefit

› Eurovent certified performances
› No cross contamination and low internal leakage
› Best class in corrosion resistance
› Polyurethane foam or Mineral wool selectable as insulation materials

Applications

Hotel

Office

Commercial

D-AHU Modular P			1	2	3	4	5	6	7	8	9	10
Airflow		m^3/h	1100	1600	2400	3100	3700	4750	5500	8000	10400	12500
Thermal efficiency		%	91,2	91,7	92,2	92,1	92	92,4	92,4	91,9	93,3	93,3
External static pressure	Nom.	Pa	200	200	200	200	200	200	200	200	200	200
Current	Nom.	A	1,54	2,07	1,05	1,36	1,73	2,21	2,55	3,65	4,58	5,60
Power input	Nom.	kW	0,35	0,48	0,73	0,94	1,20	1,53	1,77	2,53	3,17	3,88
SFPv		$kW/m^3/s$	1,161	1,073	1,093	1,092	1,167	1,161	1,156	1,139	1,098	1,117
Electrical supply	Phase	ph	1	1	3 + N	3 + N	3 + N	3 + N	3 + N	3 + N	3 + N	3 + N
	Frequency	Hz	50	50	50	50	50	50	50	50	50	50
	Voltage	V	230	230	400	400	400	400	400	400	400	400
Dimensions unit	Width	mm	720	820	990	1200	1400	1400	1600	1940	1940	2300
	Height	mm	1320	1320	1540	1740	1740	1920	1920	2180	2460	2570
	Length	mm	2030	2200	2610	2660	2800	3210	3340	3840	4060	4190
Weight unit		kg	343	358	512	604	785	852	964	1449	1700	2071

D-AHU Modular L

Heat recovery

Premium efficiency
counterflow
plate heat exchanger

Compact filter

Double stage filtration for both
supply and return air side

Panel

Double skin panel, MW insulated,
pre painted (ext.) and Aluzinc (int.)
finishing

Connection

Rectangular connection (std.)
Rectangular – Circular transiction (opt.)

Bypass

100% modulating element

EC fan

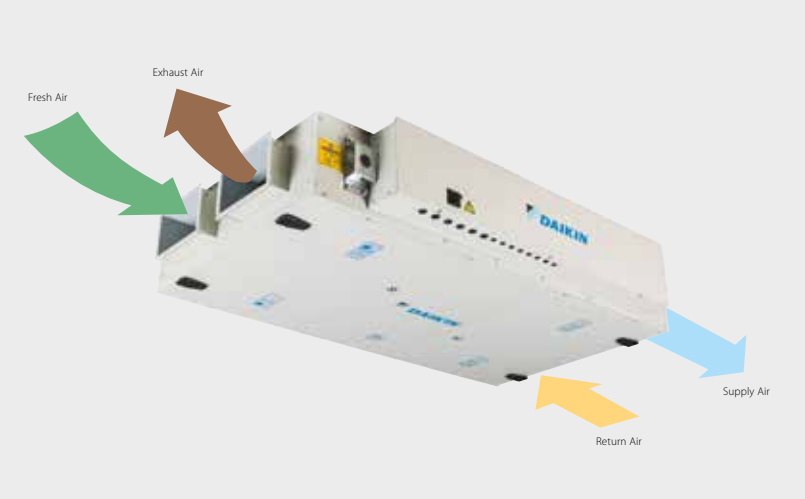
EC centrifugal fans with
IE4 motor efficiency

Modular L Pro

Premium efficiency heat recovery unit

Highlights

› 6 Predefined sizes
› Compact footprint (first unit height 280mm only)
› First in the market for Indoor Air Quality (IAQ)
› Up to 94% of thermal energy recovered
› Available in a left or right version
› 50mm of mineral wool insulation (M0 fire class)
› Intelligent defrost logic to decrease energy consumption and increase comfort



Heat exchanger

› Premium quality counter flow plate heat exchanger
› Up to 93% of the thermal energy recovered
› High grade aluminum allowing high grade corrosion protection

Applications


Offices


School


Light Commercial

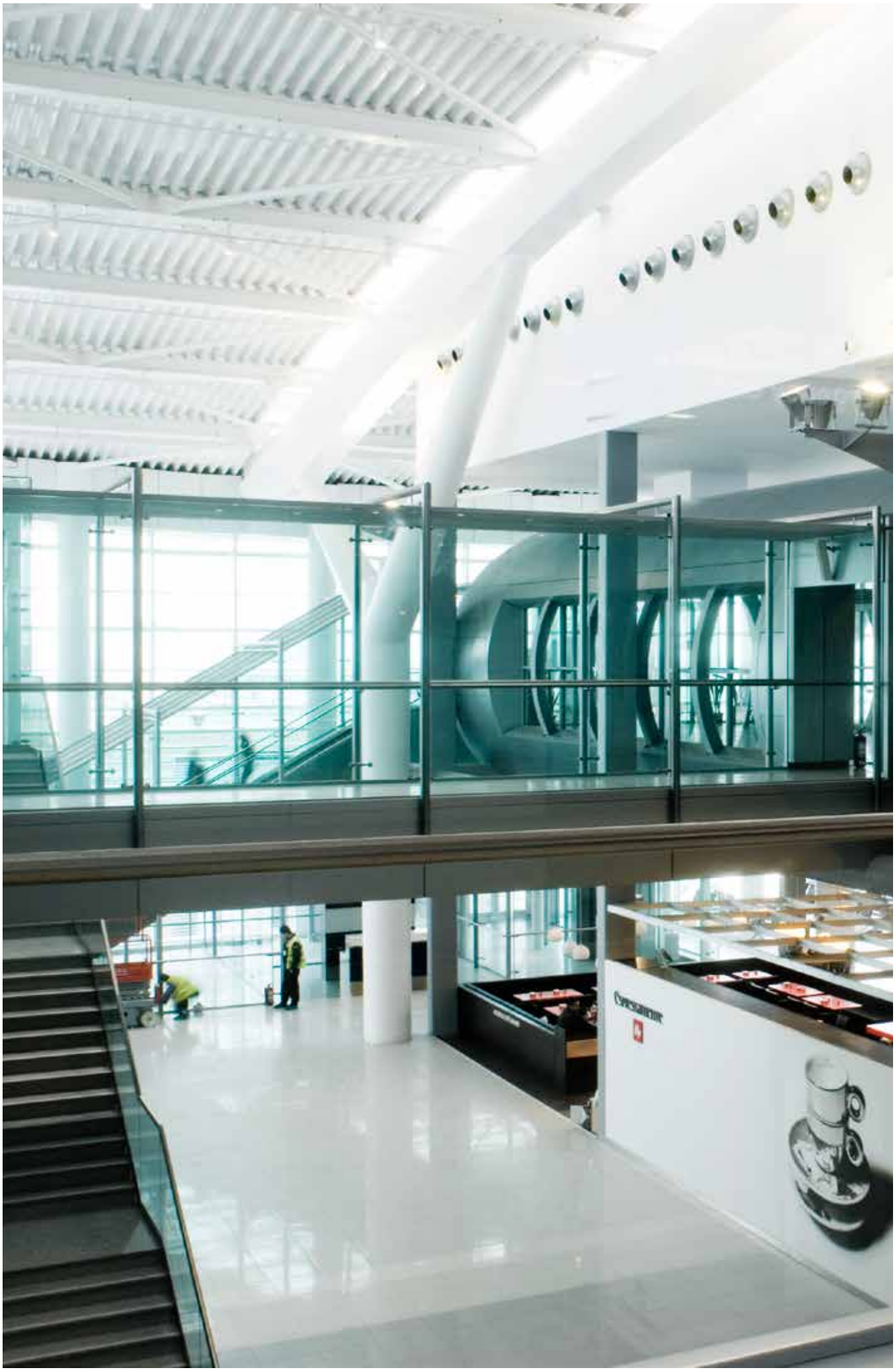
Technical details

D-AHU Modular L			2	3	4	5	6	7
Airflow		m^3/h	300	600	1200	1500	2500	3000
Heat exchanger thermal efficiency[1].		%	93	93	93	92	94	93
External static pressure	Nom.	Pa	100	100	100	100	100	100
Current	Nom.	A	0,45	1,08	1,85	2,39	4,34	5,29
Power input	Nom.	kW	0,10	0,25	0,43	0,55	1,00	1,22
SFPv[2].		$kW/m^3/s$	1,24	1,49	1,28	1,32	1,44	1,46
ERP compliant			ErP 2018 Compliant					
Electrical supply	Phase	ph	50/60	50/60	50/60	50/60	50/60	50/60
	Frequency	Hz	220/240 Vac	220/240 Vac	220/240 Vac	220/240 Vac	220/240 Vac	220/240 Vac
	Voltage	V	920	1100	1600	1600	2000	2000
Main unit dimensions	Width	mm	280	350	415	415	500	500
	Height	mm	1660	1800	2000	2000	2000	2000
	Length	mm	250	400	500	500	700	700
Rectangular duct flange	Width	mm	150	200	300	300	400	400
	Height	mm	49	56	57	53	61	57
Unit Sound Power Level (Lwa)		dB	32	39	39	35	43	39
Unit Sound Pressure Level[3].		dBA	125	180	270	280	355	360
Weight unit		kg	125	180	270	280	355	360

1. Winter design condition: Outdoor: -10°C,90% Indoor: 22°C,50%

2. SFPv is a parameter that quantifies the fan efficiency (the lower it is the better will be). This reduces if airflow decreases.

3. EN 3744. Surrounding, Directivity (Q) = 2, @1,5m distance



Daikin fresh air package

Unique in the market

Plug and play connection of AHU to Daikin VRV and ERQ

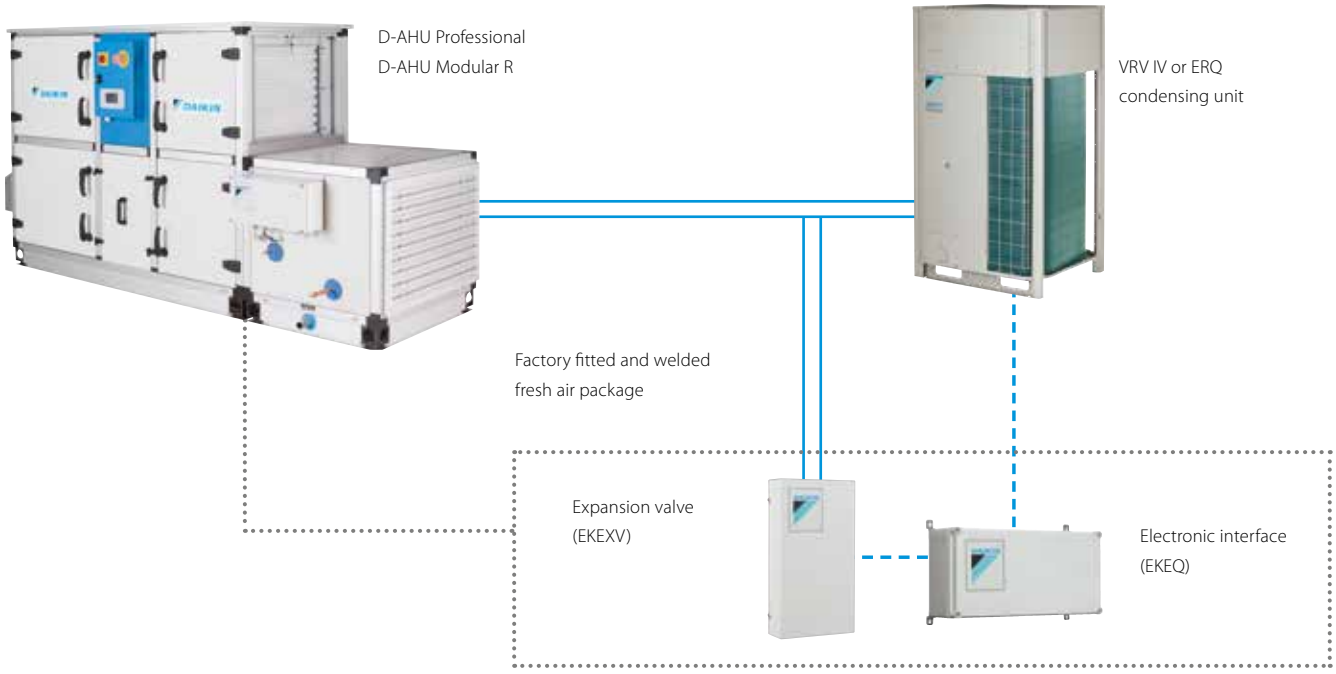
The Daikin fresh air package provides a complete solution, including all unit controls (expansion valve, control box and AHU controller) and sensors factory mounted and configured.

Higher efficiency

Daikin heat pumps are renowned for their high energy efficiency. Integrating the AHU with a heat recovery system is even more effective since an office system can frequently be in cooling mode while the outdoor air is too cold to be brought inside in an unconditioned state. In this case heat from the offices is merely transferred to heat up the cold incoming fresh air.

High comfort levels

Daikin ERQ and VRV units respond rapidly to fluctuations in supply air temperature, resulting in a steady indoor temperature and resulting in high comfort levels for the end user. The ultimate is the VRV range which improves comfort even more by offering continuous heating, also during defrost.



Customised regulation and control systems

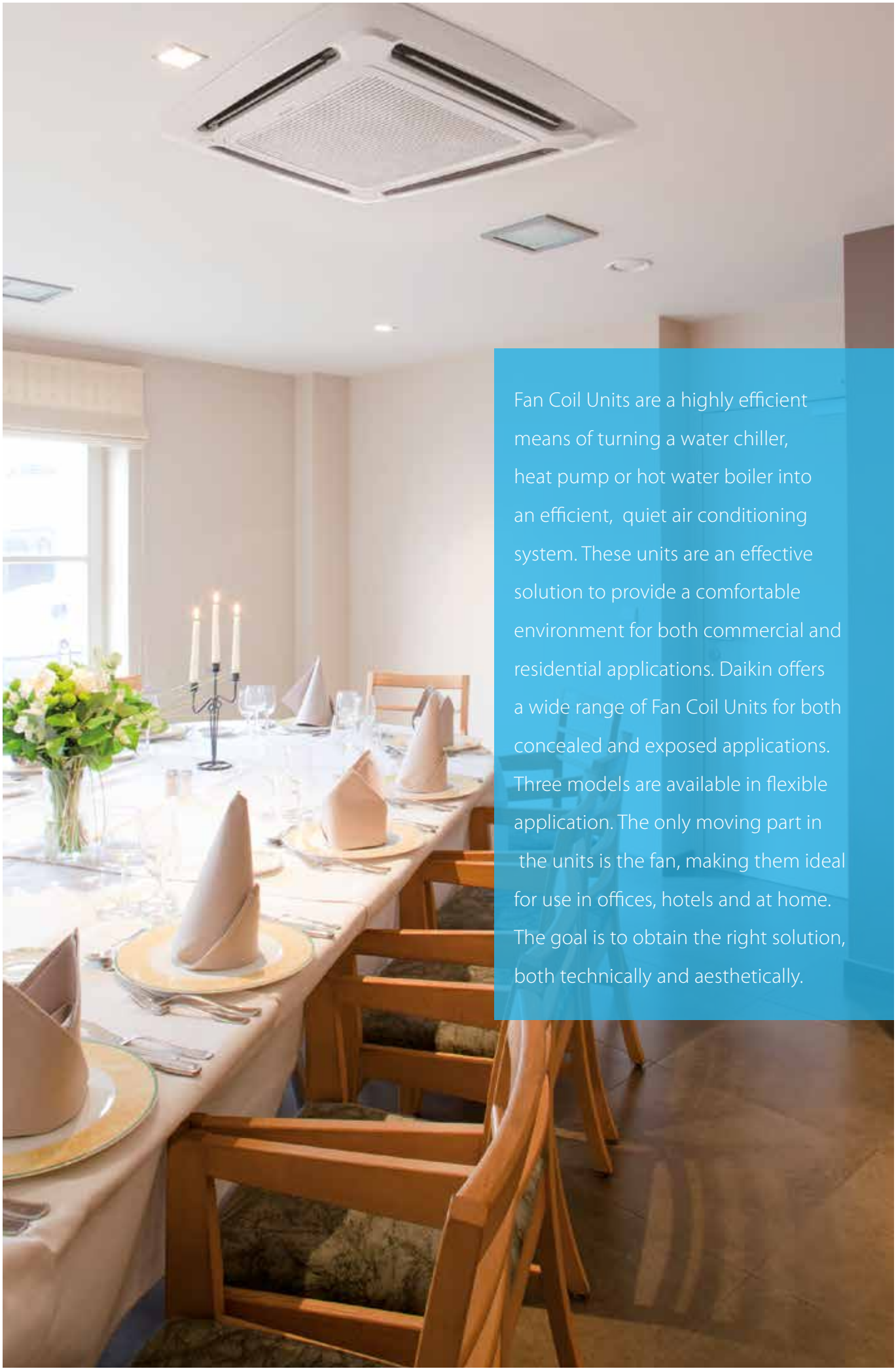
All Modular air handling systems come with a regulation and control system (with or without connection to a BMS).

The MicroTech III controller is designed to work with most applications. It can thus manage a chilled water system or direct-expansion system while providing management of the heat recovery loop for constant or variable speeds.
This allows for precise temperature control based on P.I.D. regulation, and constantly optimises the operating parameters of the air handling unit.

- LCD display with 164 x 44 pixels.
- 3-key control panel.
- Rotating knob control for greater ease of use.
- Memory for data backups.
- Alarm relays for general types of incidents.
- Password-controlled access for configuration changes.
- Maintenance reports showing all run-time hours and general operating conditions.
- Alarm log to facilitate the analysis of incidents.

The MicroTech III controller provides the option of controlling the set-points for ambient air temperature, air return and supply air, and the possibility of regulating air quality with the addition of a CO_2 probe. For additional information about these features, please contact your Daikin representative.

The POL638 standard software has been customised to manage the control signals of Daikin's ERQ and VRV IV systems.



Fan Coil Units are a highly efficient means of turning a water chiller, heat pump or hot water boiler into an efficient, quiet air conditioning system. These units are an effective solution to provide a comfortable environment for both commercial and residential applications. Daikin offers a wide range of Fan Coil Units for both concealed and exposed applications. Three models are available in flexible application. The only moving part in the units is the fan, making them ideal for use in offices, hotels and at home. The goal is to obtain the right solution, both technically and aesthetically.

Table of content

Fan coil units

Fan coil units with BLDC motor

As more buildings undergo renovation, the need to be able to deliver high indoor air quality in a specific space in an **efficient and cost-effective way** without having to do a radical re-fit of the entire HVAC system has made fan coil technology an obvious solution.

Daikin has a full capacity range of **aesthetically pleasing** fan coil units with advanced controls that reliably deliver **excellent comfort levels**. And by using a refined range of advanced DC fan motors, we are able to offer flexibility while maintaining very low noise levels.

Why choose Daikin fan coil units?

- The new brushless DC ranges reflect Daikin's commitment to developing highly efficient fan coil units that help to reduce energy consumption, without compromising on reliability and performance.
- High level quality is written large for us and we are pleased to offer high technology solutions to the market.

Benefits for the installer

› Reduced amount of sizes: less stock space needed
› Modular designs for multiple configurations
› Easy integration in BMS system via modbus protocol

Benefits for the consultant

› Best solution in the market in order to have top efficiency, best comfort and lowest sound levels
› Product flexibility: wide range of options, accessories and controls

Benefits for the end user

› High comfort level
› Up to 70% savings on running costs with a BLDC fan motor
› Controller with timer programmed operating mode
› FWECSA controller that can satisfy all customer requirements in terms of FCU management

Fan coil unit software

Select your unit via our selection software
› Selection logic is based on cooling and/or heating mode conditions entered by the user
› A detailed report including technical specifications and wiring diagram can be printed.

Download the software from the business portal. Fan coil selection is available in the software finder.

Payback tool

Prove quickly the saving in electric costs using the new BLDC motor technology compared to the AC motor technology via our payback tool. The tool can be downloaded from the business portal. Search for: BLDC payback tool

BIM objects

Our Fan Coils units are available as BIM objects in Revit format, which means they can be used in Autodesk REVIT MEP and in AutoCAD 2D files.
Visit our **BIM Application Suite**

BLDC fan motors Video

Learn more on the advantages of BLDC fan motors in Fan coil units:

Check on
YouTube
www.youtube.com/DaikinEurope

Benefits of brushless inverter technology on fan coil units:

Higher efficiency than AC (Alternative Current) motor

› Up to 70% energy savings
› No heat generation
› No power losses
› Higher efficiency than AC motors to reach set point

High comfort level

› Less fluctuation of air temperature and relative humidity
› More consistent output level
› Stepless speed change for gradual air output
› More accurate adjustments to reach set point

Low sound levels

› Lower minimum rotation speed
› No start-stop sequence
› Gradual air output

High flexibility level

› Multiple configurations: cassettes, floorstanding units, flexi type units with or without cabinet and ducted units
› Wide capacity range in heating and cooling
› Different piping topologies and connection valves


FWN-AT/AF


FWG-AT/AF


FWR-AT/AF


FWS-AT/AF


FWC-BT/BF

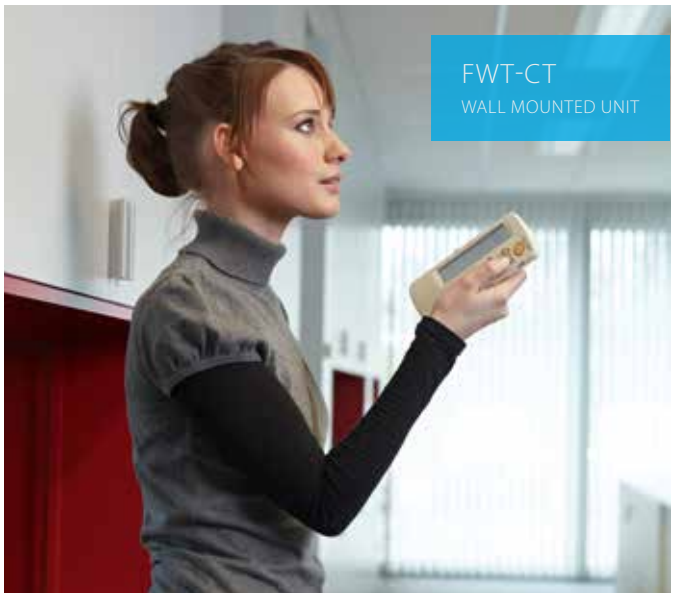

FWP-AT


FWZ-AT/AF

FWS-AT/AF
FLEXI TYPE UNIT

FWF-BT/BF
CEILING MOUNTED CASSETTE

FWC-BT/BF
CEILING MOUNTED CASSETTE


FWT-CT
WALL MOUNTED UNIT


FWR-AT/AF
FLOOR STANDING UNIT

Products overview

Type	Model	Product name		Fan motor type	Capacity
Round flow cassette	Round flow cassette - 900 x 900 cassette - 360° air discharge ensures uniform air flow - Integrated fresh air intake - Easy installation in corners - Standard drain pump with 850 mm lift	FWC-BT/BF		BLDC	Cooling: 4.0 - 8.7 kW Heating: 5.5 -12.1 kW
4-way blow ceiling mounted cassette	4-way blow ceiling mounted cassette - 900 x 900 cassette - High efficiency, continuous air flow regulation and fan speed modulation - Reduced sound emissions - Easy installation and maintenance	FWG-AT/AF		BLDC	Cooling: 2.0~ 11.75 kW Heating: 3.3~ 15.65 kW
	4-way blow ceiling mounted cassette - 600 x 600 cassette - Integrated fresh air intake - Horizontal auto swing - Easy installation in corners - Standard drain pump with 750 mm lift	FWF-BT/BF		AC	Cooling: 1.4 - 5.2 kW Heating: 2.3 - 6.7 kW
	4-way blow ceiling mounted cassette - 600 x 600 cassette - Easy installation and maintenance - High power air flow - Standard drain pump with 700 mm lift	FWF-CT		AC	Cooling: 1.91 - 4.54 kW Heating: 2.64 - 5.28 kW
Floor standing units	Floor standing unit - For vertical mounting - Continuous air flow regulation and fan speed modulation - Up to 70% energy savings - Low sound levels	FWZ-AT/AF		BLDC	Cooling: 2.64 - 10.08 kW Heating: 2.46 - 11.18 kW
	Floor standing unit - For horizontal or vertical concealed mounting - Insulated valve packages, no extra drain pan required - Fast-on connections for electrical options: no tools needed - Easy maintenance	FWV-DAT/DAF		AC	Cooling: 1.46 -8.02 kW Heating: 1.90 - 10.03 kW
Flexi type units	Flexi type unit - For horizontal or vertical mouting - Continuous air flow regulation and fan speed modulation - Up to 70% energy savings - Low sound levels	FWR-AT/AF		BLDC	Cooling: 2.64 - 10.08 kW Heating: 2.46- 11.18 kW
	Flexi type unit - For horizontal or vertical concealed mounting - Insulated valve packages, no extra drain pan required - Fast-on connections for electrical options: no tools needed - Easy maintenance	FWL-DAT/DAF		AC	Cooling: 1.46 - 8.02 kW Heating: 1.90 - 10.03 kW
	Concealed flexi type unit - For horizontal or vertical concealed mounting - Continuous air flow regulation and fan speed modulation - Up to 70% energy savings - Low sound levels	FWS-AT/AF		BLDC	Cooling: 2.64 - 10.08 kW Heating: 2.46 - 11.18 kW
	Concealed flexi type unit - For horizontal or vertical concealed mounting - Insulated valve packages, no extra drain pan required - Fast-on connections for electrical options: no tools needed - Easy maintenance	FWM-DAT/DAF		AC	Cooling: 1.46 -8.02 kW Heating: 1.90 - 10.03 kW
Ducted units	Ducted unit with low ESP - For horizontal concealed mounting - Available static pressure up to 30 Pa - Easy installation and maintenance - 4-speed fan motor - High power air flow	FWE-CT/CF		AC	Cooling: 2.10 - 9.96 kW Heating: 2.3 - 13.00 kW
	Ducted unit with medium ESP - For horizontal concealed mounting - Instant adjustment to temperature and relative humidity changes - Available static pressure up to 70 Pa - Low sound levels	FWP-AT		BLDC	Cooling: 2.61 - 6.47 kW Heating: 5.47 - 12.28 kW
	Ducted unit with medium ESP - For horizontal concealed mounting - Available static pressure up to 60 Pa - 7-speed electrical motors (thermal protection on windings) - Easy maintenance	FWB-BT		AC	Cooling: 2.61 - 10.34 kW Heating: 5.47 - 18.78 kW
	Ducted unit with medium ESP - For horizontal or vertical concealed mounting - Avaiable static pressure up to 70 Pa - Easy maintenance	FWN-AT/AF		BLDC	Cooling: 2.83 - 8.75 kW Heating: 3.63 - 18.10 kW
	Ducted unit with high ESP - For horizontal or vertical concealed mounting - Available static pressure from 60 up to 145 Pa - Easy maintenance	FWD-AT/AF		AC	Cooling: 3.90 - 18.30 kW Heating: 4.05 - 21.92 kW
Wall mounted unit	Wall mounted unit - High aesthetic cabinet design - Optimum air distribution - Easy installation - 3-speed fan motor	FWT-CT		AC	Cooling: 2.43 - 5.28 kW Heating: 3.22 - 7.33 kW

Capacity class

	1	15	2	25	3	35	4	5	6	7	8	9	10	11	12	16	18
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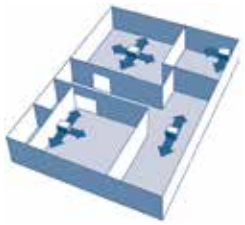
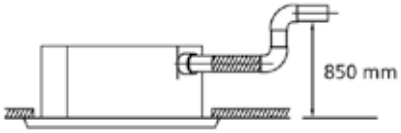
Round flow cassette

BLDC fan motor unit for ceiling mounting. 360° air discharge

› 360° air discharge ensures uniform air flow and temperature distribution
› Modern style decoration panel in white (RAL9010)
› Optional fresh air intake
› Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling



› Possibility to shut 1 or 2 flaps for easy installation in corners
› Standard drain pump with 850mm lift increases flexibility and installation speed



FWC-BT/BF

BRC7E532F/533F

BRC315D7

› More information about FWC-BT

› More information about FWC-BF

Indoor unit			FWC-BT/BF	06	07	08	09	06	07	08	09
				2-pipe				4-pipe			
Cooling capacity (standard conditions)	Total capacity	High	kW	5.5	6.1	7.2	8.1	5.9	6.3	7.2	8.3
		Medium	kW	4.7	5.3	5.9	6.8	5.1	5.6	6.2	6.9
		Low	kW	3.9	4.5	4.8	5.4	4.3	4.6	4.8	5.7
	Sensible capacity	High	kW	4.2	4.7	5.7	6.5	4.2	4.6	5.4	6.4
		Medium	kW	3.5	4.0	4.5	5.3	3.6	4.0	4.5	5.2
		Low	kW	2.8	3.3	3.5	4.1	3.1	3.3	3.5	4.0
Heating capacity (standard conditions)	High		kW	6.8	7.7	9.2	10.6	6.9	7.8	9.2	10.4
	Medium		kW	5.8	6.6	7.6	8.8	6.1	6.7	7.6	8.7
	Low		kW	4.8	5.5	5.8	7.0	5.2	5.5	5.8	6.8
Power input	High		kW	0.045	0.054	0.077	0.107	0.046	0.055	0.077	0.107
	Medium		kW	0.040	0.046	0.058	0.076	0.041	0.047	0.059	0.077
	Low		kW	0.034	0.037	0.039	0.045	0.035	0.038	0.040	0.046
FCEER				116	119	113	104	124	120	112	106
FCCOP				143	147	141	137	149	144	138	131
Dimensions	Unit	HeightxWidthxDepth	mm	288x840x840							
Weight	Unit		kg	26				29			
Decoration panel	Dimensions	HeightxWidthxDepth	mm	95x999x1,008							
Decoration panel	Weight		kg	7							
Fan	Type			Turbo fan							
	Quantity			1							
	Air flow rate	High	m^3/h	1,068	1,236	1,518	1,776	1,032	1,200	1,476	1,746
		Medium	m^3/h	894	1,038	1,200	1,410	864	1,002	1,164	1,374
		Low	m^3/h	720	834	888	1,044	708	804	852	1,014
Total sound power level	High		dBA	43.0	47.0	53.0	57.0	43.0	47.0	53.0	57.0
	Medium		dBA	36.0	39.0	44.0	49.0	36.0	39.0	44.0	49.0
	Low		dBA	31.0	33.0	36.0	40.0	33.0	36.0		40.0
Sound pressure level	High		dBA	29.0	33.0	39.0	43.0	29.0	33.0	39.0	43.0
	Medium		dBA	24.0	28.0	32.0	37.0	24.0	28.0	32.0	37.0
	Low		dBA	21.0	22.0	24.0	28.0	21.0	22.0	24.0	28.0
Piping connections	Drain	OD	mm	VP25 (External dia.32 / internal dia. 25)							
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-240							
Control systems	Infrared remote control			BRC7E532F / BRC7E533F							
	Wired remote control			BRC315D7							

For standard conditions refer to Measuring Conditions table, at the end of this catalogue

4-way blow ceiling mounted cassette

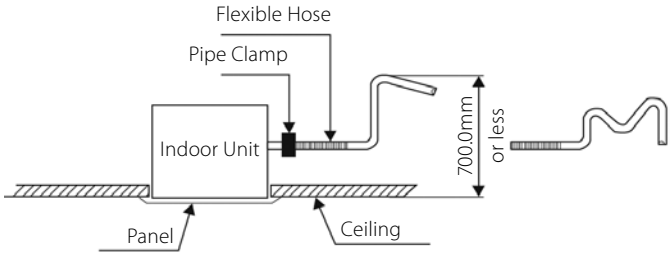
BLDC fan motor unit for ceiling mounting. High efficiency, continuous air flow regulation and fan speed modulation

› Up to 70% energy savings with brushless DC motor technology compared to traditional technology
› Instant adjustment to temperature and relative humidity changes
› Continuous modulation of fan speed resulting in reduced sound emissions, in comparison with fixed speed AC motor fan coil units
› Easy installation and maintenance
› Drain pump with 700mm lift

FWG-AT/AF

BRC51A61

BRC52A61



› More information about FWG-AT

› More information about FWG-AF

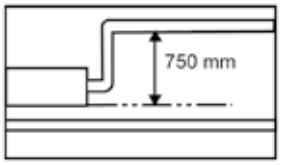
Indoor unit			FWG-AT/AF	05	08	11	05	08	11
				2-pipe			4-pipe		
Cooling capacity (standard conditions)	Total capacity	High	kW	5.86	8.71	11.63	4.36	7.11	8.88
		Medium	kW	4.63	7.20	9.62	3.58	6.05	7.67
		Low	kW	3.49	5.77	7.81	2.79	4.97	6.46
	Sensible capacity	High	kW	4.47	6.34	8.25	3.81	5.66	7.05
		Medium	kW	3.42	5.36	6.89	2.97	4.80	5.98
		Low	kW	2.53	4.23	5.50	2.23	3.78	4.86
Heating capacity (standard conditions)	High		kW	5.91	9.40	11.35	6.74	9.86	13.79
	Medium		kW	4.83	7.52	9.51	5.47	8.51	11.82
	Low		kW	3.73	5.95	7.66	4.45	7.09	10.09
Power input	High		kW	0.047	0.100	0.130	0.047	0.100	0.130
	Medium		kW	0.03	0.06	0.09	0.03	0.06	0.09
	Low		kW	0.02	0.04	0.05	0.02	0.04	0.05
FCEER				B			A	B	
FCCOP				B		C	A	B	
Dimensions	Unit	HeightxWidthxDepth	mm	265x820x820		300x820x820	265x820x820	268x820x820	300x820x820
Decoration panel	Dimensions	HeightxWidthxDepth	mm	85x990x990					
Weight	Unit		kg	26.0	28.0	32.0	26.0	28.0	32.0
Decoration panel	Weight		kg	4.0					
Casing	Colour			Without powder paint					
Fan	Type			Turbo fan					
	Quantity			1					
	Air flow rate	High	m^3/h	1,053	1,512	1,801	1,053	1,512	1,801
		Medium	m^3/h	799	1,223	1,478	799	1,223	1,478
		Low	m^3/h	595	951	1,155	595	951	1,155
Total sound power level	High		dBA	46.0	57.0	59.0	46.0	57.0	59.0
	Medium		dBA	40.0	52.0	55.0	40.0	52 .0	55.0
	Low		dBA	34.0	49.0		34.0	49.0	
Sound pressure level	High		dBA	37.0	47.0	51.0	37.0	47.0	51.0
	Medium		dBA	31.0	42.0	46.0	31.0	42.0	46.0
	Low		dBA	23.0	37.0	41.0	23.0	37.0	41.0
Piping connections	Drain	OD	mm	19					
Power supply	Phase/Frequency/Voltage		Hz/V	1N~/50/220-240					
Control systems	Infrared remote control			Infrared remote control as standard with decoration panel kit					
	Wired remote control			BRC51A61					

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

4-way blow ceiling mounted cassette

AC fan motor unit for ceiling mounting. Possibility to shut 1 or 2 flaps

- Modern style decoration panel in white (RAL9010)
- Compact casing (570mm in width and depth) enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles
- Comfortable horizontal auto swing ensures draughtfree operation and prevents ceiling soiling
- Optional fresh air intake
- Possibility to shut 1 or 2 flaps for easy installation in corners
- Standard drain pump with 750mm lift increases flexibility and installation speed



› More information about FWF-BT

› More information about FWF-BF

Indoor unit			FWF-BT/BF	02	03	04	05	02	03	04	05
				2-pipe				4-pipe			
Cooling capacity (standard conditions)	Total capacity	High	kW	1.7	3.0	4.0	4.9	1.8	2.9	3.8	4.6
		Medium	kW	1.5	2.7	3.1	4.0	1.5	2.4	3.1	3.8
		Low	kW	1.3	2.4		2.8	1.3	1.6		2.6
	Sensible capacity	High	kW	1.4	2.0	2.7	3.5	1.5	1.8	2.5	3.2
		Medium	kW	1.2	1.7	2.0	2.7	1.2	1.5	1.9	2.5
		Low	kW	1.0	1.4		1.8	1.0			1.6
Heating capacity (standard conditions)		High	kW	2.4	3.3	4.5	5.6	3.3	3.6	4.7	5.7
		Medium	kW	2.1	2.9	3.5	4.4	2.9	3.1	3.7	4.7
		Low	kW	1.9	2.7		3.0	2.4	2.6		3.2
Power input		High	kW	0.074		0.090	0.118	0.074		0.094	0.121
		Medium	kW	0.067		0.070	0.089	0.067	0.062	0.074	0.093
		Low	kW	0.060		0.055	0.062	0.060	0.055		0.066
FCEER				22	40	44	45	22	33	34	40
FCCOP				32	45	49		41	48		49
Dimensions	Unit	HeightxWidthxDepth	mm	285 x575x575							
Weight	Unit		kg	19				20			
Decoration panel	Dimensions	HeightxWidthxDepth	mm	85x740x745							
Decoration panel	Weight		kg	4.5							
Fan	Type			Turbo fan							
	Quantity			1							
	Air flow rate	High	m^3/h	456	468	660	876	468	438	618	822
		Medium	m^3/h	384	390	486	648	390	366	456	612
		Low	m^3/h	300	318		420	318	300		390
Total sound power level	High		dBA	44.0		50.0	55.0	44.0	46.0	52.0	57.0
	Medium		dBA	40.0		44.0	49.0	40.0	42.0	46.0	51.0
	Low		dBA	36.0	38.0		42.0	36.0	38.0	41.0	44.0
Sound pressure level	High		dBA	31.0		40.0	45.0	31.0	33.0	42.0	47.0
	Medium		dBA	27.0		33.0	39.0	27.0	29.0	35.0	41.0
	Low		dBA	26.0			30.0	26.0	27.0		32.0
Piping connections	Drain	OD	mm	VP20 (External dia.26 / Internal dia. 20)							
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-440							
Control systems	Infrared remote control			BRC7E530 / BRC7E531							
	Wired remote control			BRC315D7							

For standard conditions refer to Measuring Conditions table, at the end of this catalogue

4-way blow ceiling mounted cassette

AC fan motor unit for ceiling mounting

› 4 way air discharge and air swing
› Compact casing (570mm in width and depth) enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles
› Wide operating range
› Air suction from underneath
› Easy installation and maintenance
› Built-in high pressure drain pump with 700mm lift
› Double-intake centrifugal fans
› High power air flow
› 3-speed fan motor
› Infrared remote control as standard with decoration panel kit

FWF-CT

MERCA

WRC-HPC

SRC-HPA

› More information about FWF-CT

Indoor unit				FWF-CT	02	03	04
					2-pipe		
Cooling capacity (standard conditions)	Total capacity	High		kW	2.43	4.04	4.20
		Medium		kW	2.15	3.46	3.73
		Low		kW	1.86	2.73	3.11
	Sensible capacity	High		kW	1.85	2.87	3.09
		Medium		kW	1.62	2.37	2.70
		Low		kW	1.39	1.83	2.22
Heating capacity (standard conditions)	High			kW	3.03	3.88	4.37
	Medium			kW	2.50	3.08	3.40
	Low			kW	2.08	2.18	2.91
Power input	High			kW	0.063	0.064	0.079
	Medium			kW	0.05	0.06	0.08
	Low			kW	0.05		0.07
Dimensions	Unit	HeightxWidthxDepth		mm	250x570x570		
Weight	Unit			kg	15.0	17.0	
	Operation weight			kg	19	21	
Decoration panel	Dimensions	Unit	HeightxWidthxDepth	mm	45x460x460		
	Weight			kg	3.0		
Air filter	Type				Washable Saranet		
Fan	Type				Turbo fan		
	Quantity				1		
	Air flow rate	High		m^3/h	646	680	748
		Medium		m^3/h	493	527	664
		Low		m^3/h	391	374	476
Total sound power level	High			dBA	52	54	56
	Medium			dBA	45	47	56
	Low			dBA	39	41	45
Sound pressure level	High			dBA	42	45	48
	Medium			dBA	35	38	40
	Low			dBA	29	30	36
Piping connections	Drain	OD		mm	19.05		
Power supply	Phase/Frequency/Voltage			Hz/V	1N~/50/220-240		
Current input	High			A	0.28		0.35
	Medium			A	0.23	0.25	0.32
	Low			A	0.21	0.24	0.31
Control systems	Infrared remote control				Infrared remote control as standard with decoration panel kit		
	Wired remote control				MERCA/SRC-HPA		

For standard conditions refer to Measuring Conditions table, at the end of this catalogue

Floor standing unit

BLDC fan motor unit for vertical mounting. Continuous air flow regulation and fan speed modulation

- Up to 70% energy savings with brushless DC motor technology compared to traditional technology
- Instant adjustment to temperature and relative humidity changes
- Low operating sound level
- Highly flexible solutions: multiple sizes, piping topologies and connection valves
- Requires very little installation space

› More information about FWZ-AT

› More information about FWZ-AF

Indoor unit			FWZ-AT/AF	02	03	06	08	02	03	06	08
				2-pipe				4-pipe			
Cooling capacity (standard conditions)	Total capacity	High	kW	1.94	2.91	4.48	7.93	1.77	2.86	4.64	7.79
		Medium	kW	1.69	2.37	3.64	6.2	1.55	2.32	3.79	6.12
		Low	kW	1.35	1.75	2.99	4.1	1.25	1.72	3.10	4.06
	Sensible capacity	High	kW	1.49	2.09	3.62	5.87	1.44	2.06	3.54	5.76
		Medium	kW	1.30	1.69	2.90	4.59	1.21	1.65	2.85	4.54
		Low	kW	1.04	1.25	2.31	3.04	0.97	1.23	2.27	3.01
Heating capacity (standard conditions)	High		kW	2.15	2.94	4.88	8.37	1.76	2.68	4.64	7.35
	Medium		kW	1.81	2.37	4.11	6.53	1.56	2.31	4.07	6.29
	Low		kW	1.50	1.76	3.36	4.39	1.36	1.88	3.55	4.85
Power input	High		kW	0.019	0.016	0.033	0.087	0.019	0.016	0.033	0.087
	Medium		kW	0.01		0.02	0.038	0.01		0.02	0.038
	Low		kW	0.01			0.013	0.01			0.013
FCEER				B	A			B	A		B
FCCOP				B	A			B	A		B
Dimensions	Unit	HeightxWidthxDepth	mm	564x774x226	564x984x226	564x1,190x226	564x1,404x251	564x774x226	564x984x226	564x1,190x226	564x1,404x251
Weight	Unit		kg	20.6	26.7	32.3	41.6	20.6	26.7	32.3	41.6
Casing	Colour			White - RAL9010							
Air filter	Type			Polypropylene net							
Fan	Type			Centrifugal							
	Quantity			1	2			1	2		
	Air flow rate	High	m^3/h	344	442	785	1,393	327	431	763	1,362
		Medium	m^3/h	271	341	605	1,022	261	332	593	1,007
		Low	m^3/h	211	241	470	642	205	237	460	636
Total sound power level	High		dBA	50.0	48.0	56.0	67.0	50.0	47.0	58.0	66.0
	Medium		dBA	44.0	42.0	49.0	60.0	44.0	41.0	53.0	58.0
	Low		dBA	40.0	36.0	43.0	49.0	38.0	33.0	48.0	
Sound pressure level	High		dBA	45.0	43.0	51.0	62.0	45.0	42.0	54.0	61.0
	Medium		dBA	39.0	37.0	44.0	55.0	39.0	36.0	48.0	53.0
	Low		dBA	35.0	31.0	38.0	44.0	33.0	28.0	43.0	
Electric heater	Power input (Optional)		kW	1.5	1.6	2.0	-	1.5	1.6	2.0	-
Piping connections	Drain	OD	mm	16							
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230							
Control systems	Wired remote control			FWEC3A / FWECSA							

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Floor standing unit

AC fan motor unit for vertical mounting

› Quick fixing system for wall mounted installation
› Pre-assembled 3-way/4-port on/off valves are available
› Valve packages are insulated, no extra drain pan required
› Valve packages contain balancing valves and sensor pocket
› Fast-on connections for electrical options: no tools needed
› The air filter can easily be removed for cleaning
› Electric heater: no relay up to 2kW capacity
› Electric heater: equipped with two overheat cut-out thermostats

FWV-DAT/DAF

FWEC1,2,3A

FWECSA

ECFWMB6

› More information about FWV-DAT

› More information about FWV-DAF

Indoor unit			FWV-DAT/DAF	01	15	02	25	03	35	04	06	08	10	01	15	02	25	03	35	04	06	08	10
				2-pipe										4-pipe									
Cooling capacity (standard conditions)	Total capacity	High	kW	1.50	1.69	1.91	2.36	2.87	3.45	4.23	4.41	6.53	7.78	1.42	1.64	1.74	2.32	2.81	3.36	4.16	4.57	6.46	7.64
		Medium	kW	1.21	1.48	1.66	1.99	2.34	2.58	3.21	3.59	5.14	6.07	1.11	1.44	1.52	1.96	2.29	2.54	3.17	3.74	5.10	5.99
		Low	kW	1.02	1.24	1.34	1.57	1.73	1.94	2.47	2.95	3.88	4.00	0.97	1.22	1.24	1.55	1.70	1.92	2.44	3.06	3.84	3.96
	Sensible capacity	High	kW	1.16	1.25	1.37	1.82	2.05	2.69	3.05	3.55	4.73	5.72	1.10	1.22	1.41	1.79	2.01	2.61	2.99	3.47	4.67	5.61
		Medium	kW	0.94	1.10	1.20	1.53	1.66	1.99	2.39	2.85	3.70	4.46	0.87	1.07	1.18	1.50	1.62	1.96	2.36	2.80	3.67	4.40
		Low	kW	0.77	0.93	0.98	1.15	1.23	1.41	1.76	2.27	2.75	2.94	0.73	0.91	0.96	1.14	1.21	1.40	1.74	2.23	2.73	2.91
Heating capacity (standard conditions)	High		kW	1.82	1.84	2.15	2.70	2.94	4.05	4.24	4.98	6.49	8.37	1.66	1.76		2.53	2.68	4.20	3.82	4.64	6.97	7.35
	Medium		kW	1.48	1.72	1.81	2.26	2.37	3.13	3.24	4.08	5.17	6.53	1.49	1.56		2.18	2.31	3.47	3.22	4.07	6.02	6.29
	Low		kW	1.21	1.45	1.50	1.74	1.76	2.39	2.47	3.31	3.97	4.39	1.31	1.36		1.78	1.88	2.82	2.73	3.55	5.02	4.85
Power input	High		kW	0.037	0.053		0.057	0.056	0.065	0.098		0.182	0.244	0.037	0.053		0.057	0.056	0.065	0.098		0.182	0.244
	Medium		kW	0.03	0.04				0.05	0.06	0.07	0.13	0.17	0.03	0.04				0.05	0.06	0.07	0.13	0.17
	Low		kW	0.02	0.03	0.02	0.03		0.04		0.05	0.09	0.11	0.02	0.03	0.02	0.03		0.04		0.05	0.09	0.11
Dimensions	Unit	HeightxWidthxDepth	mm	564x774x226			564x984x226		564x1,190x226			564x1,400x251		564x774x226			564x984x226		564x1,190x226			564x1,400x251	
Weight	Unit		kg	19.7		20.6	25.5	26.7	31.0	30.4	32.3	41.4	41.6	19.7		20.6	25.5	26.7	31.0	30.4	32.3	41.4	41.6
Casing	Colour			White - RAL9010																			
Air filter	Type			Polypropylene net																			
Fan	Type			Centrifugal																			
	Quantity			1			2							1			2						
	Air flow rate	High	m^3/h	319	344		442		640	706	785	1,011	1,393	307	330	327	432	431	628	690	763	998	1,362
		Medium	m^3/h	233	271		341		450	497	605	771	1,022	225	261		334	332	444	490	593	765	1,007
		Low	m^3/h	178	211		241		320	361	470	570	642	174	205		238	237	316	356	460	565	636
Total sound power level	High		dBA	47.0	49.0	50.0	48.0		52.0	53.0	56.0	61.0	67.0	45.0	49.0	50.0	48.0	47.0	53.0	56.0	58.0	60.0	66.0
	Medium		dBA	42.0	44.0		43.0	42.0	43.0		49.0	54.0	60.0	39.0	44.0		43.0	41.0	45.0	46.0	53.0	54.0	58.0
	Low		dBA	37.0	38.0	40.0	35.0	36.0	35.0		43.0	47.0	49.0	33.0	40.0	38.0	34.0	33.0	36.0	39.0	48.0	46.0	48.0
Sound pressure level	High		dBA	42.0	44.0	45.0	43.0		47.0	48.0	51.0	56.0	62.0	40.0	44.0	45.0	43.0	42.0	46.0	51.0	54.0	55.0	61.0
	Medium		dBA	37.0	39.0		38.0	37.0	38.0		44.0	49.0	55.0	34.0	39.0		38.0	36.0	38.0	41.0	48.0	49.0	53.0
	Low		dBA	32.0	33.0	35.0	30.0	31.0	30.0		38.0	42.0	44.0	28.0	33.0		29.0	28.0	29.0	32.0	43.0	41.0	43.0
Electric heater	Power input (Optional)		kW	1.0	1.5		1.6		2.0			3.0		1.0	1.5		1.6		2.0			3.0	
Piping connections	Drain	OD	mm	16																			
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230																			
Control systems	Wired remote control			FWEC1A / FWEC2A / FWEC3A / FWECSA / ECFWMB6																			

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Flexi type unit

BLDC fan motor unit for horizontal or vertical mounting. Continuous air flow regulation and fan speed modulation

- For wall or ceiling mounted installation: ideal solution for spaces with no false ceilings
- Up to 70% energy savings with brushless DC motor technology compared to traditional technology
- Instant adjustment to temperature and relative humidity changes
- Low operating sound level
- Highly flexible solutions: multiple sizes, piping topologies and connection valves
- Requires very little installation space

FWR-AT/AF

FWEC3A

FWECSA

› More information about FWR-AT

› More information about FWR-AF

Indoor unit			FWR-AT/AF	02	03	06	08	02	03	06	08
				2-pipe				4-pipe			
Cooling capacity (standard conditions)	Total capacity	High	kW	1.94	2.91	4.48	7.93	1.77	2.86	4.64	7.79
		Medium	kW	1.69	2.37	3.64	6.20	1.55	2.32	3.79	6.12
		Low	kW	1.35	1.75	2.99	4.10	1.25	1.72	3.10	4.06
	Sensible capacity	High	kW	1.49	2.09	3.62	5.87	1.44	2.06	3.54	5.76
		Medium	kW	1.30	1.69	2.90	4.59	1.21	1.65	2.85	4.54
		Low	kW	1.04	1.25	2.31	3.04	0.97	1.23	2.27	3.01
Heating capacity (standard conditions)	High		kW	2.15	2.94	4.88	8.37	1.76	2.68	4.64	7.35
	Medium		kW	1.81	2.37	4.11	6.53	1.56	2.31	4.07	6.29
	Low		kW	1.50	1.76	3.36	4.39	1.36	1.88	3.55	4.85
Power input	High		kW	0.019	0.016	0.033	0.087	0.019	0.016	0.033	0.087
	Medium		kW	0.01		0.02	0.038	0.01		0.02	0.038
	Low		kW	0.01			0.013	0.01			0.013
FCEER				B	A			B	A		B
FCCOP				B	A			B	A		B
Dimensions	Unit	HeightxWidthxDepth	mm	564x774x246	564x984x246	564x1,190x246	564x1,404x271	564x774x246	564x984x246	564x1,190x246	564x1,404x271
Weight	Unit		kg	21.2	27.5	33.6	43.1	21.2	27.5	33.6	43.1
Casing	Colour			White - RAL9010							
Air filter	Type			Polypropylene net							
Fan	Type			Centrifugal							
	Quantity			1	2			1	2		
	Air flow rate	High	m^3/h	344	442	785	1,393	327	431	763	1,362
		Medium	m^3/h	271	341	605	1,022	261	332	593	1,007
		Low	m^3/h	211	241	470	642	205	237	460	636
Total sound power level	High		dBA	50.0	48.0	56.0	67.0	50.0	47.0	58.0	66.0
	Medium		dBA	44.0	42.0	49.0	60.0	44.0	41.0	53.0	58.0
	Low		dBA	40.0	36.0	43.0	49.0	38.0	33.0	48.0	
Sound pressure level	High		dBA	45.0	43.0	51.0	62.0	45.0	42.0	54.0	61.0
	Medium		dBA	39.0	37.0	44.0	55.0	39.0	36.0	48.0	53.0
	Low		dBA	35.0	31.0	38.0	44.0	33.0	28.0	43.0	
Electric heater	Power input (Optional)		kW	1.5	1.6	2.0	-	1.5	1.6	2.0	-
Piping connections	Drain	OD	mm	16							
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230							
Control systems	Wired remote control			FWEC3A / FWECSA							

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Flexi type unit

AC fan motor unit for horizontal or vertical mounting

› Quick fixing system for wall or ceiling mounted installation
› Pre-assembled 3-way/4-port on/off valves are available
› Valve packages are insulated, no extra drain pan required
› Valve packages contain balancing valves and sensor pocket
› Fast-on connections for electrical options: no tools needed
› The air filter can easily be removed for cleaning
› Electric heater: no relay up to 2kW capacity
› Electric heater: equipped with two overheat cut-out thermostats

FWL-DAT/DAF

FWEC1,2,3A

FWECSA

ECFWMB6

› More information about FWL-DAT

› More information about FWL-DAF

Indoor unit			FWL-DAT/DAF	01	15	02	25	03	35	04	06	08	10	01	15	02	25	03	35	04	06	08	10
				2-pipe										4-pipe									
Cooling capacity (standard conditions)	Total capacity	High	kW	1.50	1.69	1.91	2.36	2.87	3.45	4.23	4.41	6.53	7.78	1.42	1.64	1.74	2.32	2.81	3.36	4.16	4.57	6.46	7.64
		Medium	kW	1.21	1.48	1.66	1.99	2.34	2.58	3.21	3.59	5.14	6.07	1.11	1.44	1.52	1.96	2.29	2.54	3.17	3.74	5.10	5.99
		Low	kW	1.02	1.24	1.34	1.57	1.73	1.94	2.47	2.95	3.88	4.00	0.97	1.22	1.24	1.55	1.70	1.92	2.44	3.06	3.84	3.96
	Sensible capacity	High	kW	1.16	1.25	1.37	1.82	2.05	2.69	3.05	3.55	4.73	5.72	1.10	1.22	1.41	1.79	2.01	2.61	2.99	3.47	4.67	5.61
		Medium	kW	0.94	1.10	1.20	1.53	1.66	1.99	2.39	2.85	3.70	4.46	0.87	1.07	1.18	1.50	1.62	1.96	2.36	2.80	3.67	4.40
		Low	kW	0.77	0.93	0.98	1.15	1.23	1.41	1.76	2.27	2.75	2.94	0.73	0.91	0.96	1.14	1.21	1.40	1.74	2.23	2.73	2.91
Heating capacity (standard conditions)	High		kW	1.82	1.84	2.15	2.70	2.94	4.05	4.24	4.98	6.49	8.37	1.66	1.76		2.53	2.68	4.20	3.82	4.64	6.97	7.35
	Medium		kW	1.48	1.72	1.81	2.26	2.37	3.13	3.24	4.08	5.17	6.53	1.49	1.56		2.18	2.31	3.47	3.22	4.07	6.02	6.29
	Low		kW	1.21	1.45	1.50	1.74	1.76	2.39	2.47	3.31	3.97	4.39	1.31	1.36		1.78	1.88	2.82	2.73	3.55	5.02	4.85
Power input	High		kW	0.037	0.053		0.057	0.056	0.065	0.098		0.182	0.244	0.037	0.053		0.057	0.056	0.065	0.098		0.182	0.244
	Medium		kW	0.03	0.04				0.05	0.06	0.07	0.13	0.17	0.03	0.04				0.05	0.06	0.07	0.13	0.17
	Low		kW	0.02	0.03	0.02	0.03		0.04		0.05	0.09	0.11	0.02	0.03	0.02	0.03		0.04		0.05	0.09	0.11
Dimensions	Unit	HeightxWidthxDepth	mm	564x774x246			564x984x246		564x1,190x246			564x1,400x271		564x774x246			564x984x246		564x1,190x246			564x1,400x271	
Weight	Unit		kg	20.6		21.2	26.5	27.5	32.5	33.5	33.6	43.1		20.6		21.2	26.5	27.5	32.5	33.5	33.6	43.1	
Casing	Colour			White - RAL9010																			
Air filter	Type			Polypropylene net																			
Fan	Type			Centrifugal																			
	Quantity			1			2							1			2						
	Air flow rate	High	m^3/h	319	344		442		640	706	785	1,011	1,393	307	330	327	432	431	628	690	763	998	1,362
		Medium	m^3/h	233	271		341		450	497	605	771	1,022	225	261		334	332	444	490	593	765	1,007
		Low	m^3/h	178	211		241		320	361	470	570	642	174	205		238	237	316	356	460	565	636
Total sound power level	High		dBA	47.0	49.0	50.0	48.0		52.0	53.0	56.0	61.0	67.0	45.0	49.0	50.0	48.0	47.0	53.0	56.0	58.0	60.0	66.0
	Medium		dBA	42.0	44.0		43.0	42.0	43.0		49.0	54.0	60.0	39.0	44.0		43.0	41.0	45.0	46.0	53.0	54.0	58.0
	Low		dBA	37.0	38.0	40.0	35.0	36.0	35.0		43.0	47.0	49.0	33.0	40.0	38.0	34.0	33.0	36.0	39.0	48.0	46.0	48.0
Sound pressure level	High		dBA	42.0	44.0	45.0	43.0		47.0	48.0	51.0	56.0	62.0	40.0	44.0	45.0	43.0	42.0	46.0	51.0	54.0	55.0	61.0
	Medium		dBA	37.0	39.0		38.0	37.0	38.0		44.0	49.0	55.0	34.0	39.0		38.0	36 .0	38.0	41.0	48.0	49.0	53.0
	Low		dBA	32.0	33.0	35.0	30.0	31.0	30.0		38.0	42.0	44.0	28.0	33.0		29.0	28.0	29.0	32.0	43.0	41.0	43.0
Electric heater	Power input (Optional)		kW	1.0	1.5		1.6		2.0			3.0		1.0	1.5		1.6		2.0			3.0	
Piping connections	Drain	OD	mm	16																			
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230																			
Control systems	Wired remote control			FWEC1A / FWEC2A / FWEC3A / FWECSA / ECFWMB6																			

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Concealed flexi type unit

BLDC fan motor unit for horizontal or vertical concealed mounting. Continuous air flow regulation and fan speed modulation

› Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
› Up to 70% energy savings with brushless DC motor technology compared to traditional technology
› Instant adjustment to temperature and relative humidity changes
› Low operating sound level
› Highly flexible solutions: multiple sizes, piping topologies and connection valves
› Available static pressure up to 50Pa at maximum speed

FWS-AT/AF

FWEC3A

FWECSA

› More information about FWS-AT

› More information about FWS-AF

Indoor unit			FWS-AT/AF	02	03	06	08	02	03	06	08
				2-pipe				4-pipe			
Cooling capacity (standard conditions)	Total capacity	High	kW	1.94	2.91	4.48	7.93	1.77	2.86	4.64	7.79
		Medium	kW	1.69	2.37	3.64	6.2	1.55	2.32	3.79	6.12
		Low	kW	1.35	1.75	2.99	4.1	1.25	1.72	3.10	4.06
	Sensible capacity	High	kW	1.49	2.09	3.62	5.87	1.44	2.06	3.54	5.76
		Medium	kW	1.30	1.69	2.90	4.59	1.21	1.65	2.85	4.54
		Low	kW	1.04	1.25	2.31	3.04	0.97	1.23	2.27	3.01
Heating capacity (standard conditions)	High		kW	2.15	2.94	4.88	8.37	1.76	2.68	4.64	7.35
	Medium		kW	1.81	2.37	4.11	6.53	1.56	2.31	4.07	6.29
	Low		kW	1.50	1.76	3.36	4.39	1.36	1.88	3.55	4.85
Power input	High		kW	0.019	0.016	0.033	0.087	0.019	0.016	0.033	0.087
	Medium		kW	0.01		0.02	0.038	0.01		0.02	0.038
	Low		kW	0.01			0.013	0.01			0.013
FCEER				B	A			B	A		B
FCCOP				B	A			B	A		B
Dimensions	Unit	HeightxWidthxDepth	mm	535x584x224	535x794x224	535x1,000x224	535x1,214x249	535x584x224	535x794x224	535x1,000x224	535x1,214x249
Weight	Unit		kg	16.9	22.1	26.6	35.4	16.9	22.1	26.6	35.4
Air filter	Type			Polypropylene net							
Fan	Type			Centrifugal							
	Quantity			1	2			1	2		
	Air flow rate	High	m^3/h	344	442	785	1,393	327	431	763	1,362
		Medium	m^3/h	271	341	605	1,022	261	332	593	1,007
		Low	m^3/h	211	241	470	642	205	237	460	636
Total sound power level	High		dBA	50.0	48.0	56.0	67.0	50.0	47.0	58.0	66.0
	Medium		dBA	44.0	42.0	49.0	60.0	44.0	41.0	53.0	58.0
	Low		dBA	40.0	36.0	43.0	49.0	38.0	33.0	48.0	
Sound pressure level	High		dBA	45.0	43.0	51.0	62.0	45.0	42.0	54.0	61.0
	Medium		dBA	39.0	37.0	44.0	55.0	39.0	36.0	48.0	53.0
	Low		dBA	35.0	31.0	38.0	44.0	33.0	28.0	43.0	
Electric heater	Power input (Optional)		kW	1.5	1.6	2.0	-	1.5	1.6	2.0	-
Piping connections	Drain	OD	mm	16							
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230							
Control systems	Wired remote control			FWEC3A / FWECSA							

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Concealed flexi type unit

AC fan motor unit for horizontal or vertical concealed mounting

› Quick fixing system for wall or ceiling mounted installation
› Pre-assembled 3-way/4-port on/off valves are available
› Valve packages are insulated, no extra drain pan required
› Valve packages contain balancing valves and sensor pocket
› Fast-on connections for electrical options: no tools needed
› The air filter can easily be removed for cleaning
› Electric heater: no relay up to 2kW capacity
› Electric heater: equipped with two overheat cut-out thermostats
› Available static pressure up to 50Pa at maximum speed

FWM-DAT/DAF

FWEC1,2,3A

FWECSA

› More information about FWM-DAT

› More information about FWM-DAF

Indoor unit			FWM-DAT/DAF	01	15	02	25	03	35	04	06	08	10	01	15	02	25	03	35	04	06	08	10
				2-pipe										4-pipe									
Cooling capacity (standard conditions)	Total capacity	High	kW	1.50	1.69	1.91	2.36	2.87	3.45	4.23	4.41	6.53	7.78	1.42	1.64	1.74	2.32	2.81	3.36	4.16	4.57	6.46	7.64
		Medium	kW	1.21	1.48	1.66	1.99	2.34	2.58	3.21	3.59	5.14	6.07	1.11	1.44	1.52	1.96	2.29	2.54	3.17	3.74	5.10	5.99
		Low	kW	1.02	1.24	1.34	1.57	1.73	1.94	2.47	2.95	3.88	4.00	0.97	1.22	1.24	1.55	1.70	1.92	2.44	3.06	3.84	3.96
	Sensible capacity	High	kW	1.16	1.25	1.37	1.82	2.05	2.69	3.05	3.55	4.73	5.72	1.10	1.22	1.41	1.79	2.01	2.61	2.99	3.47	4.67	5.61
		Medium	kW	0.94	1.10	1.20	1.53	1.66	1.99	2.39	2.85	3.70	4.46	0.87	1.07	1.18	1.50	1.62	1.96	2.36	2.80	3.67	4.40
		Low	kW	0.77	0.93	0.98	1.15	1.23	1.41	1.76	2.27	2.75	2.94	0.73	0.91	0.96	1.14	1.21	1.40	1.74	2.23	2.73	2.91
Heating capacity (standard conditions)	High		kW	1.82	1.84	2.15	2.70	2.94	4.05	4.24	4.98	6.49	8.37	1.66	1.76		2.53	2.68	4.20	3.82	4.64	6.97	7.35
	Medium		kW	1.48	1.72	1.81	2.26	2.37	3.13	3.24	4.08	5.17	6.53	1.49	1.56		2.18	2.31	3.47	3.22	4.07	6.02	6.29
	Low		kW	1.21	1.45	1.50	1.74	1.76	2.39	2.47	3.31	3.97	4.39	1.31	1.36		1.78	1.88	2.82	2.73	3.55	5.02	4.85
Power input	High		kW	0.037	0.053		0.057	0.056	0.065	0.098		0.182	0.244	0.037	0.053		0.057	0.056	0.065	0.098		0.182	0.244
	Medium		kW	0.03	0.04				0.05	0.06	0.07	0.13	0.17	0.03	0.04				0.05	0.06	0.07	0.13	0.17
	Low		kW	0.02	0.03	0.02	0.03		0.04		0.05	0.09	0.11	0.02	0.03	0.02	0.03		0.04		0.05	0.09	0.11
Dimensions	Unit	HeightxWidthxDepth	mm	535x584x224			535x794x224		535x1,000x224			535x1,210x249		535x584x224			535x794x224		535x1,000x224			535x1,210x249	
Weight	Unit		kg	16.5		16.9	21.4	22.1	26.3	26.4	26.6	35.4		16.5		16.9	21.4	22.1	26.3	26.4	26.6	35.4	
Air filter	Type			Polypropylene net																			
Fan	Type			Centrifugal																			
	Quantity			1			2							1			2						
	Air flow rate	High	m^3/h	319	344		442		640	706	785	1,011	1,393	307	330	327	432	431	628	690	763	998	1,362
		Medium	m^3/h	233	271		341		450	497	605	771	1,022	225	261		334	332	444	490	593	765	1,007
		Low	m^3/h	178	211		241		320	361	470	570	642	174	205		238	237	316	356	460	565	636
Total sound power level	High		dBA	47.0	49.0	50.0	48.0		52.0	53.0	56.0	61.0	67.0	45.0	49.0	50.0	48.0	47.0	53.0	56.0	58.0	60.0	66.0
	Medium		dBA	42.0	44.0		43.0	42.0	43.0		49.0	54.0	60.0	39.0	44.0		43.0	41.0	45.0	46.0	53.0	54.0	58.0
	Low		dBA	37.0	38.0	40.0	35.0	36.0	35.0		43.0	47.0	49.0	33.0	40.0	38.0	34.0	33.0	36.0	39.0	48.0	46.0	48.0
Sound pressure level	High		dBA	42.0	44.0	45.0	43.0		47.0	48.0	51.0	56.0	62.0	40.0	44.0	45.0	43.0	42.0	46.0	51.0	54.0	55.0	61.0
	Medium		dBA	37.0	39.0		38.0	37.0	38.0		44.0	49.0	55.0	34.0	39.0		38.0	36.0	38.0	41.0	48.0	49.0	53.0
	Low		dBA	32.0	33.0	35.0	30.0	31.0	30.0		38.0	42.0	44.0	28.0	33.0		29.0	28.0	29.0	32.0	43.0	41.0	43.0
Electric heater	Power input (Optional)		kW	1.0	1.5		1.6		2.0			3.0		1.0	1.5		1.6		2.0			3.0	
Piping connections	Drain	OD	mm	16																			
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230																			
Control systems	Wired remote control			FWEC1A / FWEC2A / FWEC3A / FWECSA																			

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Concealed ceiling unit with low ESP

AC fan motor unit for horizontal concealed mounting

- Easy installation and maintenance
- 4-speed fan motor
- High power air flow
- Wired electronic controllers range
- Available static pressure up to 50Pa at maximum speed
- Wide operating range
- Standard left and right side water connection
- Extended drain pan as standard
- Factory mounted valve (both left and right side)
- Nylon filter G2 class
- Polyethylene insulation

FWE-CT/CF

FWEC1,2,3A

FWECSA

› More information about FWE-CT

› More information about FWE-CF

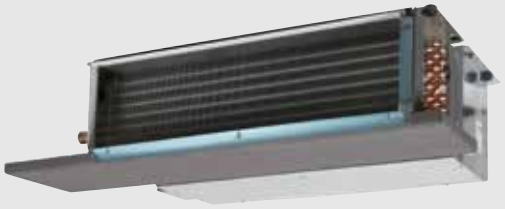
Indoor unit			FWE-CT/CF	02	03	04	06	07	08	10	02	03	04	06	07	08	10
				2-pipe							4-pipe						
Cooling capacity (standard conditions)	Total capacity	Super high	kW	2.17	3.22	4.34	6.06	6.83	7.84	9.96	2.10	3.16	3.98	6.05	6.78	7.79	9.91
		High	kW	1.81	2.78	3.49	5.32	5.68	6.92	8.64	1.76	2.69	3.22	5.20	5.61	6.79	8.61
		Medium	kW	1.60	2.45	2.96	4.56	4.94	6.07	7.51	1.56	2.36	2.70	4.47	4.91	5.98	7.49
		Low	kW	0.90	1.40	1.80	2.80	3.10	3.90	4.90	0.85	1.40	1.63	2.72	3.10	3.88	4.88
	Sensible capacity	Super high	kW	1.61	2.44	3.27	4.55	4.83	6.02	7.58	1.55	2.37	3.19	4.49	5.16	5.91	7.45
		High	kW	1.33	2.08	2.58	3.94	4.30	5.25	6.48	1.28	1.99	2.53	3.81	4.20	5.09	6.39
		Medium	kW	1.16	1.82	2.16	3.34	3.71	4.56	5.57	1.13	1.73	2.10	3.23	3.64	4.44	5.49
		Low	kW	0.70	1.20	1.40	2.10	2.50	3.10	3.70	0.66	1.18	1.35	2.02	2.47	3.05	3.65
Heating capacity (standard conditions)		Super high	kW	2.38	3.66	4.77	6.48	7.96	9.00	11.08	2.02	3.11	4.01	5.43	6.69	7.50	9.15
		High	kW	1.96	3.13	3.76	5.61	6.53	7.84	9.43	1.71	2.69	3.31	4.73	5.65	6.62	8.06
		Medium	kW	1.72	2.74	2.81	4.73	5.62	6.78	8.08	1.54	2.41	2.83	4.13	5.03	5.91	7.10
		Low	kW	1.02	1.70	1.93	2.85	3.75	4.49	5.30	0.90	1.51	1.79	2.53	3.45	4.04	4.77
Power input	Super high		kW	0.046	0.069	0.083	0.119	0.163	0.181	0.230	0.046	0.069	0.083	0.119	0.163	0.181	0.230
	High		kW	0.039	0.054	0.059	0.093	0.128	0.145	0.180	0.039	0.054	0.059	0.093	0.128	0.145	0.180
	Medium		kW	0.03	0.05		0.07	0.11	0.12	0.15	0.03	0.05		0.07	0.11	0.12	0.15
	Low		kW	0.03	0.04		0.06	0.09	0.10	0.12	0.03	0.04		0.06	0.09	0.10	0.12
Dimensions	Unit	HeightxWidthxDepth	mm	253x590 x705	253x590 x875	253x590 x1,010	253x590 x1,210	253x590 x1,460	253x590 x1,560	253x590 x1,820	253x590 x705	253x590 x875	253x590 x1,010	253x590 x1,210	253x590 x1,460	253x590 x1,560	253x590 x1,820
Weight	Unit		kg	17.0	20.2	23.7	28.4	36.7	39.1	45.5	18.1	21.6	25.3	30.1	39.7	41.4	48.9
Casing	Colour			Metal													
Air filter	Type			Aluminium Frame PP Filter Net G2 Class													
Fan	Type			Centrifugal (Blade: Forward - curve)													
	Quantity			1		2		3		4	1		2		3		4
	Air flow rate	Super high	m^3/h	430	638	910	1,195	1,559	1,753	2,177	416	626	835	1,193	1,548	1,742	2,166
		High	m^3/h	311	518	619	926	1,188	1,413	1,735	302	501	571	905	1,173	1,386	1,729
		Medium	m^3/h	238	385	413	630	851	1,016	1,202	232	371	377	618	846	1,001	1,199
		Low	m^3/h	150	256	284	426	569	688	808	142	256	257	414	569	684	804
Total sound power level	Super high		dBA	51.0	61.0	58.0	62.0		64.0	65.0	51.0	61.0	58.0	62.0		64.0	65.0
	High		dBA	49.0	56.0	50.0	55.0	57.0	58.0	60.0	49.0	56.0	50.0	55.0	57	58.0	60.0
	Medium		dBA	37.0	49.0	40.0	48.0	47.0	50.0		37.0	49.0	40.0	48.0	47	50.0	
	Low		dBA	31.0	38.0	32.0	39.0	38.0	41.0	40.0	31.0	38.0	32.0	39.0	38.0	41.0	40.0
Sound pressure level	Super high		dBA	41.0	51.0	48.0	52.0		54.0	55.0	41.0	51.0	48.0	52.0		54.0	55.0
	High		dBA	39.0	46.0	38.0	45.0	47.0	48.0	49.0	39.0	46.0	38.0	45.0	47.0	48.0	49.0
	Medium		dBA	26.0	39.0	28.0	36.0	37.0	40.0	39.0	26.0	39.0	28.0	36.0	37.0	40.0	39.0
	Low		dBA	21.0	28.0	22.0	29.0	27.0	31.0	29.0	21.0	28.0	22.0	29.0	27.0	31.0	29.0
Piping connections	Drain	OD	mm	R 3/4"													
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-240													
Control systems	Wired remote control			FWEC1A / FWEC2A / FWEC3A / FWECSA													

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Concealed ceiling unit with medium ESP

BLDC fan motor unit for horizontal concealed mounting. Continuous air flow regulation and fan speed modulation

- Blends unobtrusively with any interior décor: only the suction and discharge grills are visible
- Up to 50% energy savings with brushless DC motor technology compared to traditional technology
- Instant adjustment to temperature and relative humidity changes
- Low operating sound level
- Highly flexible solutions: multiple sizes, piping topologies and connection valves
- 7-speed electrical motors (with thermal protection on windings).
- All 7 speeds pre-wired in the factory in the terminal block of the switch box
- Available static pressure up to 80Pa at maximum speed



FWP-AT

FWEC3A

FWECSA

› More information about FWP-AT

Indoor unit				FWP-AT	02	03	04	05	06	07
					2-pipe					
Cooling capacity (1) (standard conditions)	Total capacity	High	kW		2.38	2.88	3.19	4.58	4.85	5.80
		Low	kW		1.35	1.51	1.69	2.23	2.58	2.86
	Sensible capacity	High	kW		1.71	1.96	2.13	3.23	3.44	3.93
		Low	kW		0.95	1.03	1.11	1.62	1.79	1.92
Heating capacity (1) (standard conditions)		High	kW		2.54	2.80	3.00	4.71	5.15	5.56
		Low	kW		1.40	1.48	1.53	2.46	2.59	2.74
Power input (1)	High		kW		0.046			0.076		
	Low		kW		0.01			0.02		
FCEER					A					
FCCOP					A					
Dimensions	Unit	HeightxWidthxDepth	mm		551x1,040x239			551x1,390x239		
Weight	Unit		kg		26.0	27.0	29.0	35.0	37.0	39.0
Air filter	Type				Acrylic fiber - Filtering class G2 (G3 on request)					
Fan	Type				Centrifugal					
	Quantity				1			2		
	Air flow rate (1)	High	m^3/h		371			722		
		Low	m^3/h		184			283	331	
Total sound power level	High		dBA		58.0			60.0		
	Low		dBA		36.0		38.0	39.0		
Sound pressure level	High		dBA		53.0			55.0		
	Low		dBA		31.0		33.0	34.0		
Electric heater	Power input (Optional)		kW		2.0			2.5		
Piping connections	Drain	OD	mm		17					
Power supply	Phase/Frequency		Hz		1~/50					
Control systems	Wired remote control				FWEC3A / FWECSA					

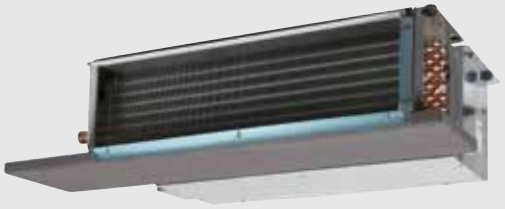
For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

(1) Only the values for minimum and maximum speeds are indicated

Concealed ceiling unit with medium ESP

AC fan motor unit for horizontal concealed mounting

- Compact dimensions, can easily be mounted in a narrow ceiling void (unit height: 240mm)
- 3, 4 or 6 stage row cooling coil
- Drain pan to collect the condensate from: heat exchanger and regulating valves
- 7-speed electrical motors (with thermal protection on windings)
- All 7 speeds pre-wired in the factory in the terminal block of the switch box
- The air filter can easily be removed for cleaning
- Available static pressure up to 80Pa at maximum speed



FWB-BT

FWEC1,2,3A

FWECSA

› More information about FWB-BT

Indoor unit				FWB-BT	02	03	04	05	06	07	08	09	10
					2-pipe								
Cooling capacity (1) (standard conditions)	Total capacity	High	kW		2.32	2.82	3.13	4.47	4.74	5.69	5.70	6.48	7.65
		Low	kW		1.33	1.49	1.67	2.17	2.52	2.80	3.83	4.26	4.94
	Sensible capacity	High	kW		1.65	1.90	2.07	3.12	3.33	3.82	3.90	4.39	5.02
		Low	kW		0.93	1.01	1.09	1.56	1.73	1.86	2.67	2.92	3.25
Heating capacity (1) (standard conditions)		High	kW		2.54	2.80	3.00	4.70	5.15	5.56	5.95	6.57	7.18
		Low	kW		1.39	1.48	1.53	2.14	2.81	2.71	4.11	4.42	4.69
Power input (1)	High		kW		0.106			0.192			0.294		
	Low		kW		0.03			0.08			0.16		
Dimensions	Unit	HeightxWidthxDepth	mm		551x1,040x239			551x1,390x239			551x1,740x239		
Weight	Unit		kg		26.0	27.0	29.0	35.0	37.0	39.0	47.0	49.0	53.0
Air filter	Type				Acrylic fiber - Filtering class G2 (G3 on request)								
Fan	Type				Centrifugal								
	Quantity				1			2			3		
	Air flow rate (1)	High	m^3/h		371			722			905		
		Low	m^3/h		184			283	331		572		
Total sound power level	High		dBA		58.0			60.0			69.0		
	Low		dBA		36.0		38.0	39.0			53.0		
Sound pressure level	High		dBA		53.0			55.0			64.0		
	Low		dBA		31.0		33.0	34.0			48.0		
Electric heater	Power input (Optional)		kW		2.0			2.5			3.0		
Piping connections	Drain	OD	mm		17								
Power supply	Phase/Frequency		Hz		1~/50								
Control systems	Wired remote control				FWEC1A / FWEC2A / FWEC3A / FWECSA								

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

(1) Only the values for minimum and maximum speeds are indicated

Concealed ceiling unit with high ESP

BLDC fan motor unit for horizontal or vertical mounting. Continuous air flow regulation and fan speed modulation

- Up to 70% energy savings with brushless DC motor technology compared to traditional technology
- Instant adjustment to temperature and relative humidity changes
- Low operating sound level
- Highly flexible solutions: multiple sizes, piping topologies and connection valves
- The air filter can easily be removed for cleaning
- Straight duct connector mounted to discharge side
- Available static pressure up to 120Pa at maximum speed

FWN-AT/AF

FWEC3A

FWECSA

› More information about FWN-AT

› More information about FWN-AF

Indoor unit			FWN-AT/AF	04	05	06	07	08	10	04	05	06	07	08	10
				2-pipe						4-pipe					
Cooling capacity (standard conditions)	Total capacity	High	kW	3.80	4.65	6.01	6.65	7.57	8.49	3.76	4.61	5.91	6.55	7.46	8.35
		Medium	kW	3.47	4.20	5.65	6.25	6.84	7.62	3.44	4.17	5.58	6.17	6.75	7.52
		Low	kW	2.83	3.38	5.22	5.78	6.20	6.84	2.82	3.36	5.17	5.71	6.14	6.77
	Sensible capacity	High	kW	2.98	3.56	4.47	5.04	6.29	6.83	2.95	3.53	4.39	4.97	6.19	6.71
		Medium	kW	2.70	3.19	4.20	4.73	5.60	6.07	2.68	3.17	4.15	4.66	5.52	5.98
		Low	kW	2.19	2.54	3.90	4.35	5.01	5.40	2.18	2.52	3.84	4.30	4.96	5.34
Heating capacity (standard conditions)		High	kW	4.05	4.83	6.42	7.26	7.88	8.93	3.91	3.89	5.72	5.65	7.99	7.94
		Medium	kW	3.69	4.36	6.03	6.80	7.11	8.04	3.68	3.66	5.51	5.45	7.47	7.44
		Low	kW	3.04	3.55	5.59	6.29	6.47	7.28	3.23		5.25	5.21	7.02	6.99
Power input	High		kW	0.112		0.152		0.248		0.112		0.152		0.248	
	Medium		kW	0.07		0.13		0.17		0.73		0.13		0.17	
	Low		kW	0.04		0.10		0.12		0.45	0.40	0.10		0.12	
FCEER				C	B	C				B		C			
FCCOP				B	A	B		C		B		C			
Dimensions	Unit	HeightxWidthxDepth	mm	559x754x280		559x964x280		559x1,170x280		559x754x280		559x964x280		559x1,170x280	
Weight	Unit		kg	32.5	33.3	40.6	41.7	47.3	48.7	34.7	35.5	43.2	44.4	50.3	51.7
Air filter	Type			Acrylic - Filtering class EU2											
Fan	Type			Centrifugal											
	Quantity			1		2				1		2			
	Air flow rate	High	m^3/h	802	791	1,238	1,203	1,606	1,581	793	783	1,211	1,182	1,576	1,550
		Medium	m^3/h	700	692	1,134	1,107	1,384	1,371	694	686	1,115	1,088	1,362	1,349
		Low	m^3/h	534	532	1,019	1,000	1,207	1,198	531	529	1,005	985	1,192	1,184
Total sound power level	High		dBA	66.0		69.0		72.0		66.0		69.0		72.0	
	Medium		dBA	61.0		63.0		67.0		61.0		63.0		67.0	
	Low		dBA	54.0		59.0	61.0	62.0		54.0		59.0	61.0	62.0	
Sound pressure level	High		dBA	61.0		64.0		67.0		61.0		64.0		67.0	
	Medium		dBA	56.0		58.0		62.0		56.0		58.0		62.0	
	Low		dBA	49.0		54.0	56.0	57.0		49.0		54.0	56.0	57.0	
Electric heater	Power input (Optional)		kW	2.0		6.0		9.0		2.0		6.0		9.0	
Piping connections	Drain	OD	mm	17											
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230											
Control systems	Wired remote control			FWEC3A / FWECSA											

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Concealed ceiling unit with high ESP

AC fan motor unit for horizontal concealed mounting

› Quick fixing system for wall or ceiling mounted installation
› Straight duct connector mounted to discharge side
› The air filter can easily be removed for cleaning
› Available static pressure up to 180Pa at maximum speed

FWD-AT/AF

FWEC1,2,3A

FWECSA

› More information about FWD-AT

› More information about FWD-AF

Indoor unit			FWD-AT/AF	04	06	08	10	12	16	18	04	06	08	10	12	16	18
				2-pipe							4-pipe						
Cooling capacity (standard conditions)	Total capacity	High	kW	3.65	5.71	7.33	8.25	11.86	15.92	17.74	3.62	5.60	7.20	8.10	11.66	15.84	17.66
		Medium	kW	3.36	5.39	6.63	7.41	10.12	13.83	15.36	3.33	5.32	6.54	7.31	10.00	13.77	15.29
		Low	kW	2.74	4.99	6.03	6.68	8.42	11.63	12.92	2.73	4.92	5.97	6.61	8.33	11.59	12.87
	Sensible capacity	High	kW	2.83	4.16	6.04	6.58	9.22	12.21	13.49	2.80	4.08	5.94	6.46	9.06	12.14	13.41
		Medium	kW	2.59	3.94	5.39	5.86	7.75	10.43	11.40	2.57	3.89	5.31	5.77	7.66	10.38	11.34
		Low	kW	2.10	3.66	4.84	5.23	6.35	8.61	9.37	2.09	3.60	4.79	5.17	6.29	8.58	9.34
Heating capacity (standard conditions)		High	kW	4.05	6.42	7.88	8.93	12.72	17.29	19.05	3.91	5.72	7.99	7.94	14.43	19.30	19.20
		Medium	kW	3.69	6.03	7.11	8.04	10.84	15.05	16.40	3.68	5.51	7.47	7.44	12.63	17.17	17.03
		Low	kW	3.04	5.59	6.47	7.28	9.06	12.68	13.73	3.23	5.25	7.02	6.99	10.86	14.88	14.79
Power input	High		kW	0.265	0.460	0.505		0.750	1.300		0.265	0.460	0.505		0.750	1.300	
	Medium		kW	0.19	0.39	0.38		0.54	1.09		0.19	0.39	0.38		0.54	1.09	
	Low		kW	0.14	0.35	0.29		0.37	0.87		0.14	0.35	0.29		0.37	0.87	
Dimensions	Unit	HeightxWidthxDepth	mm	559x754x 280	559x964x 280	559x1,170x280		718x1,170x 353	718x1,380x353		559x754x 280	559x964x 280	559x1,170x280		718x1,170x 353	718x1,380x353	
Weight	Unit		kg	32.5	40.6	47.3	48.7	65.3	77.0	79.5	34.7	43.2	50.3	51.7	70.9	83.4	85.9
Air filter	Type			Acrylic fiber - Filtering class G2 (G4 on request)													
Fan	Type			Centrifugal													
	Quantity			1	2						1	2					
	Air flow rate	High	m^3/h	802	1,241	1,609	1,584	2,380	3,206	3,175	794	1,212	1,573	1,550	2,328	3,186	3,155
		Medium	m^3/h	700	1,134	1,384	1,371	1,898	2,641	2,604	694	1,115	1,362	1,349	1,871	2,626	2,590
		Low	m^3/h	534	1,021	1,208	1,200	1,485	2,092	2,073	532	1,004	1,194	1,186	1,466	2,084	2,065
Total sound power level	High		dBA	66.0	69.0	72.0		74.0	78.0		66.0	69.0	72.0		74.0	78.0	
	Medium		dBA	61.0	63.0	67.0			73.0		61.0	64.0	67.0			73.0	
	Low		dBA	54.0	59.0	62.0		60.0	69.0		54.0	61.0	62.0		60.0	69.0	
Sound pressure level	High		dBA	61.0	64.0	67.0		69.0	73.0		61.0	64.0	67.0		69.0	73.0	
	Medium		dBA	56.0	58.0	62.0			68.0		56.0	59.0	62.0			68.0	
	Low		dBA	49.0	54.0	57.0		55.0	64.0		49.0	56.0	57.0		55.0	64.0	
Electric heater	Power input (Optional)		kW	2.0	6.0	9.0			12.0		2.0	6.0	9.0			12.0	
Piping connections	Drain	OD	mm	17													
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230													
Control systems	Wired remote control			FWEC1A / FWEC2A / FWEC3A / FWECSA													

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue
(1) Only the values for minimum and maximum speeds are indicated

Wall mounted unit

AC fan motor unit for wall mounting

› High aesthetic cabinet design
› Optimum air distribution
› Easy to install
› Wireless remote control up to 9 m distance
› 3-speed fan motor
› Wide operating range
› Low operating sound level thanks to tangential fan
› Insulated with self-extinguishing class 1 heat insulation
› Removable washable air filter (self-extinguishing class 1)

FWT-CT

MERCA

SRC-HPA

WRC-HPC

› More information about FWF-CT

Indoor unit			FWT-CT	02	03	04	05	06
						2-pipe		
Cooling capacity (standard conditions)	Total capacity	High	kW	2.40	2.67	3.27	4.49	5.21
		Medium	kW	2.20	2.23	2.79	4.02	4.32
		Low	kW	1.94	2.02	2.52	3.76	4.04
	Sensible capacity	High	kW	1.82	1.99	2.60	3.38	4.03
		Medium	kW	1.73	1.69	2.21	3.00	3.52
		Low	kW	1.50	1.49	1.91	2.77	3.22
Heating capacity (standard conditions)		High	kW	2.71	2.96	3.71	5.07	6.23
		Medium	kW	2.41	2.62	3.29	4.51	5.38
		Low	kW	2.06	2.25	2.75	4.03	4.83
Power input	High		kW	0.031	0.032	0.042	0.053	0.072
	Medium		kW	0.03		0.04	0.05	0.07
	Low		kW	0.03			0.04	0.06
FCEER				D			C	D
FCCOP				C				
Dimensions	Unit	HeightxWidthxDepth	mm	288x800x206			310x1,070x224	
Weight	Unit		kg	9.00			14.0	
Casing	Colour			White				
Air filter	Type			Washable Saranet				
Fan	Type			Cross flow fan				
	Quantity			1				
	Air flow rate	High	m^3/h	442	476	629	866	1,053
		Medium	m^3/h	391	425	544	765	883
		Low	m^3/h	340	374	442	663	782
Total sound power level	High		dBA	45.0	48.0	55.0		59.0
	Medium		dBA	41.0	44.0	50.0	51.0	54.0
	Low		dBA	36.0	39.0	45.0	47.0	51.0
Sound pressure level	High		dBA	34.0	35.0	42.0		46.0
	Medium		dBA	29.0	30.0	39.0	38.0	42.0
	Low		dBA	25.0		32.0	34.0	39.0
Piping connections	Drain	OD	mm	19				
Power supply	Phase/Frequency/Voltage		Hz/V	1N~/50/220-240				
Control systems	Infrared remote control			WRC-HPC				
	Wired remote control			MERCA / SRC-HPA				

For standard conditions refer to the Measuring Conditions table, at the end of this catalogue

Options & accessories - Fan coil units

	INDOOR UNITS	FWG-AT/AF	FWC-BT/BF	FWF-BT/BF	FWF-CT	FWZ-AT/AF	FWV-DAT/DAF	FWR-AT/AF
Panels	Decoration panel 600x600 (2-pipe)			BYFQ60B3	DCP600TC [1]			
	Decoration panel 900x900 (2-pipe)	DCP900BTA [1]	BYCQ140C					
	Decoration panel 900x900 (4-pipe)	DCP900BFA [1]	BYCQ140C					
	Panel spacer for reducing required installation height		KDBQ44B60					
	Sealing member of air discharge outlet		KDBHQ55C140	KDBH44BA60				
	Rear panel					ERPV02A6 (2 class) ERPV03A6 (3 class) ERPV06A6 (6 class) ERPV10A6 (8 class)	ERPV02A6 (1, 15 & 2 class) ERPV03A6 (25 & 3 class) ERPV06A6 (35, 4 & 6 class) ERPV10A6 (8 & 10 class)	ERPV02A6 (2 class) ERPV03A6 (3 class) ERPV06A6 (6 class) ERPV10A6 (8 class)
	Air intake & discharge grille					EAIDF02A6 (2 class) EAIDF03A6 (3 class) EAIDF06A6 (6 class) EAIDF10A6 (10 class)	EAIDF02A6 (1, 15 & 2 class) EAIDF03A6 (25 & 3 class) EAIDF06A6 (35, 4 & 6 class) EAIDF10A6 (8 & 10 class)	EAIDF02A6 (2 class) EAIDF03A6 (3 class) EAIDF06A6 (6 class) EAIDF10A6 (10 class)
Individual control systems & network	Wired remote controller (standard)	BRC51A61	BRC315D	BRC315D	MERCA		FWEC1A	
	Wired remote controller (advanced)						FWEC2A	
	Wired remote controller (advanced Plus)					FWEC3A	FWEC3A	FWEC3A
	Wired remote controller (heat pump)				SRC-HPA			
	Wireless controller (heat pump)		BRC7F530	BRC7F532F				
	Controller electromechanical						ECFWMB6	
	Split controller - power control board					FWECSAP	FWECSAP	FWECSAP
	Split controller - control panel					FWECSAC	FWECSAC	FWECSAC
	On-board mounting kit					FWECKA	FWECKA	FWECKA
	Wall-mounting kit					FWFCKA	FWFCKA	FWFCKA
Centralised control systems	Central remote control		DCS302CA51	DCS302CA51				
	Unified ON/OFF control		DCS301BA51	DCS301BA51				
	Schedule timer		DST301BA51	DST301BA51				
Building Management System & Standard protocol interface	Intelligent Touch Manager		DCM601A5A	DCM601A5A				
	Intelligent Touch Controller		DCS601C51C	DCS601C51C				

1. Decoration panel code includes wireless controller

FWL-DAT/DAF	FWS-AT/AF	FWM-DAT/DAF	FWE-CT/CF	FWP-AT	FWB-BT	FWD-AT/AF	FWN-AT/AF	FWT-CT
ERPV02A6 (1,15 & 2 class) ERPV03A6 (25 & 3 class) ERPV06A6 (35, 4 & 6 class) ERPV10A6 (8 & 10 class)	ERPV02A6 (2 class) ERPV03A6 (3 class) ERPV06A6 (6 class) ERPV10A6 (8 class)	ERPV02A6 (1,15 & 2 class) ERPV03A6 (25 & 3 class) ERPV06A6 (35,4 & 6 class) ERPV10A6 (8&10 class)						
EAIDF02A6 (1, 15 & 2 class) EAIDF03A6 (25 & 3 class) EAIDF06A6 (35, 4 & 6 class) EAIDF10A6 (8 & 10 class)	EAIDF02A6 (2 class) EAIDF03A6 (3 class) EAIDF06A6 (6 class) EAIDF10A6 (10 class)	EAIDF02A6 (1, 15 & 2 class) EAIDF03A6 (25 & 3 class) EAIDF06A6 (35, 4 & 6 class) EAIDF10A6 (8 & 10 class)						
FWEC1A		FWEC1A	FWEC1A		FWEC1A	FWEC1A	FWEC1A	MERCA
FWEC2A		FWEC2A	FWEC2A		FWEC2A	FWEC2A	FWEC2A	
FWEC3A	FWEC3A	FWEC3A	FWEC3A	FWEC3A	FWEC3A	FWEC3A	FWEC3A	
								SRC-HPA
								WRC-HPC
ECFWMB6		ECFWMB6						
FWECSAP	FWECSAP	FWECSAP	FWECSAP	FWECSAP	FWECSAP	FWECSAP	FWECSAP	
FWECSAC	FWECSAC	FWECSAC	FWECSAC	FWECSAC	FWECSAC	FWECSAC	FWECSAC	
FWECKA	FWECKA	FWECKA						
FWFCKA	FWFCKA	FWFCKA	FWFCKA	FWFCKA	FWFCKA	FWFCKA	FWFCKA	

	INDOOR UNITS	FWG-AT/AF	FWC-BT/BF	FWF-BT/BF	FWF-CT	FWZ-AT/AF	FWV-DAT/DAF	FWR-AT/AF
Filters	Long-life filter		KAFP551K160	KAFQ441BA60				
ON/OFF valves 230V	3-ways 230V ON/OFF valve kit (2-pipe)	VKFWGA012T3V (5 & 8 class) VKFWGA022T3V (11 class)	EKMV3C09B	EKMV3C09B	MCKCW2T3VN	E2MV03A6 (2, 3 & 6 class) E2MV10A6 (8 class)	E2MV03A6 (1 up to 35 class) E2MV06A6 (4 & 6 class) E2MV10A6 (8 & 10 class)	E2MV03A6 (2, 3 & 6 class) E2MV10A6 (8 class)
	3-ways 230V ON/OFF valve kit (4-pipe)	VKFWGA014T3V (5 & 8 class) VKFWGA024T3V (11 class)	EKMV3C09B x2	EKMV3C09B x2		E4MV03A6 (2, 3 & 6 class) E4MV10A6 (8 class)	E4MV03A6 (1 up to 35 class) E4MV06A6 (4 & 6 class) E4MV10A6 (8 & 10 class)	E4MV03A6 (2, 3 & 6 class) E4MV10A6 (8 class)
	2-ways 230V ON/OFF valve kit (2-pipe)		EKMV2C09B	EKMV2C09B				
	2-ways 230V ON/OFF valve kit (4-pipe)		EKMV2C09B x 2	EKMV2C09B x 2				
	2-ways 230V ON/OFF valve kit (cooling heat exchanger)					E2MV2B07A6 (2 up to 6 class) E2MV2B10A6 (8 class)	E2MV2B07A6 (1 up to 6 class) E2MV2B10A6 (8 & 10 class)	E2MV2B07A6 (2 up to 6 class) E2MV2B10A6 (8 class)
	2-ways 230V ON/OFF valve kit (additional heat exchanger)					E2MV2B07A6	E2MV2B07A6	E2MV2B07A6
	3-ways 230V ON/OFF valve kit (additional heat exchanger)							
	Simplified 3-ways 230V ON/OFF valve kit (2-pipe)					E2MVD03A6 (2 & 3 class) E2MVD06A6 (6 class) E2MVD10A6 (8 class)	E2MVD03A6 (1 up to 35 class) E2MVD06A6 (4 & 6 class) E2MVD10A6 (8 & 10 class)	E2MVD03A6 (2 & 3 class) E2MVD06A6 (6 class) E2MVD10A6 (8 class)
	Simplified 3-ways 230V ON/OFF valve kit (4-pipe)					E4MVD03A6 (2 & 3 class) E4MVD06A6 (4 & 6 class) E4MVD10A6 (8 & 10 class)	E4MVD03A6 (1 up to 35 class) E4MVD06A6 (4 & 6 class) E4MVD10A6 (8 & 10 class)	E4MVD03A6 (2 & 3 class) E4MVD06A6 (4 & 6 class) E4MVD10A6 (8 & 10 class)
ON/OFF valves 24V	3-ways 24V ON/OFF valve kit (2-pipe)					E2M2V03A6 (2 & 3 class) E2M2V06A6 (6 class) E2M2V10A6 (8 class)	E2M2V03A6 (1 up to 35 class) E2M2V06A6 (4 & 6 class) E2M2V10A6 (8 & 10 class)	E2M2V03A6 (2 & 3 class) E2M2V06A6 (6 class) E2M2V10A6 (8 class)
	3-ways 24V ON/OFF valve kit (4-pipe)					E4M2V03A6 (2 & 3 class) E4M2V06A6 (6 class) E4M2V10A6 (8 class)	E4M2V03A6 (1 up to 35 class) E4M2V06A6 (4 & 6 class) E4M2V10A6 (8 & 10 class)	E4M2V03A6 (2 & 3 class) E4M2V06A6 (6 class) E4M2V10A6 (8 class)
	2-ways 24V ON/OFF valve kit (cooling heat exchanger)					E2M2V207A6 (2, 3 & 6 class) E2M2V210A6 (8 class)	E2M2V207A6 (1 up to 35 class) E2M2V210A6 (8 & 10 class)	E2M2V207A6 (2, 3 & 6 class) E2M2V210A6 (8 class)
	2-ways 24V ON/OFF valve kit (additional heat exchanger)					E2M2V207A6	E2M2V207A6	E2M2V207A6
Proportional valves	3-ways proportional valve kit (2-pipe)						E2MPV03A6 (1 up to 35 class) E2MPV06A6 (4 & 6 class) E2MPV10A6 (8 & 10 class)	
	3-ways proportional valve kit (4-pipe)						E4MPV03A6 (1 up to 35 class) E4MPV06A6 (4 & 6 class) E4MPV10A6 (8 & 10 class)	
	2-ways proportional valve kit (cooling heat exchanger)						E2MPV207A6 (1 up to 6 class) E2MPV210A6 (8 & 10 class)	
	2-ways proportional valve kit (additional heat exchanger)						E2MPV207A6	

FWL-DAT/DAF	FWS-AT/AF	FWM-DAT/DAF	FWE-CT/CF	FWP-AT	FWB-BT	FWD-AT/AF	FWN-AT/AF	FWT-CT
E2MV03A6 (1 up to 35 class) E2MV06A6 (4 & 6 class) E2MV10A6 (8 & 10 class)	E2MV03A6 (2, 3 & 6 class) E2MV10A6 (8 class)	E2MV03A6 (1 up to 35 class) E2MV06A6 (4 & 6 class) E2MV10A6 (8 & 10 class)	EK2MV3B10C5	E2MV107A6	E2MV107A6	ED2MV04A6 (4 class) ED2MV10A6 (6, 8 & 10 class) ED2MV12A6 (12 class) ED2MV18A6 (16 & 18 class)	ED2MV04A6 (4 & 5 class) ED2MV10A6 (6 up 10 class)	
E4MV03A6 (1 up to 35 class) E4MV06A6 (4 & 6 class) E4MV10A6 (8 & 10 class)	E4MV03A6 (2, 3 & 6 class) E4MV10A6 (8 class)	E4MV03A6 (1 up to 35 class) E4MV06A6 (4 & 6 class) E4MV10A6 (8 & 10 class)	EK2MV3B10C5			ED4MV04A6 (4 class) ED4MV10A6 (6, 8 & 10 class) ED4MV12A6 x 2 (12 class) ED4MV18A6 x 2 (16 & 18 class)	ED4MV04A6 (4 & 5 class) ED4MV10A6 (6 up 10 class)	
			EK2MV2B10C5					
			EK4MV2B10C5					
E2MV2B07A6 (1 up to 6 class) E2MV2B10A6 (8 & 10 class)	E2MV2B07A6 (2 up to 6 class) E2MV2B10A6 (8 class)	E2MV2B07A6 (1 up to 6 class) E2MV2B10A6 (8 & 10 class)			E2MV207A6 (2 up to 7 class) E2MV210A6 (8 & 10 class)			
E2MV2B07A6	E2MV2B07A6	E2MV2B07A6		E2MV207A6	E2MV207A0 (2 up to 7 class) E2MV210A6 (8 & 10 class)			
				E2MV307A6	E2MV307A6			
E2MVD03A6 (1 up to 35 class) E2MVD06A6 (4 & 6 class) E2MVD10A6 (8 & 10 class)	E2MVD03A6 (2 & 3 class) E2MVD06A6 (6 class) E2MVD10A6 (8 class)	E2MVD03A6 (1 up to 35 class) E2MVD06A6 (4 & 6 class) E2MVD10A6 (8 & 10 class)						
E4MVD03A6 (1 up to 35 class) E4MVD06A6 (4 & 6 class) E4MVD10A6 (8 & 10 class)	E4MVD03A6 (2 & 3 class) E4MVD06A6 (4 & 6 class) E4MVD10A6 (8 & 10 class)	E4MVD03A6 (1 up to 35 class) E4MVD06A6 (4 & 6 class) E4MVD10A6 (8 & 10 class)						
E2M2V03A6 (1 up to 35 class) E2M2V06A6 (4 & 6 class) E2M2V10A6 (8 & 10 class)	E2M2V03A6 (2 & 3 class) E2M2V06A6 (6 class) E2M2V10A6 (8 class)	E2M2V03A6 (1 up to 35 class) E2M2V06A6 (4 & 6 class) E2M2V10A6 (8 & 10 class)						
E4M2V03A6 (1 up to 35 class) E4M2V06A6 (4 & 6 class) E4M2V10A6 (8 & 10 class)	E4M2V03A6 (2 & 3 class) E4M2V06A6 (6 class) E4M2V10A6 (8 class)	E4M2V03A6 (1 up to 35 class) E4M2V06A6 (4 & 6 class) E4M2V10A6 (8 & 10 class)						
E2M2V207A6 (1 up to 35 class) E2M2V210A6 (8 & 10 class)	E2M2V207A6 (2, 3 & 6 class) E2M2V210A6 (8 class)	E2M2V207A6 (1 up to 35 class) E2M2V210A6 (8 & 10 class)						
E2M2V207A6	E2M2V207A6	E2M2V207A6						
E2MPV03A6 (1 up to 35 class) E2MPV06A6 (4 & 6 class) E2MPV10A6 (8 & 10 class)		E2MPV03A6 (1 up to 35 class) E2MPV06A6 (4 & 6 class) E2MPV10A6 (8 & 10 class)						
E4MPV03A6 (1 up to 35 class) E4MPV06A6 (4 & 6 class) E4MPV10A6 (8 & 10 class)		E4MPV03A6 (1 up to 35 class) E4MPV06A6 (4 & 6 class) E4MPV10A6 (8 & 10 class)						
E2MPV207A6 (1 up to 6 class) E2MPV210A6 (8 & 10 class)		E2MPV207A6 (1 up to 6 class) E2MPV210A6 (8 & 10 class)						
E2MPV207A6		E2MPV207A6						

Options & accessories - Fan coil units

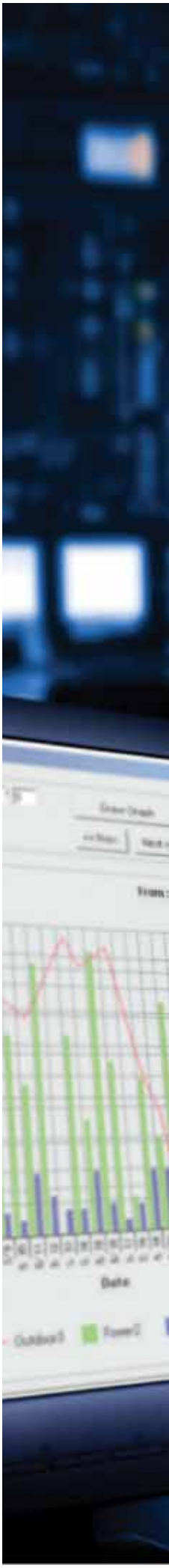
	INDOOR UNITS	FWG-AT/AF	FWC-BT/BF	FWF-BT/BF	FWF-CT	FWZ-AT/AF	FWV-DAT/DAF	FWR-AT/AF
Adapters	Installation box/Mounting plate for adapter PCBs (when there is no space in the switchbox)		KRP1H98	KRP1BA101				
	Wiring adapter for electrical appendices		KRP2A52 [2] KRP4AA53 [2]	KRP2A52 [2] KRP4AA53 [2]				
	Remote ON/OFF			EKRoroa				
	Remote sensor		KRCS01-4	KRCS01-1				
	Optional PCB for MODBUS connection		EKFCMBCB	EKFCMBCB				
	Wiring adapter with 4 output signals for valve control PDB		EKRP1C11					
	Temperature sensor kit					FWTSKA	FWTSKA	FWTSKA
	Relative humidity sensor kit					FWHSKA	FWHSKA	FWHSKA
	Fan stop thermostat						YFSTA6	
	Master-slave interface						EPIMSA6	
	Power interface							
Others	Fresh air intake kit (direct installation type)			KDDQ44XA60				
	Fresh air intake					EFA02A6 (2 class) EFA03A6 (3 class) EFA06A6 (6 class) EFA10A6 (8 class)	EFA02A6 (1, 15 & 2 class) EFA03A6 (25 & 3 class) EFA06A6 (35, 4 & 6 class) EFA10A6 (8 & 10 class)	EFA02A6 (2 class) EFA03A6 (3 class) EFA06A6 (6 class) EFA10A6 (8 class)
	Electrical box with earth terminal (2 blocks)		KJB212A	KJB212A				
	Electrical box with earth terminal (3 blocks)		KJB311A	KJB311A				
	Eletrical box with earth terminal		KJB411A	KJB411A				
	Electric heater (standard)					EEH02A6 (2 class) EEH03A6 (3 class) EEH06A6 (6 class) EEH10A6 (8 class)	EEH01A6 (1 class) EEH02A6 (15 & 2 class) EEH03A6 (25 & 3 class) EEH06A6 (35, 4 & 6 class) EEH10A6 (8 & 10 class)	EEH02A6 (2 class) EEH03A6 (3 class) EEH06A6 (6 class) EEH10A6 (8 class)
	Electric heater (big)							
	Additional heat exchanger					ESRH02A6 (2 class) ESRH03A6 (3 class) ESRH06A6 (6 class) ESRH10A6 (8 class)	ESRH02A6 (1, 15 & 2 class) ESRH03A6 (25 & 3 class) ESRH06A6 (35, 4 & 6 class) ESRH10A6 (8 & 10 class)	ESRH02A6 (2 class) ESRH03A6 (3 class) ESRH06A6 (6 class) ESRH10A6 (8 class)
	Supporting feet					ESFV06A6 (2, 3 and 6 class) ESFV10A6 (8 class)	ESFV06A6 (1 up to 6 class) ESFV10A6 (8 & 10 class)	ESFV06A6 (2, 3 and 6 class) ESFV10A6 (8 class)
	Supporting feet and grille					ESFVG02A6 (2 class) ESFVG03A6 (3 class) ESFVG06A6 (6 class) ESFVG10A6 (8 class)	ESFVG02A6 (1, 15 & 2 class) ESFVG03A6 (25 & 3 class) ESFVG06A6 (35, 4 & 6 class) ESFVG10A6 (8 & 10 class)	ESFVG02A6 (2 class) ESFVG03A6 (3 class) ESFVG06A6 (6 class) ESFVG10A6 (8 class)
	Plenum box with circular connections							
	Plenum box (insulated) with circular connections (supply side)							
	Vertical auxiliary drain pan					EDPVB6	EDPVB6	EDPVB6
	Horizontal auxiliary drain pan					EDPHB6	EDPHB6	EDPHB6
	Drain pump	included	included	included	included	CDRP1A	CDRP1A	CDRP1A (only vertical installation

2. Requires KRP1H98

FWL-DAT/DAF	FWS-AT/AF	FWM-DAT/DAF	FWE-CT/ CF	FWP-AT	FWB-BT	FWD-AT/AF	FWN-AT/AF	FWT-CT
FWTSKA	FWTSKA	FWTSKA	FWTSKA	FWTSKA	FWTSKA		FWTSKA	
FWHSKA	FWHSKA	FWHSKA	FWHSKA	FWHSKA	FWHSKA	FWHSKA	FWHSKA	
YFSTA6		YFSTA6			YFSTA6	YFSTA6	YFSTA6	
EPIMSA6		EPIMSA6	EPIMSA6		EPIMSA6	EPIMSA6	EPIMSA6	
						EPIB6 (only 12, 16 & 18 class)		
EFA02A6 (1, 15 & 2 class) EFA03A6 (25 & 3 class) EFA06A6 (35, 4 & 6 class) EFA10A6 (8 & 10 class)	EFA02A6 (2 class) EFA03A6 (3 class) EFA06A6 (6 class) EFA10A6 (8 class)	EFA02A6 (1, 15 & 2 class) EFA03A6 (25 & 3 class) EFA06A6 (35, 4 & 6 class) EFA10A6 (8 & 10 class)				EDMFA04A6 (4 class) EDMFA06A6 (6 class) EDMFA10A6 (8 & 10 class) EDMFA12A6 (12 class) EDMFA18A6 (16 & 18 class)	EDMFA04A6 (4 & 5 class) EDMFA06A6 (6 & 7 class) EDMFA10A6 (8 & 10 class)	
EEH01A6 (1 class) EEH02A6 (15 & 2 class) EEH03A6 (25 & 3 class) EEH06A6 (35, 4 & 6 class) EEH10A6 (8 & 10 class)	EEH02A6 (2 class) EEH03A6 (3 class) EEH06A6 (6 class) EEH10A6 (8 class)	EEH01A6 (1 class) EEH02A6 (15 & 2 class) EEH03A6 (25 & 3 class) EEH06A6 (35, 4 & 6 class) EEH10A6 (8 & 10 class)		Factory mounted	Factory mounted	EDEH04A6 (4 class) EDEHS06A6 (6 class) EDEHS10A6 (8 & 10 class) EDEHS12A6 (12 class) EDEHS18A6 (16 & 18 class)	EDEH04A6 (4 & 5 class) EDEHS06A6 (6 & 7 class) EDEHS10A6 (8 & 10 class)	
						EDEH04A6 (4 class) EDEHB06A6 (6 class) EDEHB10A6 (8 & 10 class) EDEHB12A6 (12 class) EDEHB18A6 (16 & 18 class)	EDEH04A6 (4 & 5 class) EDEHB06A6 (6 & 7 class) EDEHB10A6 (8 & 10 class)	
ESRH02A6 (1, 15 & 2 class) ESRH03A6 (25 & 3 class) ESRH06A6 (35, 4 & 6 class) ESRH10A6 (8 & 10 class)	ESRH02A6 (2 class) ESRH03A6 (3 class) ESRH06A6 (6 class) ESRH10A6 (8 class)	ESRH02A6 (1, 15 & 2 class) ESRH03A6 (25 & 3 class) ESRH06A6 (35, 4 & 6 class) ESRH10A6 (8 & 10 class)		EAH04A6 (2-4 class) EAH07A6 (5-7 class)	EAH04A6 (2-4 class) EAH07A6 (5-7 class) EAH10A6 (8-10 class)			
ESFV06A6 (1 up to 6 class) ESFV10A6 (8 & 10 class)	ESFV06A6 (2, 3 & 6 class) ESFV10A6 (8 class)	ESFV06A6 (1 up to 6 class) ESFV10A6 (8 & 10 class)						
ESFVG02A6 (1, 15 & 2 class) ESFVG03A6 (25 & 3 class) ESFVG06A6 (35, 4 & 6 class) ESFVG10A6 (8 & 10 class)	ESFVG02A6 (2 class) ESFVG03A6 (3 class) ESFVG06A6 (6 class) ESFVG10A6 (8 class)	ESFVG02A6 (1, 15 & 2 class) ESFVG03A6 (25 & 3 class) ESFVG06A6 (35, 4 & 6 class) ESFVG10A6 (8 & 10 class)						
	EPCC02A6 (2 class) EPCC03A6 (3 class) EPCC06A6 (6 class) EPCC10A6 (8 class)	EPCC02A6 (1,15 & 2 class) EPCC03A6 (25 & 3 class) EPCC06A6 (35, 4 & 6 class) EPCC10A6 (8 & 10 class)						
			EPAA02A6 EPAA05A6	EPAA02A6 EPAA05A6 EPAA08A6				
EDPVB6	EDPVB6	EDPVB6				EDDPV10A6 (4, 6, 8, 10 class) EDDPV18A6 (12, 16 & 18 class)	EDDPV10A6	
EDPHB6	EDPHB6	EDPHB6				EDDPH10A6 (4, 6, 8, 10 class) EDDPH18A6 (12, 16 & 18 class)	EDDPH10A6	
CDRP1A (only vertical installation	CDRP1A	CDRP1A		CDRP1A	CDRP1A	CDRP1A	CDRP1A	

Table of content

Control Systems




Print Graph
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Mini BMS

with full integration across all product pillars

DCM601A51

touch Intelligent Manager

- Price competitive mini BMS
- Cross-pillar integration of Daikin products
- Integration of third party equipment

NEW

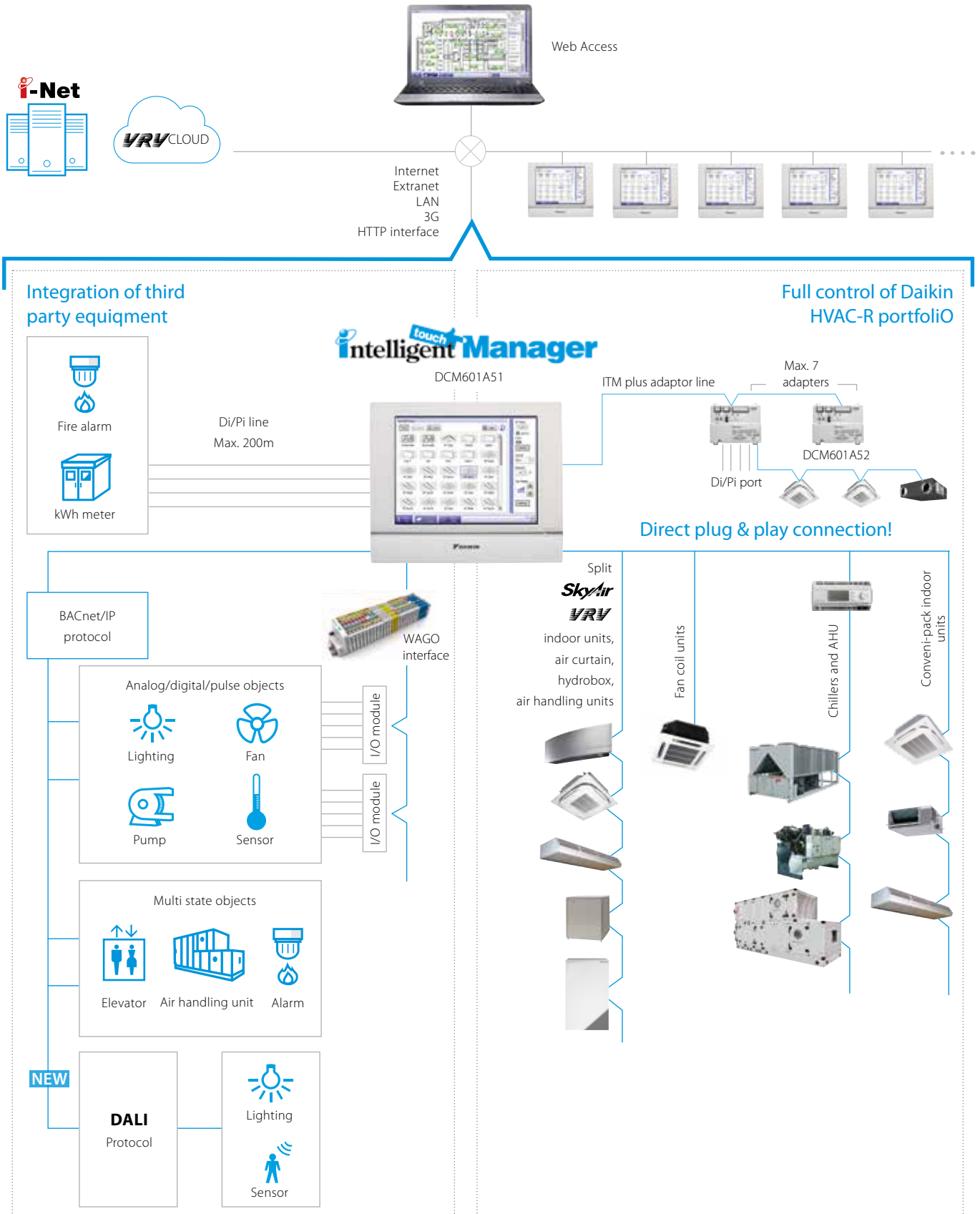
Download the WAGO selection tool from my.daikin.eu

› Easy selection of WAGO materials
› Material list creation
› Time saving
  - Includes wiring schemes
  - Contains commissioning/preset data for iTM

Check on YouTube

www.youtube.com/DaikinEurope

System overview



touch Intelligent Manager

User friendliness

› Intuitive user interface
› Visual lay out view and direct access to indoor unit main funtions
› All functions direct accessible via touch screen or via web interface

Smart energy management

› Monitoring if energy use is according to plan
› Helps to detect origins of energy waste
› Powerful schedules guarantee correct operation throughout the year
› Save energy by interlocking A/C operation with other equipment such as heating

Flexibility

› Cross-pillar integration (heating, air conditioning, applied systems, refrigeration, air handling units)
› BACnet protocol for 3rd party products integration
› I/O for integration of equipment such as lights, pumps… on WAGO modules
› Modular concept for small to large applications
› Control up to 512 indoor unit groups via one ITM and combine multiple ITM via web interface

Easy servicing and commissioning

› Remote refrigerant containment check reducing on site visit
› Simplified troubleshooting
› Save time on commissioning thanks to the pre-commissioning tool
› Auto registration of indoor units

Plug & play


Split


SkyAir


VRV

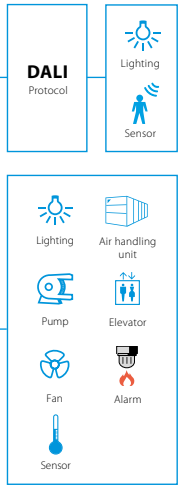

Fan coils

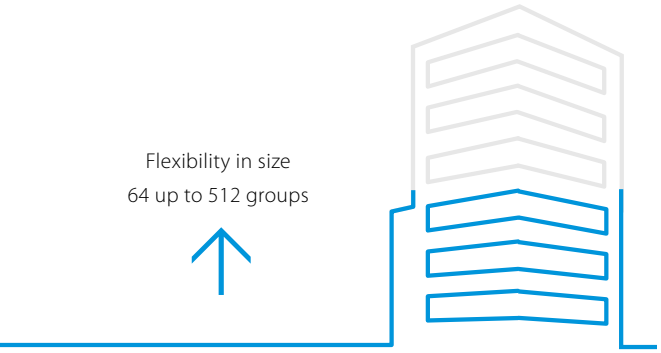

Chillers and AHU


Conveni-pack indoor units


HRV ventilation


WAGO I/O





Functions overview

Languages
› English
› French
› German
› Italian
› Spanish
› Dutch
› Portuguese

Management
› Web access
› Power Proportional Distribution (option)
› Operational history (malfunctions, …)
› Smart energy management
- monitor if energy use is according to plan
- detect origins of energy waste
› Setback function
› Sliding temperature

WAGO Interface
› Modular integration of 3rd party equipment
- WAGO coupler (interface between WAGO and iTM)
- Di module
- Do module
- Ai module
- Ao module
- Thermistor module
- Pi module

Open http interface
› Communication to any third party controller (domotics, BMS, etc.) is possible via http open interface (http option DCM007A51)

System layout
› Up to 512 unit groups can be controlled (ITM + 7 iTM Plus adapters)

Control
› Individual control (512 groups)
› Schedule setting (Weekly schedule, yearly calender, seasonal schedule)
› Interlock control
› Setpoint limitation
› Temperature limit

DALI integration
› Control and monitor the lights
› Easier facility management: receive error signal when light or light controller has a malfunction
› Flexible approach and less wiring needed, compared to classic light scheme
› Easier to make groups and control scenes
› Connection between intelligent Touch Manager and DALI through WAGO BACnet IP interface

Connectable to
- DX Split, Sky Air, VRV
- HRV
- Chillers (via MT3-EKCMBACIP controller)
- Daikin AHU (via MT3-EKCMBACIP controller)
- Fan coils
- Daikin Altherma Flex type
- LT and HT hydroboxes
- Biddle Air curtains
- WAGO I/O
- BACnet/IP protocol
- Daikin PMS interface (option DCM010A51) **NEW**

Chiller Intelligent Manager

Factory-engineered system control to manage a chiller plant room

Thus optimising its performance and increasing its reliability by:
› Optimal start-up, sequencing & staging of chillers
› Matching chiller capacity to load demand

iCM's main functionalities:

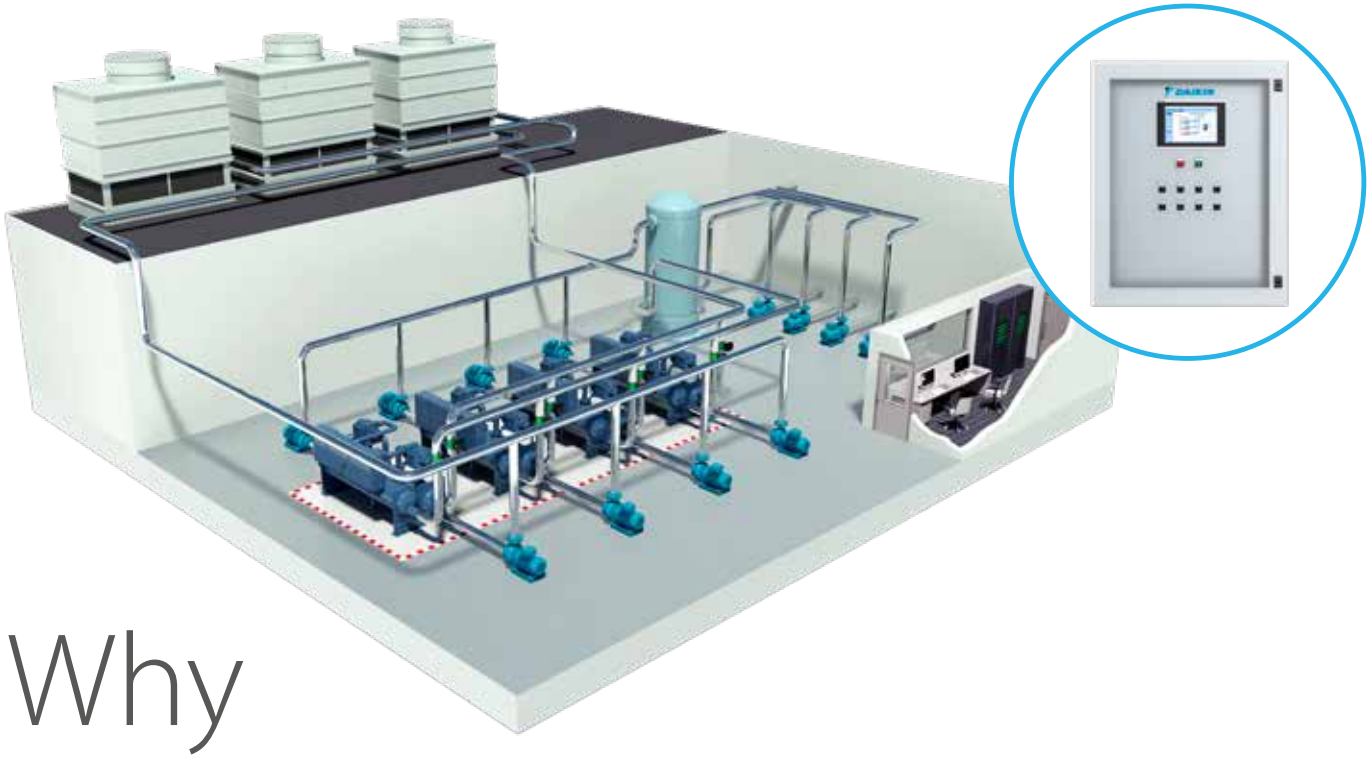
Availability
Determines whether chillers are available or not, based on:
› Inputs from the chiller unit controllers
› Modbus communication status
› Pump status

Sequencing
Optimises the order in which available chillers are turned on and off depending on operating hours, energy efficiency, etc.

Staging
Calculates **energy-optimal stage-up/stage-down** of the chiller by determining the increased capacity demand by capacity control, compensation of temperature and rotation. This function aims at providing the most energy-efficient combination of chillers on a continuous basis.

Stopping Last Chiller/Recycling
Captures a rise in demand when the **last chiller is staged down,** by operating the pump dedicated to the next ON chiller at a minimum VFD frequency.

Min/Max Operating Chiller Setting
Ensures that the number of operating chillers always **stays within a certain range,** regardless of changes in demand.



Why choose iCM?

› Optimise performance
› Increase reliability
› Reduce energy costs
› Reduce maintenance costs
› Factory-engineered and tested
› Remote control and monitoring. From one-time commissioning to real-time commissioning

Daikin is the best qualified partner to optimise the operation of a Daikin chiller plant room.

Product line-up

and specifications

iCM is available in two versions:

Standard

(Configuration)

(Basic)
(≤4 MT3 chillers)

(Light/Full)
(≤4/≤8 MT3 chillers
& peripherals)

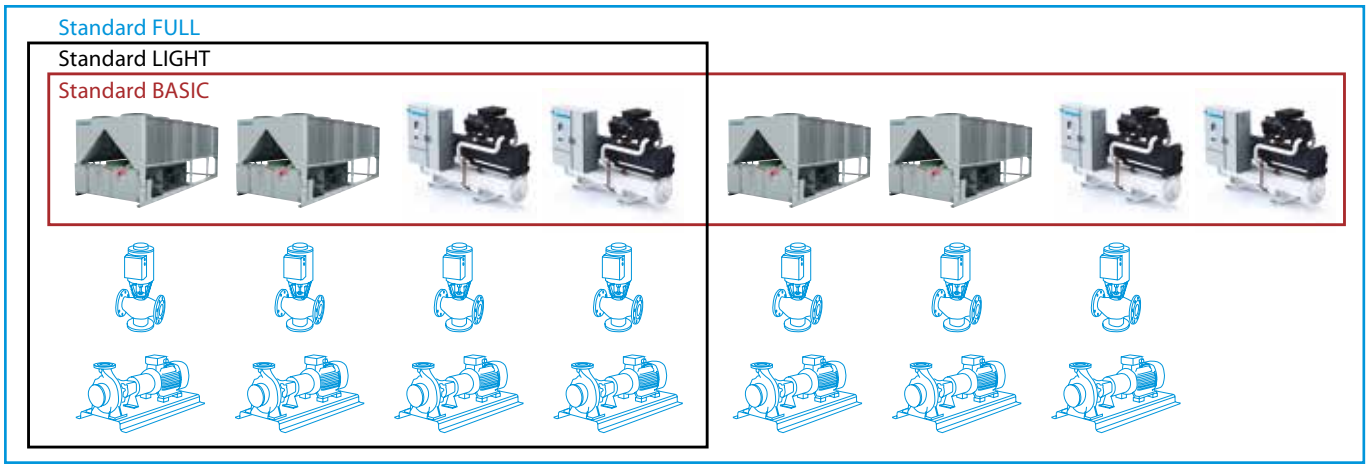
Customised

(Free-programmable)

(Customised)

Standard version
Configurable controller with a pre-set library of applications.
The standard system is divided into three configurations according to how many chillers and peripherals it can manage.

Standard is the right solution for you when you have:
- Up to 8 x (Air cooled/Water Cooled Chillers + Shut-Off valves + Pumps + Cooling Towers)
- Daikin or 3rd party chillers
- A primary only, or a primary-secondary system
- Constant or variable primary (evaporator and condenser) flow
- Dedicated/manifolded layout



Customised version:
Free-programmable controller for those applications not covered by the Standard version.

Remote control and monitoring possibilities

(valid for both Standard and Customised versions)

- **Connectivity to Daikin's remote monitoring and control system (www.daikinonsite.com)** for remote monitoring and service providing Internet connection to the main controller
- **Integration with general BAS/BMS** offered through BACnet or Modbus Modules based on BACnet/IP or Modbus RTU/RS-485 protocols
- **Built-in HMI, Remote HMI, Web HMI and daikinonsite.com** are available for control and configuration

Modbus Interface

RTD-W

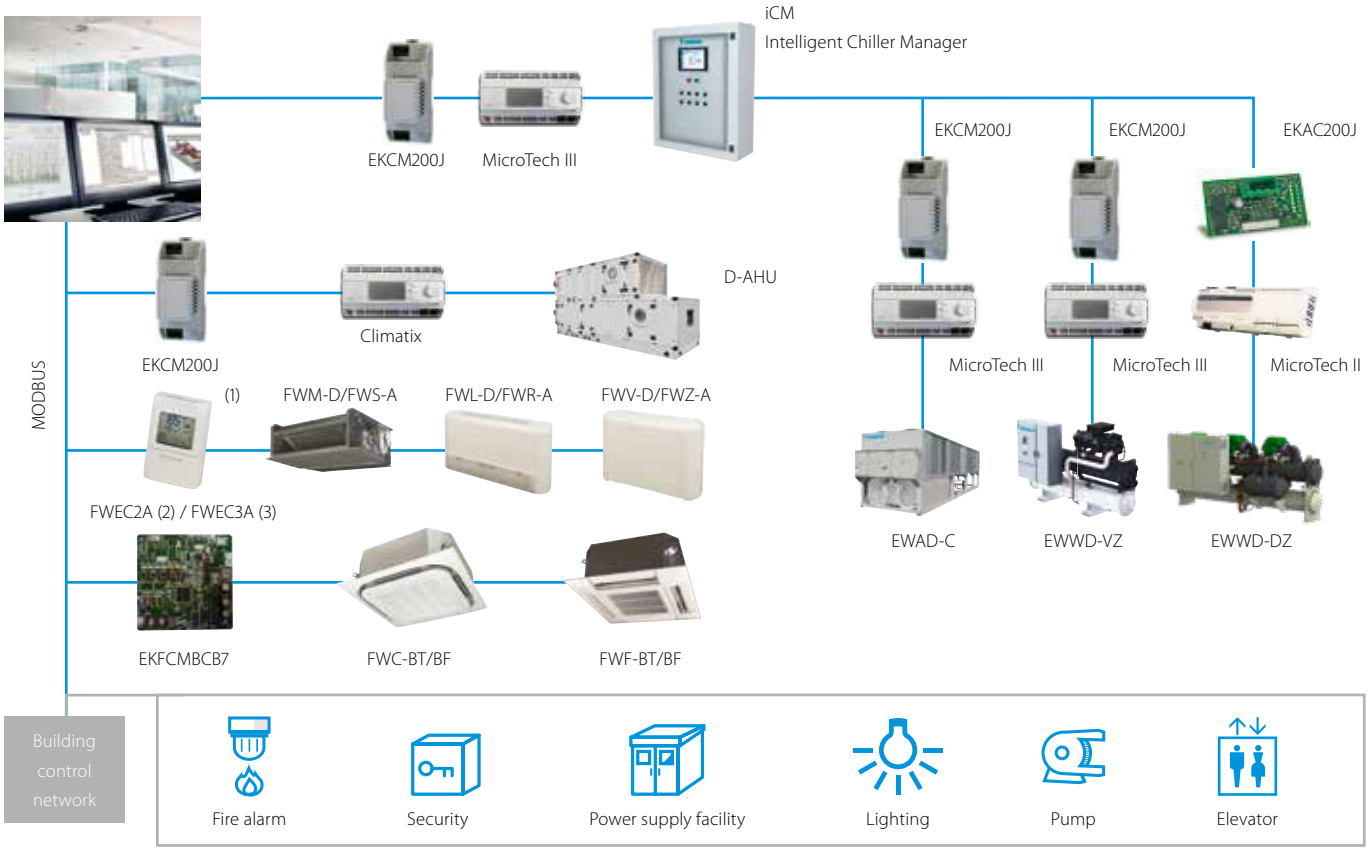
Modbus interface for monitoring and control of Daikin Altherma Flex Type, VRV HT hydrobox and **small inverter chiller**.

Main functions	**RTD-W**
Dimensions H x W x D mm	100x100x22
On/off prohibition	✓
Modbus RS485	✓
Dry contact control	✓
Output signal (operation error)	✓
Space heating / cooling operation	✓
Domestic hot water control	✓
Smart Grid control	
Control functions	
On/Off Space heating/cooling	M,C
Set point leaving water temperature (heating / cooling)	M,V
Room temperature setpoint	M
Operation mode	M
Domestic Hot water ON	
Domestic Hot Water reheat	M,C
Domestic Hot Water reheat setpoint	
Domestic Hot Water storage	M
Domestic Hot Water Booster setpoint	
Quiet mode	M,C
Weather dependent setpoint enable	M
Weather dependent curve shift	M
Fault/pump info relay choice	
Control source prohibition	M
Smart grid mode control	
Prohibit Space heating/cooling	
Prohibit DHW	
Prohibit Electric heaters	
Prohibit All operation	
PV available for storage	
Powerful boost	
Monitoring functions	
On/Off Space heating/cooling	M,C
Set point leaving water temperature (H/C)	M
Room temperature setpoint	M
Operation mode	M
Domestic Hot Water reheat	M
Domestic Hot Water storage	M
Number of units in the group	M
Average leaving water temperature	M
Remocon room temperature	M
Fault	M,C
Fault code	M
Circulation pump operation	M
Flow rate	
Solar pump operation	
Compressor status	M
Desinfection operation	M
Setback operation	M
Defrost/ start up	M
Hot start	
Booster Heater operation	
3-Way valve status	
Pump running hours accumulated	M
Compressor running hours accumulated	
Actual leaving water temperature	M
Actual return water temperature	M
Actual DHW tank temperature (*)	M
Actual refrigerant temperature	
Actual outdoor temperature	M

M : Modbus / R : Resistance / V : Voltage / C: control
* : only when room is occupied / ** : setpoint limitation / (*) if available
*** : no fan speed control on the CYV air curtain / **** : run & fault

Modbus interface

Integrate chillers, fan coil units and air handling units in BMS systems via modbus protocol



(1) The communication module is integrated in the controller (2) Connection to FWV-D, FWL-D & FWM-D (3) Connection to FWV-D, FWL-D, FWM-D and to FWZ-A, FWR-A, FWS-A

Integrate Refrigeration units in BMS systems via modbus protocol

BRR9A1V1

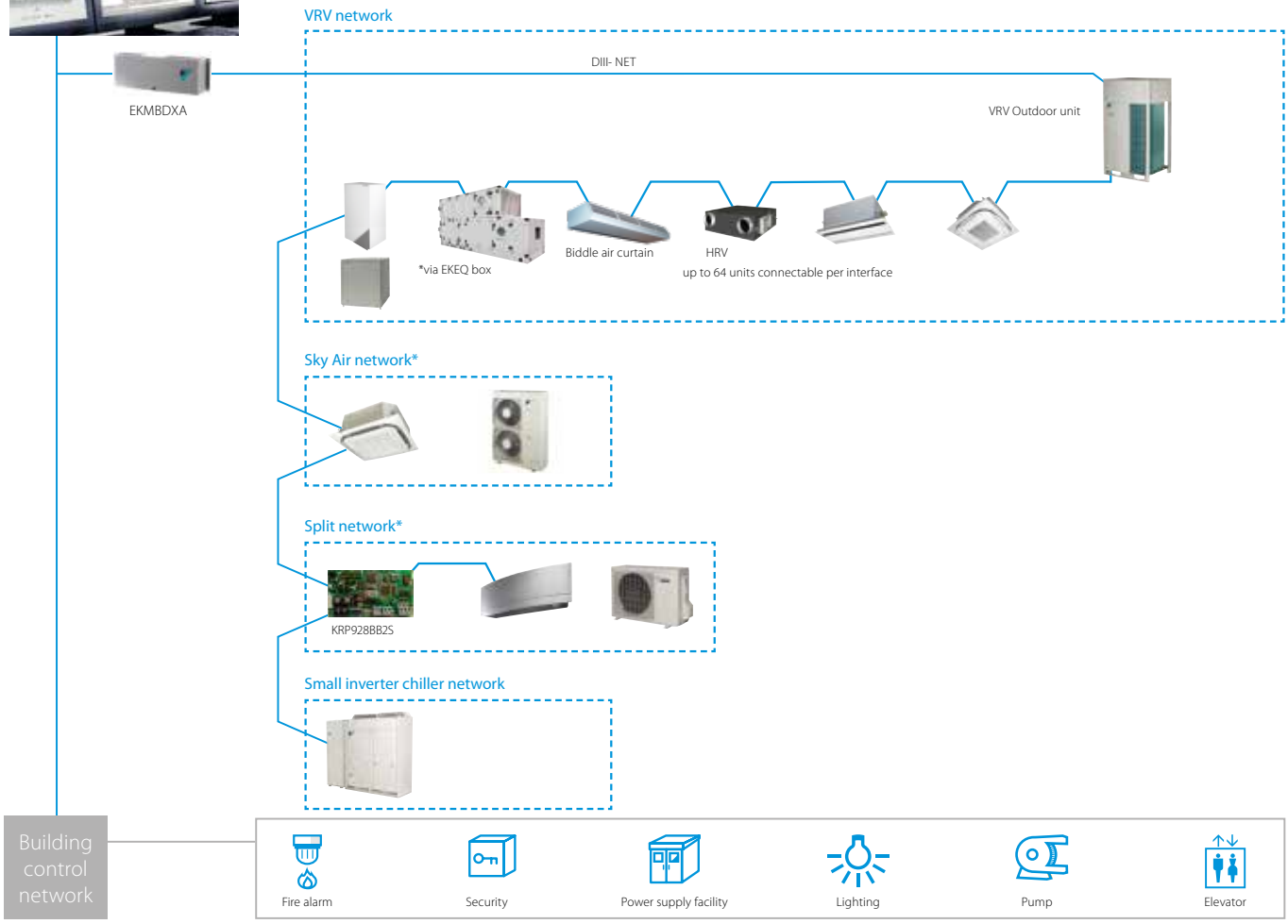
* For all connectable indoor units and Biddle air curtains please refer to the Conveni-pack pages in this catalogue

DIII-net Modbus interface

EKMBDXA

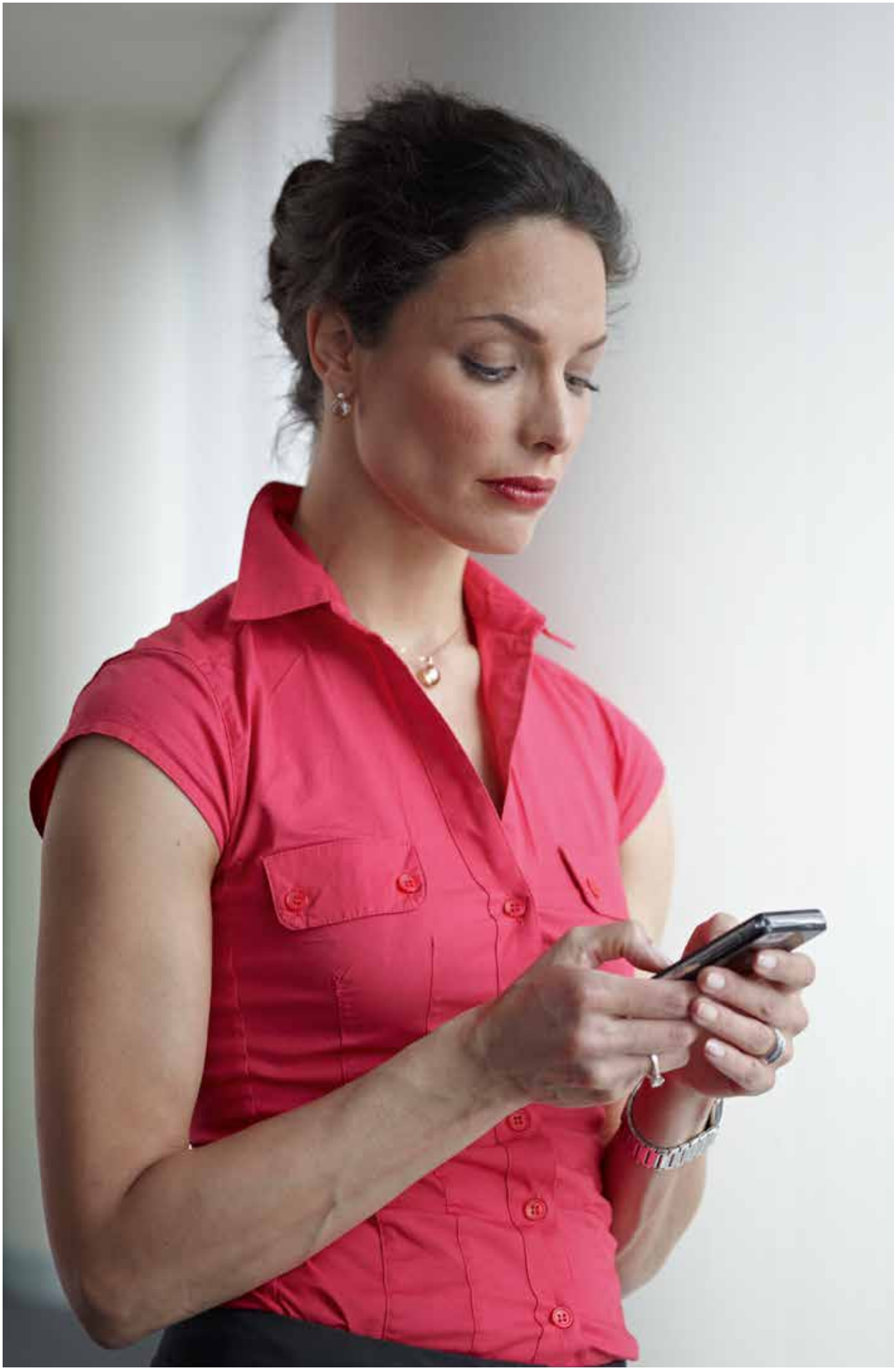
Integrated control system for seamless connection between Split, Sky Air, VRV and small inverter chillers and BMS systems

› Communication via Modbus RS485 protocol
› Detailed monitoring and control of the VRV total solution
› Easy and fast installation via DIII-net protocol
› As the Daikin DIII-net protocol is being used, only one modbus interface is needed for a group of Daikin systems (up to 10 outdoor unit systems).



* Additional centralized controller might be required. For more information contact your local dealer.

			EKMBDXA7V1
Maximum number of connectable indoor units			64
Maximum number of connectable outdoor units			10
Communication	DIII-NET - Remark		DIII-NET (F1F2)
	Protocol - Remark		2 wire; communication speed: 9600 bps or 19200 bps
	Protocol - Type		RS485 (modbus)
	Protocol - Max. Wiring length	m	500
Dimensions	HeightxWidthxDepth	mm	124x379x87
Weight		kg	2.1
Ambient temperature - operation	Max.	°C	60
	Min.	°C	0
Installation			Indoor installation
Power supply	Frequency	Hz	50
	Voltage	V	220-240

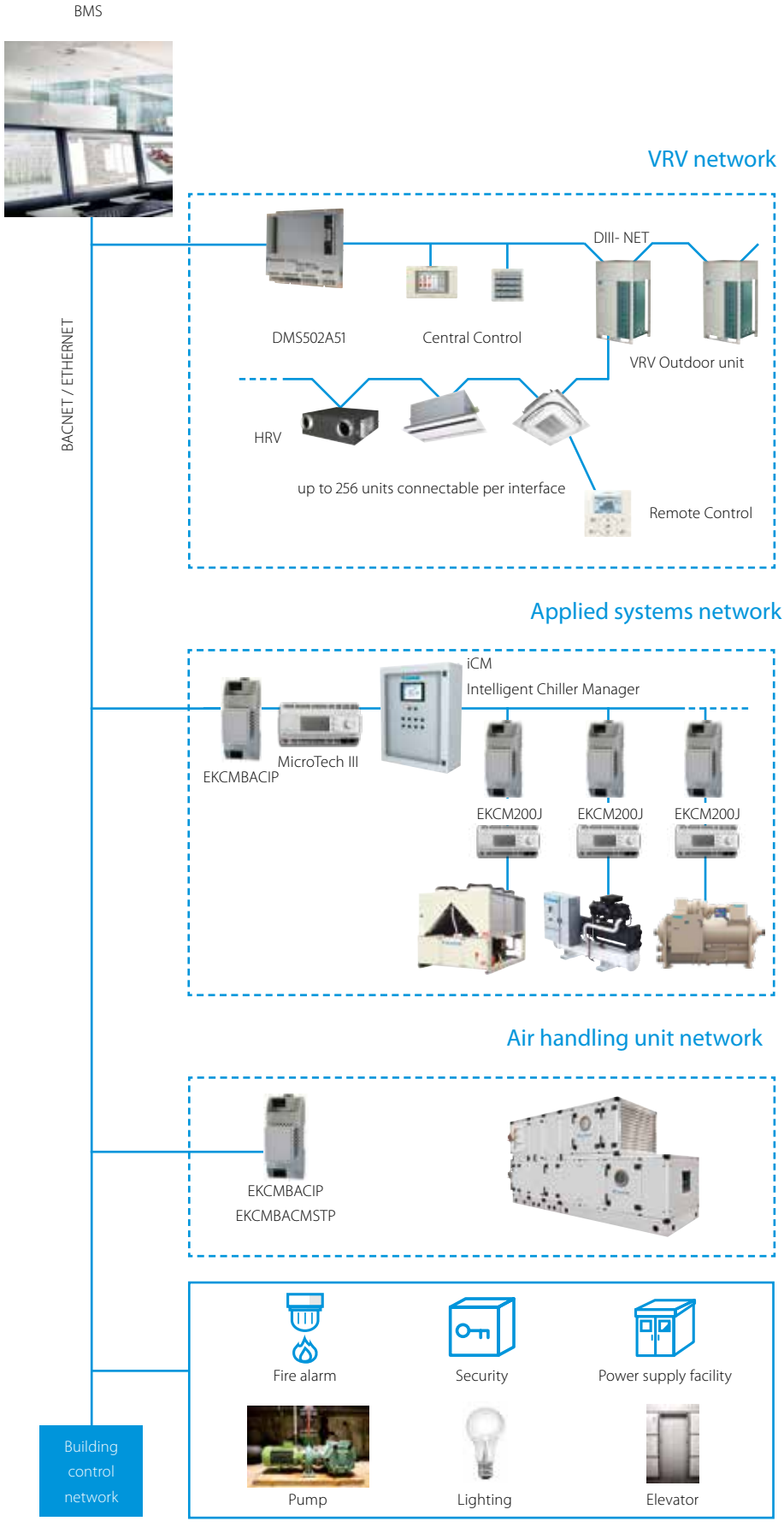


BACnet Interface

DMS502A51 / EKACBACMSTP / EKCMBACIP / EKCMBACMSTP

Integrated control system for seamless connection between VRV, applied systems, air handling units and BMS systems

- Interface for BMS system
- Communication via BACnet protocol (connection via Ethernet)
- Unlimited site size
- Easy and fast installation
- PPD data is available on BMS system (only for VRV)



LonWorks Interface

DMS504B51 / EKACLONP

Open network integration of VRV and applied systems monitoring and control functions into LonWorks networks

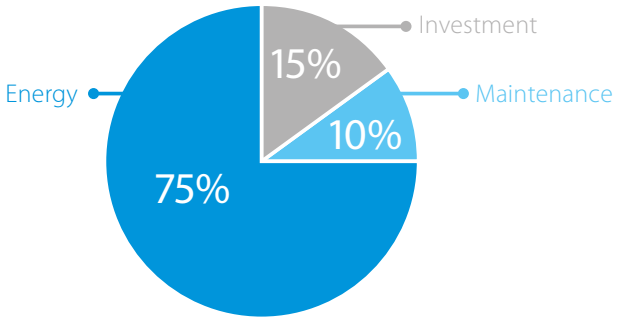
- Interface for Lon connection to LonWorks networks
- Communication via Lon protocol (twisted pair wire)
- Unlimited sitesize
- Quick and easy installation

Why
Daikin on Site?

Operating costs like energy and maintenance typically account for 85% of the system's total lifetime cost. Undiscovered energy waste and incorrect operation will increase costs and can even lead to unscheduled interruptions.

Using Daikin on Site monitoring results in optimum use and costs over the system's entire lifetime:

› Enhanced control and measuring
› Monitors the system
› Reduces risks at the earliest possible moment
› Keeps the system running as it was intended to



Typical Life cycle Cost of a chiller (15 years)

What
is Daikin on Site?

A solution for customer specific needs

The Daikin on Site cloud server collects operational data from the control system of a Daikin chiller or air handling unit plant.
Daikin's Smartcentre then turns this data into useful information on a web user interface.
Daikin on Site has predefined user roles like:
› **operator**
› **service provider**
› **Daikin specialists**

The Daikin on Site platform's features are designed to:
› Increase uptime, reduce unscheduled interruptions
› Optimise efficiency and reduce energy waste
› Increase lifetime and avoid wear by misuse
› Give insight into the optimum use of equipment, including advice from a Daikin expert

We will combine Daikin on Site remote monitoring with the complementary service programme best suited to your needs.

How does Daikin on Site deliver?

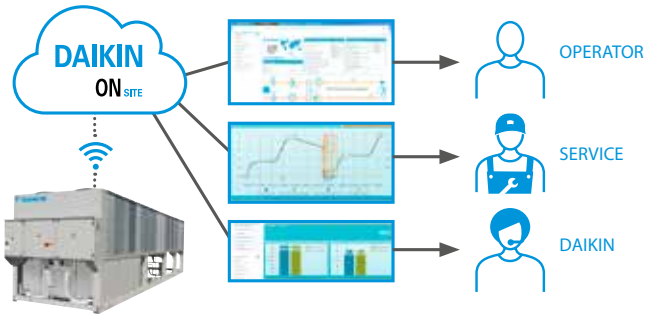
1 **Insight wherever and whenever required, full visibility and traceability of the HVAC installation.**

› Real-time information and trend insights
› No local software required
› Personal access to the web-based user interface
› Reports

2 **With Daikin on Site, we team up operators and specialists.**

› User-friendly operator information
› State-of-the art tool providing best-in-class service
› Remote solutions when possible, avoiding on site interventions

3 **Converting all expertise to maintain highest energy efficiency and uptime.**



Alerts & web application

› 24/7 year-round alarm and event monitoring
› Automated alarm system
› Receive service updates or notifications via email
› Access to Daikin on Site web application

Active monitoring

› Remote alarm analysis and diagnostics provided by Daikin Experts
› Fast and reliable on site service

Connected Service Plan

› Remote alarm analysis and diagnostics provided by Daikin Experts
› Fast and reliable on site service
› All initiatives are combined with the most suitable Daikin Service Plan

ACTION TAKEN

You can hand it to us

SMARTCENTRE
Turns data into actions

CLOUD DATA WAREHOUSE

Encrypted data transfer

Power supply

T1 = 3~, 220V, 50Hz
V1 = 1~, 220-240V, 50Hz
VE = 1~, 220-240V/220V, 50Hz/60Hz*
V3 = 1~, 230V, 50Hz
VM = 1~, 220~240V/220~230V, 50Hz/60Hz
W1 = 3N~, 400V, 50Hz
Y1 = 3~, 400V, 50Hz

* For VE power supply only 1~, 220-240V, 50Hz data is displayed in this catalogue.

Conversion table refrigerant piping

inch	mm
1/4″	6.4 mm
3/8″	9.5 mm
1/2″	12.7 mm
5/8″	15.9 mm
3/4″	19.1 mm
7/8″	22.2 mm
1 1/8″	28.5 mm
1 3/8″	34.9 mm
1 5/8″	41.3 mm
1 3/4″	44.5 mm
2″	50.8 mm
2 1/8″	54 mm
2 5/8″	66.7 mm

F-gas regulation

For fully/partially charged equipment: contains fluorinated greenhouse gases. Actual refrigerant charge depends on the final unit construction, details can be found on the unit labels.

For non pre-charged equipment (Chillers: split chiller (SEHVX/SERHQ), condensing units and condenserless chillers its functioning relies on fluorinated greenhouse gases.

Measuring conditions

Applied systems

Air cooled	Cooling only		Evaporator: 12°C/7°C	Ambient: 35°CDB
	Heat pump		Evaporator: 12°C/7°C	Ambient: 35°C
			Condenser: 40°C/45°C	Ambient: 7°CDB/6°CWB
Water cooled	Cooling only		Evaporator: 12°C/7°C	
			Condenser: 30°C/35°C	
	Heating only		Evaporator: 12°C/7°C	
			Condenser: 40°C/45°C	
Condenserless chiller			Evaporator: 12°C/7°C	
			Condensing temperature: 45°C / liquid temperature: 40°C	
Fan coil units	Cooling		Indoor temperature 27°CDB, 19°CWB; entering water temperature 7°C, water temperature rise 5K	
	Heating	2-pipe	Indoor temperature 20°CDB, 15°CWB; entering water temperature 45°C, water temperature drop 5K	
		4-pipe	Indoor temperature 20°CDB, 15°CWB; entering water temperature 65°C, water temperature drop 10K	
Air Handling Units			Temperature and humidity conditions: Extract air 22°C / 50%; Fresh air -10°C / 90%	

The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment (for measuring conditions: please refer to the technical databooks). The sound power level is an absolute value indicating the "power" which a sound source generates. For more detailed information please consult our technical databooks.

Notes

Notes

Notes

Notes

DAIKIN

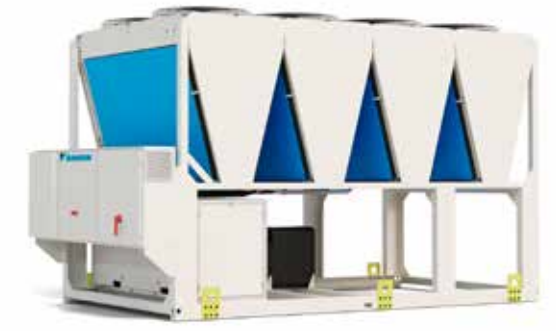
Future-proof
choice in chillers

A new generation of chillers

BLUEVOLUTION

Future proof high efficiency air-cooled scroll chiller series with refrigerant R-32. With low Global Warming Potential and seasonal energy efficiency ratio (SEER) improved by 10%, the R-32 Scroll chiller is fully compliant with the efficiency requirements imposed by current and future European Legislation.

R-32 refrigerant can be safely used in many applications including chilled water systems and is also easier to recycle and reuse. Another environmental plus in its favour.



Daikin Europe N.V. Naamloze Vennootschap Zandvoordestraat 300 · 8400 Oostende · Belgium · www.daikin.eu · BE 0412 120 336 · RPR Oostende (Publisher)

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EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

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

CERTIFIED ISO 9001 · ISO 14001

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