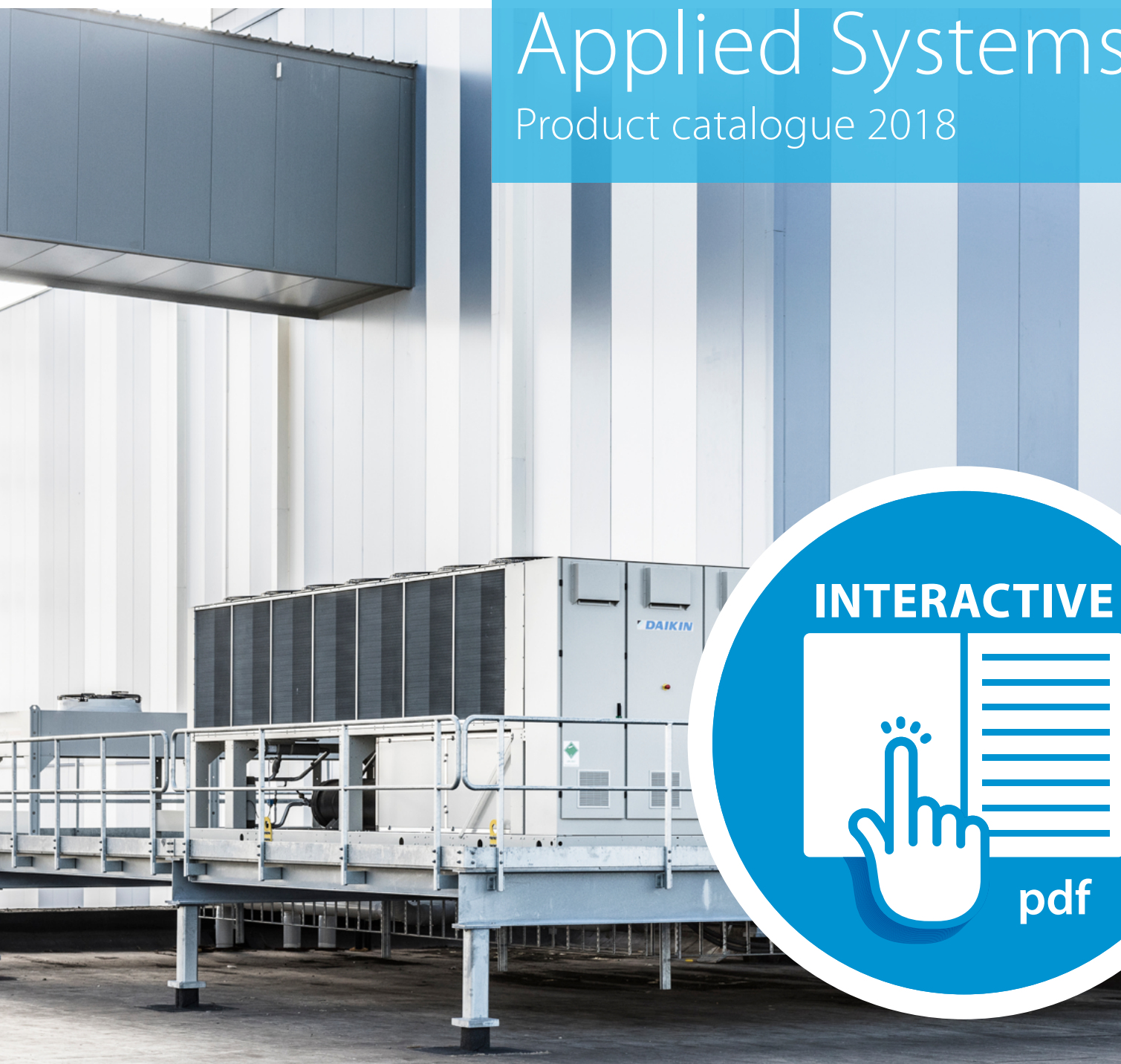


Applied Systems

Product catalogue 2018



INTERACTIVE



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.

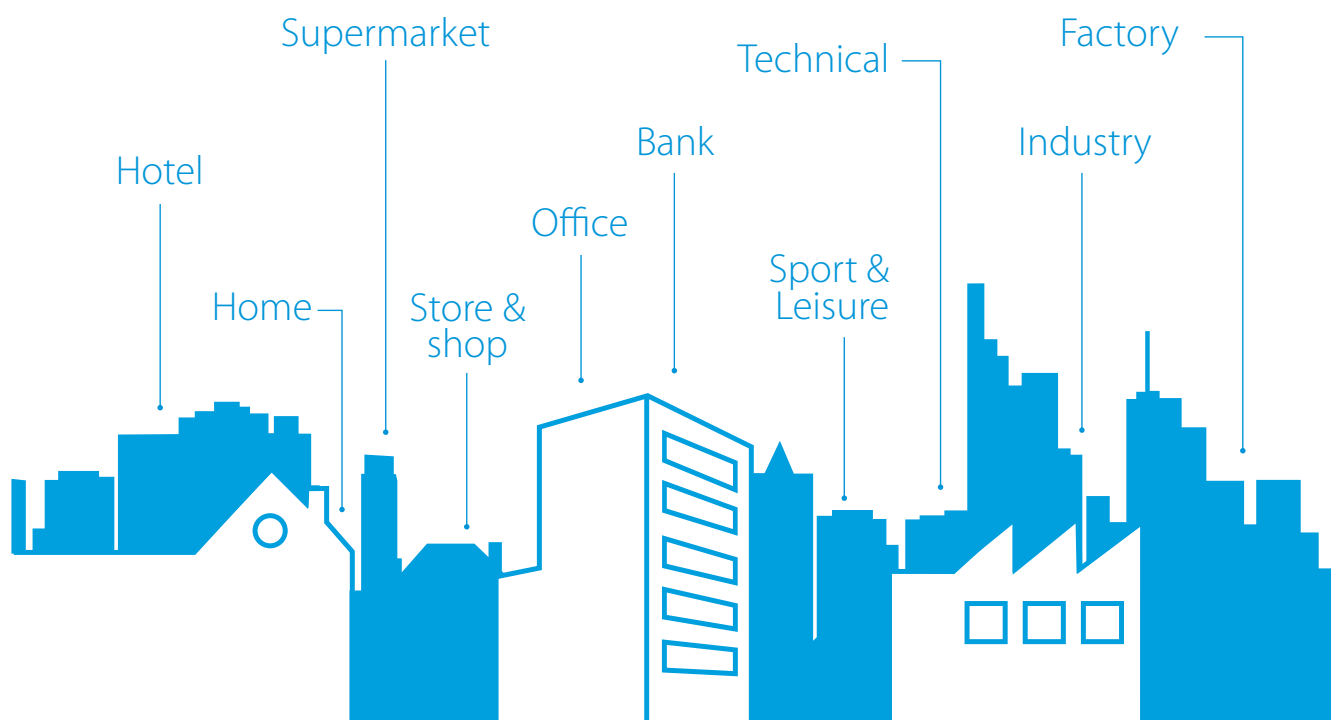
We will be smart and ready to do things differently.

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

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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.

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

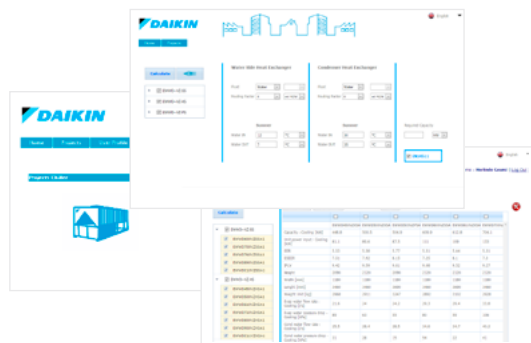
A user-friendly interface allows users to quickly create new projects, open and change existing projects or simply do a quick selection.

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/>



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**

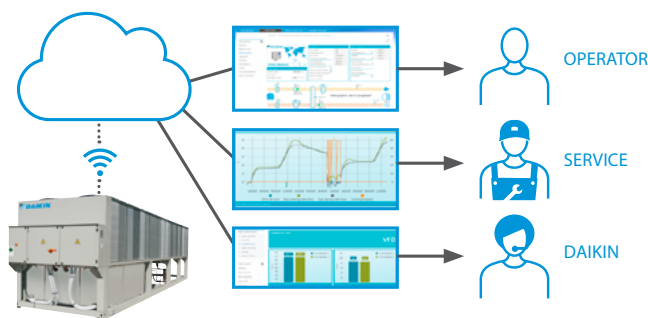
Daikin on Site



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



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.



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

BREEAM is a registered trademark of BRE (the Building Research Establishment Ltd. Community Trade Mark E5778551). The BREEAM marks, logos and symbols are the Copyright of BRE and are reproduced by permission.

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 CO₂ emissions it's not enough to simply make your equipment more efficient.

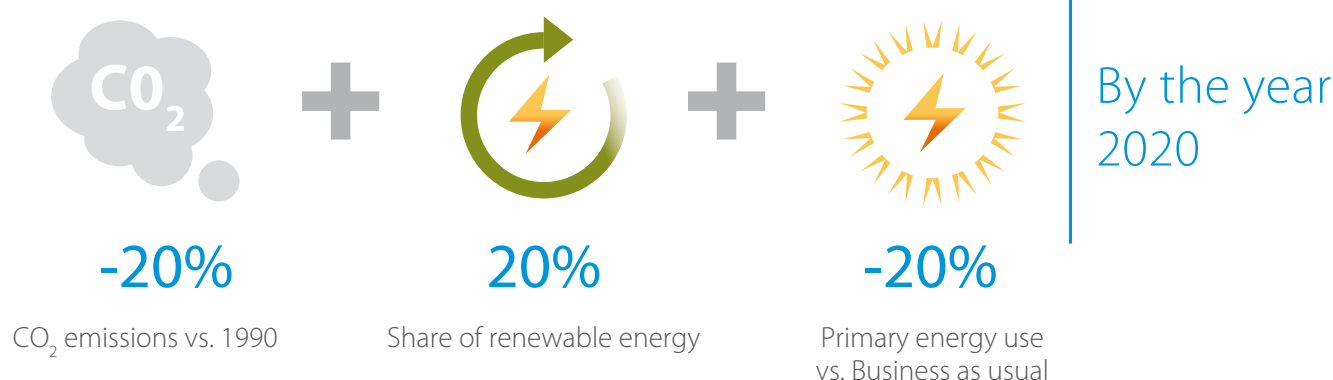
Seasonal efficiency,

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



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 its 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, cramage, 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.



- Soft starter
- Inverter

Compressor
upgrade



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

Day-to-day reliability and efficiency

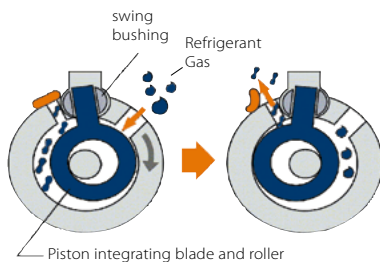
Inhouse development and manufacturing of compressors

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.

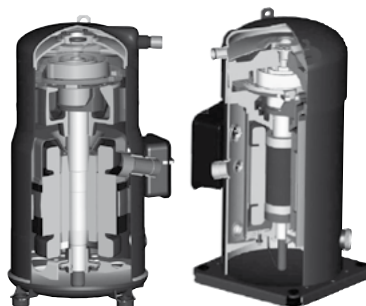


Scroll compressor for controlled capacity

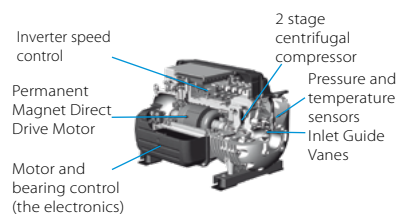
Being compact, the Daikin scroll compressor is used with R-407C and R-410A to provide constant reliability and high efficiency throughout its service life. Designed for small and medium capacities, the scroll compressors are used with air cooled and water cooled chillers.

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



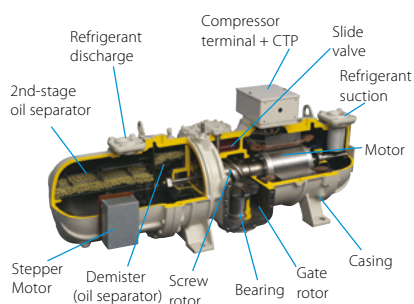
The innovative frictionless centrifugal compressor has an integrated VFD, as well as magnetic bearings, and delivers high levels of unit efficiency and reliability. The compressor's only moving part - the rotor shaft and impellers - are powered by the permanent magnetic direct-drive motor and kept levitated 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 (EWAD-TZB)

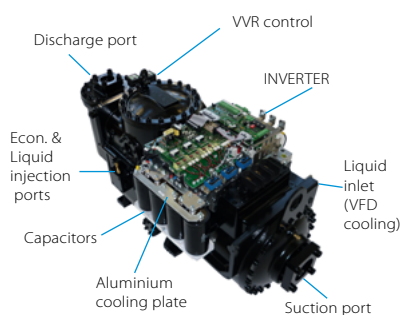
Characteristics:

- › Compressor and inverter fully designed by Daikin
- › Inverter integral to the compressor body
- › Inverter refrigerant cooled
- › VVR = Variable Volume Ratio 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

NEW







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

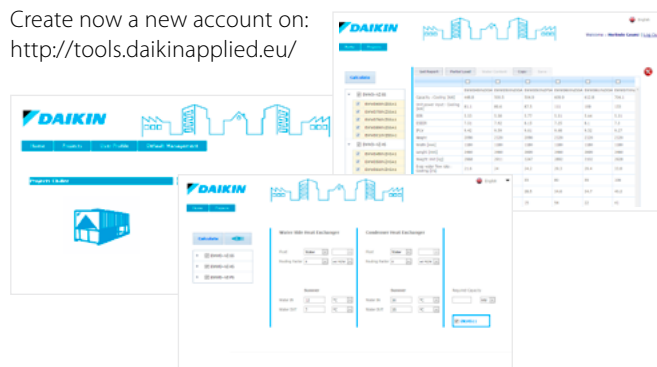
Web-based Chiller selection software

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

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<http://tools.daikinapplied.eu/>



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

Lower your running costs

with our energy saving options



Inverter technology

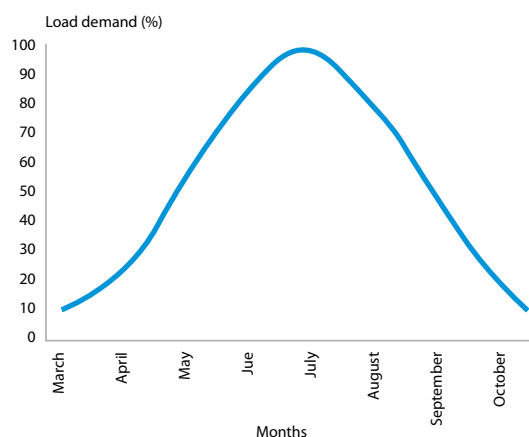
Traditional electric motors run at full load even when not needed (in chiller part load operations), resulting in energy waste.

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.

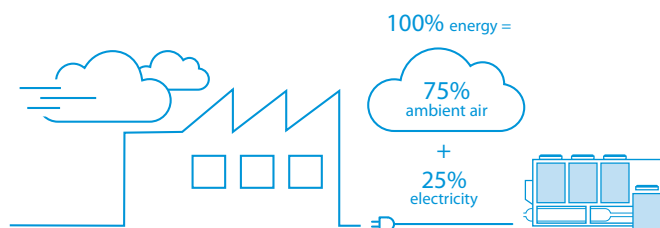
All these benefits will lead to a decrease in the overall running costs, resulting in a rapid return on investment.



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 where 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.

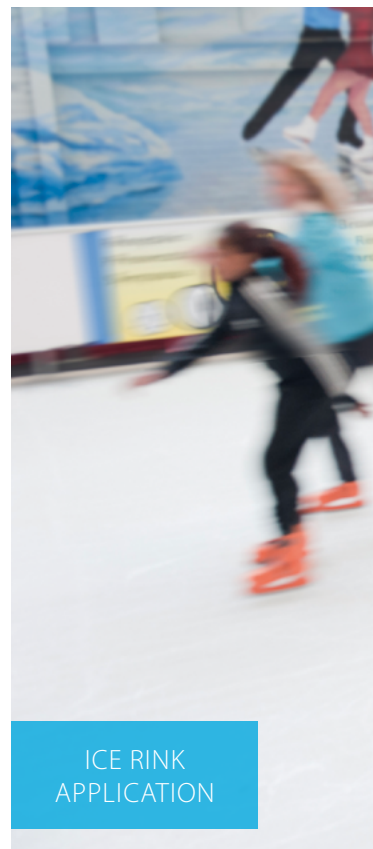
PRINTING COMPANY APPLICATION



AIR COOLED CHILLER INSTALLATION



AIR COOLED CHILLER INSTALLATION

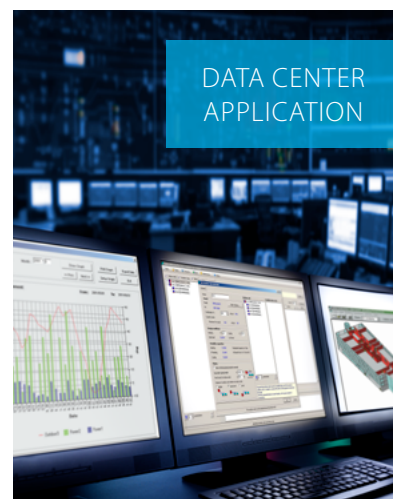


ICE RINK APPLICATION

EWAQ-E-
INSTALLATION



DATA CENTER
APPLICATION

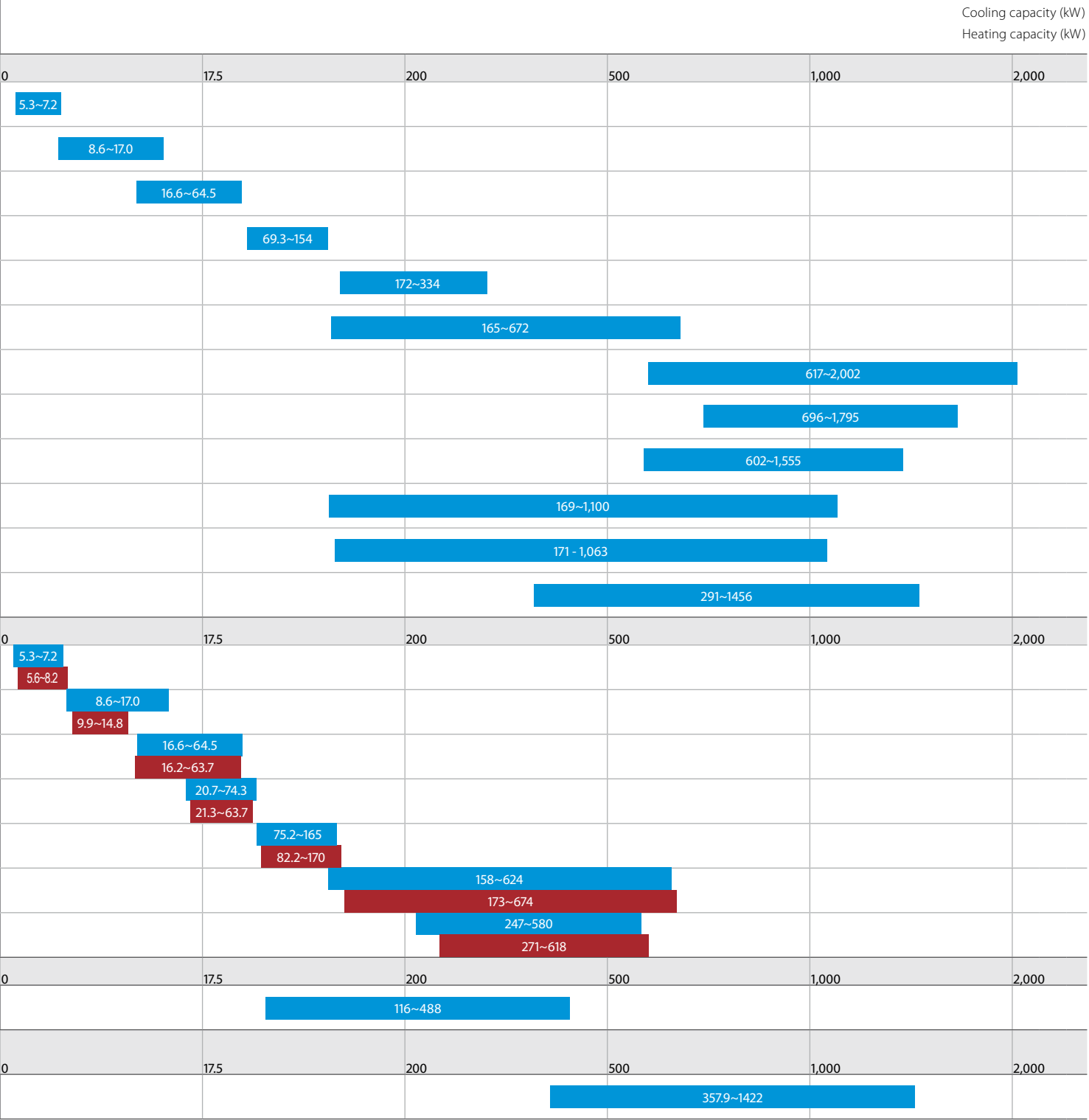


PROCESS COOLING
APPLICATION

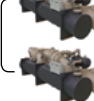


Products overview

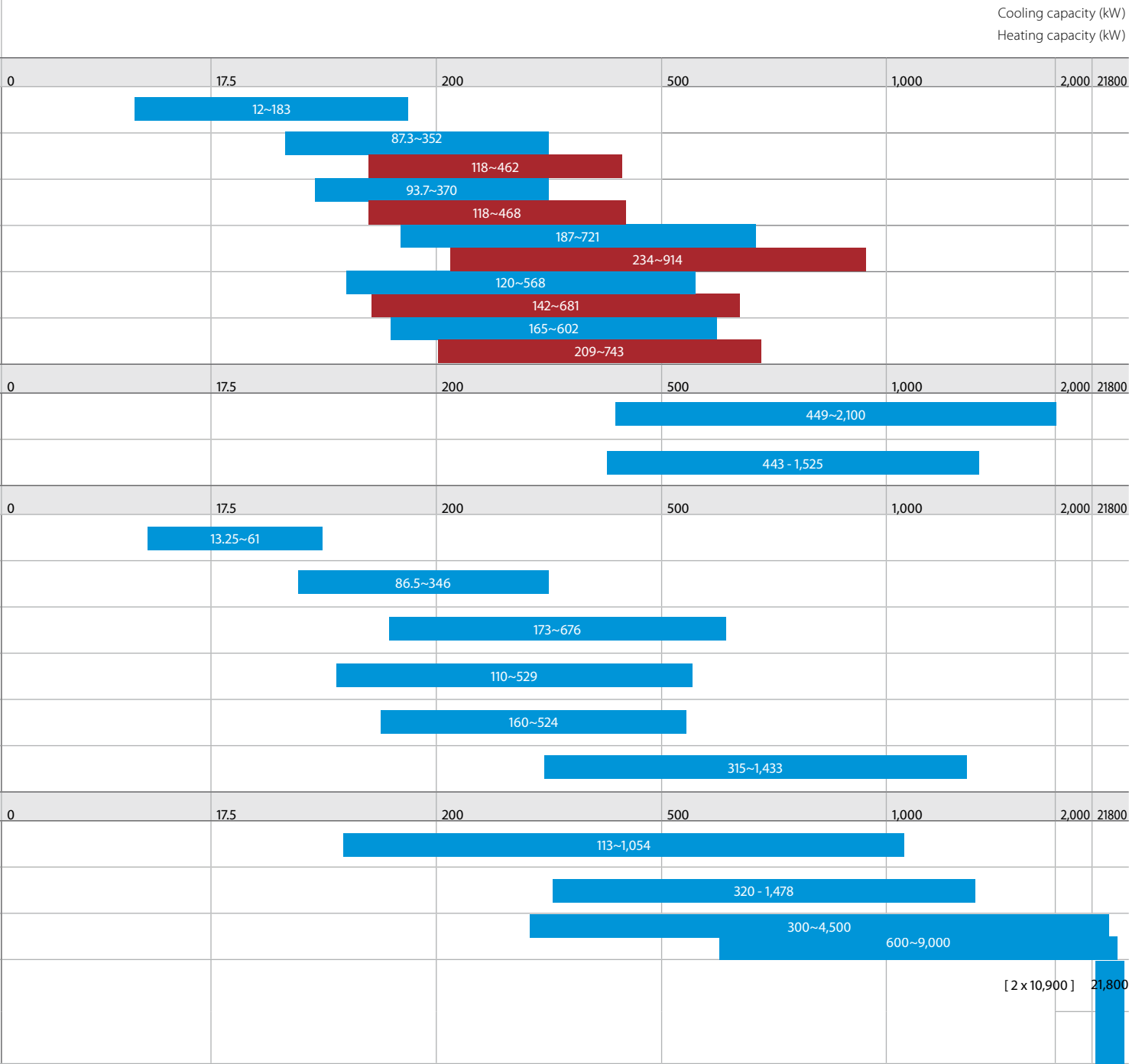
			Refrigerant type *	Refrigerant circuits	Inverter 	Free cooling 	Compressor			Water heat exchanger		Efficiency version			Sound version			
							 Swing	 Scroll	 Screw	Plate **	Single pass shell and tube	Standard	High	Premium	Standard	Low	Reduced	
Cooling only																		
EWAQ~BVP		NEW	R-410A	1							 BPHE							
EWAQ~ACV3/ACW1			R-410A	1							 BPHE							
EWAQ~CWN/P		NEW	R-410A	1-2							 BPHE							
EWAQ~G-			R-410A	1							 BPHE							
EWAQ~E-			R-410A	1														
EWAQ~F-			R-410A	2														
EWAD~C-			R-134a	2-3														
EWAD~CZ			R-134a	2-3														
EWAD~CF			R-134a	2														
EWAD~TZ B			R-134a	1-2														
EWAH~TZ B		NEW	R1234ze	1-2														
EWAD-T-		NEW	R-134a	2														
Heat pump																		
EWYQ~BVP		NEW	R-410A	1							 BPHE							
EWYQ~ACV3/ACW1			R-410A	1							 BPHE							
EWYQ~CWN/P		NEW	R-410A	1-2							 BPHE							
SEHVX-BW SERHQ-BW1		NEW	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														
Multipurpose unit																		
EWYD-4Z		NEW	R-134a	2														



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)														
EWQW-KBW1N NEW 	R-410a	1-2												
EWHQ~G- 	R-410A	1												
EWQW~G- 	R-410A	1												
EWQW~L- 	R-410A	2												
EWWD~J- 	R-134a	1-2												
EWWD~G- 	R-134a	1-2												
Water cooled chillers (Cooling only)														
EWWD-VZ 	R-134a	1							 Flooded					
EWWH-VZ NEW 	R1234ze	1							 Flooded					
Condenserless chillers														
EWLQ-KBW1N NEW 	R-410a	1-2					 BPHE							
EWLQ~G- 	R-410A	1												
EWLQ~L- 	R-410A	2												
EWLD~J- 	R-134a	1-2												
EWLD~G- 	R-134a	1-2												
EWLD~I- 	R-134a	1-2-3												
Water cooled centrifugal chillers														
EWWD~FZ 	R-134a	1						 Flooded						
EWWD-DZ NEW 	R-134a	1												
DWSC DWDC 	R-134a	1	optional					 Flooded						
6,000 RT CENTRIFUGAL 	R-134a	2 per chiller						 Flooded						

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





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

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EWAQ-E-XS/XL	32
EWAQ-E-XR	33
EWAQ-F-SS/SL	34
EWAQ-F-SR	35
EWAQ-F-XS/XL	36
EWAQ-F-XR	37

R-134a

EWAD-CZXS/XL	38
EWAD-CZXR	39
EWAD-CFXS/XL	40
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EWAD-TZSSB/SLB	44
EWAD-TZSRB	45
EWAD-TZXSB/XLB	46
EWAD-TZXRB	47
EWAD-TZPSB/TZPLB	48
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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.



› 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)	
ESEER					4.45		4.49		5.25		5.24	
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.	m³/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)
ESEER					4.31	4.30	4.33	4.43	4.44	4.36
Dimensions	Unit	Height		mm	1,435					
		Width		mm	1,420					
		Depth		mm	382					
Weight	Unit			kg	168					
Water heat exchanger	Type				Braze 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.	m³/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



› More information
about EWAQ-CWN



› More information
about EWAQ-CWP



Cooling Only				EWAQ-CWN/CWP	016	021	025	032	040	050	064	
Space cooling	A Condition 35°C	Pdc		kW	16.8(1)/17.0(2)	21.0(1)/21.2(2)	25.3(1)/25.5(2)	31.6(1)/31.8(2)	42.1(1)/42.3(2)	50.5(1)/50.7(2)	63.2(1)/63.4(2)	
	ηs,c			%	168(1)/184(2)	163(1)/178(2)	165(1)/180(2)	154(1)/163(2)	164(1)/168(2)	165(1)/172(2)	154(1)/161(2)	
Cooling capacity	Nom.			kW	16.8(1)/17.0(2)	21.0(1)/21.2(2)	25.3(1)/25.5(2)	31.6(1)/31.8(2)	42.1(1)/42.3(2)	50.5(1)/50.7(2)	63.2(1)/63.3(2)	
Power input	Cooling	Nom.		kW	5.93(1)/5.81(2)	7.61(1)/7.47(2)	9.60(1)/9.45(2)	12.9(1)/12.7(2)	15.1	19.2(1)/19.0(2)	25.7(1)/25.5(2)	
Capacity control	Method				Inverter controlled							
	Minimum capacity			%	25							
EER					2.84(1)/2.93(2)	2.77(1)/2.84(2)	2.63(1)/2.70(2)	2.45(1)/2.50(2)	2.79(1)/2.80(2)	2.63(1)/2.67(2)	2.46(1)/2.48(2)	
ESEER					4.37(1)/4.85(2)	4.26(1)/4.70(2)	4.17(1)/4.57(2)	3.87(1)/4.10(2)	4.28(1)/4.40(2)	4.18(1)/4.36(2)	3.87(1)/4.05(2)	
Dimensions	Unit	Height		mm	1,684							
		Width		mm	1,370				1,680		2,360	2,980
		Depth		mm	774				780			
Weight	Unit			kg	268(1)/280(2)	321(1)/332(2)		403(1)/414(2)	579(1)/604(2)		741(1)/765(2)	
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.	m³/min	171	185		233	370		466	
Sound power level	Cooling	Nom.		dBA	78				80	81		83
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							

(1) EWAQ-CWN: Version without pump. (2) EWAQ-CWP: Version with pump.



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
ESEER					4.11	4.23	4.04	4.12	3.91	4.20	4.06
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			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
ESEER					3.94	4.12	3.94	4.02	3.74	4.12	3.88
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
	current	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
ESEER					4.20	4.30	4.28	4.34	4.22	4.36
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-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
ESEER					4.18	4.29	4.27	4.31	4.21	4.33
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
	current	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, standard sound

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› More information
about EWAQ-E-XS



› More information
about EWAQ-E-XL



Cooling Only				EWAQ-E-XS/XL	180	200	230	260	320	340		
Space cooling	A Condition 35°C	Pdc		kW	177.6	199.9	226.1	262.7	314.7	334.2		
	ηs,c			%	152.1	153.0	154.7	155.8	162.0	156.4		
SEER					3.9			4.0	4.1	4.0		
Cooling capacity	Nom.			kW	177.6	199.9	226.1	262.7	314.7	334.2		
Power input	Cooling	Nom.		kW	58.01	65.35	73.82	86.18	103.00	109.70		
Capacity control	Method				Staged							
	Minimum capacity (XS)			%	50	21	50	22	30	23		
	Minimum capacity (XL)			%	43	43	22	25				
EER					3.062	3.058	3.063	3.048	3.055	3.047		
ESEER					4.02	4.11	3.91	4.18	4.17	4.14		
IPLV					4.50	4.68	4.51	4.83	4.76	4.66		
Dimensions	Unit	Height		mm	2,271				2,447	2,271	2,447	2,271
		Width		mm	1,224							
		Depth		mm	4,413		5,313		6,213			
Weight (XS)	Unit			kg	1,722	1,807	1,871	2,173	2,304	2,492		
	Operation weight			kg	1,734	1,819	1,885	2,188	2,318	2,507		
Weight (XL)	Unit			kg	1,876	1,965	2,032	2,370	2,507	2,705		
	Operation weight			kg	1,889	1,978	2,047	2,385	2,522	2,719		
Water heat exchanger	Type				Plate heat exchanger							
	Water volume			l	12		14					
	Water flow rate	Cooling	Nom.	l/s	8.5	9.6	10.8	12.6	15.1	16.0 / 16		
	Water pressure drop	Cooling	Nom.	kPa	27.2	34.2	35.3	46.7	46.8	53.9		
Air heat exchanger	Type				High efficiency fin and tube type							
Compressor	Type				Driven vapour compression							
	Quantity				2			3				
Fan	Type				Direct propeller							
	Quantity				4		5		6			
	Air flow rate	Nom.		l/s	21,845	21,148	26,874	25,884	32,953	32,065		
	Speed			rpm	900							
Sound power level (XS)	Cooling	Nom.		dBA	93.0	94.0	96.0	95.0	96.0	97.0		
Sound power level (XL)	Cooling	Nom.		dBA	91.0	92.0	93.0	92.0	93.0	94.0		
Sound pressure level (XS)	Cooling	Nom.		dBA	75.0	76.0			77.0			
Sound pressure level (XL)	Cooling	Nom.		dBA	73.0				74.0			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52							
	Water side	Cooling	Min.~Max.	°CDB	-13~18							
Refrigerant	Type/GWP				R-410A/2,088.0							
	Circuits	Quantity				1						
Refrigerant charge	Per circuit			kg	28.0	31.0	34.0	27.0	40.0	43.0	53.0	
Piping connections	Evaporator water inlet/outlet (OD)				3"							
Unit	Starting current	Max		A	445	557	576		639	653		
	Running current	Cooling	Nom.	A	103	115	129	151	179	190		
	Running current	Max		A	137	151	170	200	233	248		
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400							

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



EWAQ-E-XS/XL/XR

MicroTech III



› More information
about EWAQ-E-XR

Cooling Only				EWAQ-E-XR	170	190	220	260	300	320
Space cooling	A Condition 35°C	Pdc		kW	172.1	193.5	219.2	253.6	302.3	322.1
	ηs,c			%	155.8	158.3		163.1	170.3	163.8
SEER						4.0		4.2	4.3	4.2
Cooling capacity	Nom.			kW	172.1	193.5	219.2	253.6	302.3	322.1
Power input	Cooling	Nom.		kW	56.49	64.44	71.63	85.48	102.30	109.50
Capacity control	Method				Staged					
	Minimum capacity			%	50	43	25	33	22	23
EER					3.047	3.003	3.059	2.967	2.956	2.941
ESEER					4.45	4.55	4.33	4.65	4.62	4.54
IPLV					5.09		4.90	5.04	5.07	5.14
Dimensions	Unit	Height		mm	2,271					
		Width		mm	1,224					
		Depth		mm	4,413	5,313			6,213	
Weight	Unit			kg	1,970	2,064	2,134	2,489	2,632	2,840
	Operation weight			kg	1,982	2,076	2,148	2,503	2,647	2,855
Water heat exchanger	Type				Plate heat exchanger					
	Water volume			l	12		14			
	Water flow rate	Cooling	Nom.	l/s	8.2	9.3	10.5	12.1	14.5	15.4
	Water pressure drop	Cooling	Nom.	kPa	25.6	37.3	33.0 / 33	43.6	43.2	49.8
Air heat exchanger	Type				High efficiency fin and tube type					
Compressor	Type				Driven vapour compression					
	Quantity				2			3		
Fan	Type				Direct propeller					
	Quantity				4		5		6	
	Air flow rate	Nom.		l/s	16,743	16,285	20,618	20,056	25,243	24,604
	Speed			rpm	705					
Sound power level	Cooling	Nom.		dB(A)	85.0	86.0	87.0	86.0	88.0	89.0
Sound pressure level	Cooling	Nom.		dB(A)	66.0	67.0	68.0	67.0	68.0	69.0
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52					
	Water side	Cooling	Min.~Max.	°CDB	-13~18					
Refrigerant	Type/GWP				R-410A/2,088.0					
	Circuits	Quantity			1					
Refrigerant charge	Per circuit			kg	28.0	31.0	27.0	35.0	43.0	53.0
Piping connections	Evaporator water inlet/outlet (OD)				3"					
Unit	Starting current	Max		A	439	551	569		630	644
	Running current	Cooling	Nom.	A	101	113	126	150	178	189
	current	Max		A	131	145	162	193	224	239
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400					

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

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› More information
about EWAQ-F-SS



› More information
about EWAQ-F-SL



Cooling Only				EWAQ-F-SS/SL	210	230	250	280	320	350	360	400	410	480	550	610	
Space cooling	A Condition 35°C η _{s,c}	Pdc		kW	205.0	223.9	247.1	283.2	313.4	359.5		406.8		480.2	551.4	609.4	
				%	153.9	157.2	154.8	160.9	161.0	160.4	160.5	162.4	164.5	166.0	168.3	166.7	
SEER					3.9	4.0	3.9			4.1		4.2			4.3	4.2	
Cooling capacity	Nom.			kW	205.0	223.9	247.1	283.2	313.4	359.5		406.8		480.2	551.4	609.4	
Power input	Cooling	Nom.		kW	73.34	84.87	93.58	108.70	121.60	141.10		153.90		186.90	206.60	228.90	
Capacity control	Method				Staged												
	Minimum capacity (SS)			%	43	25	50	30	33	27	23	25	25	21	25	20	
	Minimum capacity (SL)			%	43	50		33		23	25	33	25	21		20	
EER					2.808	2.638	2.641	2.605	2.577	2.548		2.644		2.570	2.669	2.662	
ESEER					3.79	3.77	3.81	3.74	3.78	3.73	4.02	3.74	4.04	4.13	4.05	4.08	
IPLV					4.50	4.45	4.50	4.44	4.53	4.29	4.41	4.30	4.46	4.55	4.63	4.72	
Dimensions	Unit	Height		mm	2,271						2,221	2,447	2,397	2,221			
		Width		mm	1,224						2,258	1,224	2,258				
		Depth		mm	4,413			5,313		6,213	3,210	6,213	3,210	4,110	5,010		
Weight (SS)	Unit			kg	2,058	2,130		2,202	2,284	2,409	2,509	2,659	2,759	2,990	3,336	3,558	
	Operation weight			kg	2,070	2,142		2,216	2,298	2,424	2,524	2,699	2,799	3,036	3,382	3,604	
Weight (SL)	Unit			kg	2,297	2,373		2,449	2,535	2,666	2,766	2,968	3,068	3,315	3,679	3,912	
	Operation weight			kg	2,309	2,385		2,463	2,549	2,681	2,781	3,008	3,108	3,362	3,725	3,958	
Water heat exchanger	Type				Plate heat exchanger												
	Water volume			l	12			14				40		46			
	Water flow rate	Cooling	Nom.	l/s	9.9	10.7	11.8	13.6	15.0	17.2		19.5		23.0	26.4	29.2	
	Water pressure drop	Cooling	Nom.	kPa	36.7	43.4	52.9	56.0	69.3	29.9		32.3		34.7	45.8	56.0	
Air heat exchanger	Type				High efficiency fin and tube type												
Compressor	Type				Driven vapour compression												
	Quantity				4										6		
Fan	Type				Direct propeller												
	Quantity				4			5		6			8		10		
	Air flow rate	Nom.		l/s	21,845		21,148	27,306	26,435	32,767		32,513		43,690	54,612	52,870	
	Speed			rpm	900												
Sound power level (SS)	Cooling	Nom.		dBA	93.0	94.0	95.0			97.0						99.0	
Sound power level (SL)	Cooling	Nom.		dBA	91.0	92.0		93.0			94.0				95.0	96.0	
Sound pressure level (SS)	Cooling	Nom.		dBA	75.0		76.0			77.0	78.0				79.0		
Sound pressure level (SL)	Cooling	Nom.		dBA	73.0					74.0	75.0	74.0	75.0			76.0	
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52												
	Water side	Cooling	Min.~Max.	°CDB	-13~18												
Refrigerant	Type/GWP				R-410A/2,088.0												
	Circuits	Quantity			2												
Refrigerant charge	Total			kg	28.0		31.0	33.0	40.0	46.0		54.0		56.0	65.0	80.0	
Piping connections	Evaporator water inlet/outlet (OD)				3"												
Unit	Starting current	Max		A	349	404	419	476	505	621		649		634	768	810	
	Running	Cooling	Nom.	A	130	147	161	187	208	242		259	262	322	356	391	
	current	Max		A	160	176	191	225	254	286		314		383	433	474	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

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



EWAQ-F-SS/SL/SR

MicroTech III



› More information
about EWAQ-F-SR

Cooling Only				EWAQ-F-SR	200	220	240	270	300	330	340	370	380	460	530	580	
Space cooling	A Condition 35°C Pdc			kW	197.0	213.9	234.0	270.4	297.7	341.1		383.3		455.9	527.3	579.9	
	ηs,c			%	151.1	150.7	150.8	151.7	152.9	153.3	153.0	154.1	156.5	163.0	162.8	164.6	
SEER					3.9	3.8				3.9		4.0		4.1		4.2	
Cooling capacity	Nom.			kW	197.0	213.9	234.0	270.4	297.7	341.1		383.3		455.9	527.3	579.9	
Power input	Cooling	Nom.		kW	73.37	85.97	95.61	110.20	124.00	143.00		158.80		191.10	208.20	232.80	
Capacity control	Method				Staged												
	Minimum capacity			%	21	50	25	33	22	25	33	23		25	21	20	
EER					2.698	2.488	2.458	2.454	2.382	2.369		2.414		2.386	2.532	2.491	
ESEER					4.27	4.20	4.13	4.16	4.08	4.10	4.27	4.03	4.16	4.53	4.49	4.43	
IPLV					4.96	4.89	4.82	4.92	4.85	4.71	4.86	4.61	4.73	5.09	5.00	4.93	
Dimensions	Unit	Height	mm	2,271						2,221		2,447	2,397	2,221			
		Width	mm	1,224						2,258		1,224	2,258				
		Depth	mm	4,413				5,313		6,213	3,210	3,210	4,110	5,010			
Weight	Unit			kg	2,412		2,491	2,571	2,661	2,799	2,899	3,116	3,216	3,481	3,863	4,108	
	Operation weight			kg	2,424		2,504	2,585	2,676	2,814	2,914	3,156	3,256	3,527	3,909	4,154	
Water heat exchanger	Type				Plate heat exchanger												
	Water volume			l	12				14				40		46		
	Water flow rate	Cooling	Nom.	l/s	9.5	10.2	11.3	13.0	14.3	16.3		18.3		21.8	25.2	27.8	
		Cooling	Nom.	kPa	33.9	39.6	47.8	51.0	62.5	26.9		28.7		31.2	41.8	50.7	
Air heat exchanger	Type				High efficiency fin and tube type												
Compressor	Type				Driven vapour compression												
	Quantity				4										6		
Fan	Type				Direct propeller												
	Quantity				4				5		6				8	10	
	Air flow rate	Nom.	l/s	16,743		16,285	20,929	20,356	25,115		24,922		33,487	41,858	40,713		
				705													
Sound power level	Cooling	Nom.	dBA	85.0	86.0	87.0		89.0		90.0		89.0	91.0	92.0			
Sound pressure level	Cooling	Nom.	dBA	66.0	67.0	68.0		69.0		70.0		71.0	70.0	71.0	72.0		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~-52												
	Water side	Cooling	Min.~Max.	°CDB	-13~-18												
Refrigerant	Type/GWP				R-410A/2,088.0												
	Circuits	Quantity			2												
Refrigerant charge	Total			kg	32.0		36.0	38.0	40.0	46.0		54.0		56.0	65.0	80.0	
Piping connections	Evaporator water inlet/outlet (OD)				3"						4"						
Unit	Starting current	Max	A	344	398	414	469	498	613		641		623	754	796		
	Running	Cooling	Nom.	A	129	149	164	189	214	247		270		328	359	398	
	current	Max	A	155	170	186	218	247	277		305		372	419	460		
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

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› More information
about EWAQ-F-XS



› More information
about EWAQ-F-XL



Cooling Only				EWAQ-F-XS/XL				170	200	220	250	310	320	350	360	400	430	450	520	610	680
Space cooling	A Condition 35°C Pdc			kW	170.4	194.5	220.4	244.5			315.9		355.9		402.0	428.2	456.7	527.5	606.6	672.3	
	ηs,c			%	163.4	157.4	157.0	162.8	163.6		166.6	160.4	166.2	168.2	171.2	171.6	168.1		168.0		
SEER					4.2	4.0		4.1	4.2		4.1		4.2	4.3	4.4		4.3				
Cooling capacity	Nom.			kW	170.4	194.5	220.4	244.5	315.9		355.9		402.0	428.2	456.7	527.5	606.6	672.3			
Power input	Cooling	Nom.		kW	54.81	62.23	70.63	78.32	102.10		115.30		130.10	137.20	146.40	170.10	197.70	219.10			
Capacity control	Method			Staged																	
	Minimum capacity (XS)			%	25	21	50	22	27		23	25	33	25							
	Minimum capacity (XL)			%	25	43	25	22	33	27	33	27	23	25	21		25				
EER					3.108	3.125	3.120	3.122	3.094		3.087		3.097	3.122	3.120	3.101	3.069				
ESEER (XS)					3.90	4.10	3.95	4.08	4.04	4.30	4.05	4.33	4.24	4.27	4.23	4.35	4.30	4.23			
ESEER (XL)					3.86	4.06	3.90	4.04	4.00	4.30	4.01	4.33	4.19	4.22	4.18	4.30	4.25	4.18			
IPLV (XS)					4.56	4.76	4.67	4.70	4.67	4.60	4.64	4.80	4.72	4.65	4.61	4.95	4.82	4.68			
IPLV (XL)					4.51	4.71	4.60	4.66	4.61	4.60	4.58	4.80	4.66	4.60	4.55	4.90	4.77	4.62			
Dimensions	Unit	Height		mm	2,271				2,221		2,271		2,221								
		Width		mm	1,224				2,258		1,224		2,258								
		Depth		mm	4,413		5,313		6,213		3,210		6,213		4,110		5,010		5,910		
Weight (XS)	Unit			kg	1,688	1,958	2,210	2,339	2,500	2,600	2,632	2,732	2,744	2,845	2,861	3,569	3,667	4,054			
	Operation weight			kg	1,700	1,973	2,225	2,353	2,514		2,672	2,772	2,784	2,891	2,907	3,615	3,727	4,115			
Weight (XL)	Unit			kg	1,921	2,193	2,457	2,592	2,761	2,861	2,900	3,000	3,017	3,124	3,141	3,923	4,026	4,434			
	Operation weight			kg	1,909	2,207	2,472	2,607	2,776	2,876	2,940	3,040	3,057	3,170	3,187	3,970	4,087	4,494			
Water heat exchanger	Type			Plate heat exchanger																	
	Water volume			l	12	14				40				46				60			
	Water flow rate	Cooling	Nom.	l/s	8.2	9.3	10.5	11.7	15.1	17.0		19.3	20.5	21.8	25.3	29.0	32.2				
	Water pressure drop	Cooling	Nom.	kPa	25.1	26.6	33.5	42.1	22.2	23.3		30.5	28.6	29.6	41.1	44.1	55.2				
Air heat exchanger	Type			High efficiency fin and tube type																	
Compressor	Type			Driven vapour compression																	
	Quantity			4														6			
Fan	Type			Direct propeller																	
	Quantity			4		5		6				8				10		12			
	Air flow rate	Nom.	l/s	21,845	21,148	26,874	25,204	31,722		30,245		42,296	40,326		50,408		60,489				
	Speed		rpm	900																	
Sound power level (XS)	Cooling	Nom.	dBA	91.0	93.0	94.0	95.0	96.0				97.0	98.0				99.0	100.0			
Sound power level (XL)	Cooling	Nom.	dBA	90.0	91.0	92.0		93.0				95.0				96.0		97.0			
Sound pressure level (XS)	Cooling	Nom.	dBA	72.0	74.0	75.0	76.0	77.0	76.0	77.0	78.0				79.0	78.0	79.0				
Sound pressure level (XL)	Cooling	Nom.	dBA	71.0	73.0		74.0				75.0				76.0						
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~-52																
	Water side	Cooling	Min.~Max.	°CDB	-13~-18																
Refrigerant	Type/GWP			R-410A/2,088.0																	
	Circuits	Quantity		2																	
Refrigerant charge	Total			kg	28.0	31.0	33.0	40.0	52.0				62.0		74.0	72.0	83.0				
Piping connections	Evaporator water inlet/outlet (OD)			3"																	
Unit	Starting current	Max		A	281	338	353	408	480		509		629	643	657	642	768	818			
	Running current	Cooling	Nom.	A	110	117	128	141	181		202		229	240	254	300	343	379			
	current	Max		A	138	149	164	180	229		258		294	308	322	391	433	482			
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																

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



EWAQ-F-XS/XL/XR

MicroTech III



› More information
about EWAQ-F-XR

Cooling Only				EWAQ-F-XR	170	190	210	240	300	310	330	340	390	410	430	500	580	650		
Space cooling	A Condition 35°C	Pdc		kW	165.4	187.9	211.4	235.8	304.2		339.9		385.1	407.1	432.6	502.3	579.4	645.1		
	ηs,c			%	160.5	163.1	162.6	160.8	163.4	166.0	166.7	166.9	164.6	166.4	164.7	166.2	167.1	166.1		
SEER					4.1	4.2	4.1				4.2								4.3	4.2
Cooling capacity	Nom.			kW	165.4	187.9	211.4	235.8	304.2		339.9		385.1	407.1	432.6	502.3	579.4	645.1		
Power input	Cooling	Nom.		kW	52.97	61.16	68.70	77.28	101.30		116.60		128.10	136.20	146.20	169.60	199.60	218.70		
Capacity control	Method				Staged															
	Minimum capacity			%	25	50	25				33	27	33	21		25				
EER					3.123	3.073	3.077	3.051	3.003		2.916		3.007	2.988	2.959	2.963	2.903	2.950		
ESEER					4.53	4.64	4.51	4.60	4.53	4.68	4.44	4.63	4.68	4.64	4.54	4.82	4.69	4.65		
IPLV					5.25	5.04	5.19	5.27	5.04	5.16	5.01	4.89	5.04	4.90	4.99	5.13	5.15	5.18		
Dimensions	Unit	Height		mm	2,271				2,221		2,271	2,221								
		Width		mm	1,224				2,258		1,224	2,258								
		Depth		mm	4,413		5,313		6,213	3,210	6,213	3,210	4,110		5,010		5,910			
Weight	Unit			kg	2,004	2,303	2,580	2,722	2,900	3,000	3,045	3,145	3,168	3,280	3,298	4,120	4,228	4,655		
	Operation weight			kg	2,017	2,317	2,594	2,736	2,914	3,014	3,085	3,185	3,208	3,326	3,344	4,166	4,288	4,716		
Water heat exchanger	Type				Plate heat exchanger															
	Water volume			l	12	14				40				46				60		
	Water flow rate	Cooling	Nom.	l/s	7.9	9.0	10.1	11.3	14.5		16.3		18.4	19.5	20.7	24.0	27.7	30.9		
	Water pressure drop	Cooling	Nom.	kPa	23.6	24.8	31.4	39.1	20.6		21.3		28.4	26.4	27.1	38.0	40.2	50.8		
Air heat exchanger	Type				High efficiency fin and tube type															
Compressor	Type				Driven vapour compression															
	Quantity				4												6			
Fan	Type				Direct propeller															
	Quantity				4		5		6				8				10		12	
	Air flow rate	Nom.		l/s	16,743	16,285	20,618	19,522	24,428		23,426		32,570	31,235		39,044		46,852		
	Speed			rpm	705															
Sound power level	Cooling	Nom.		dB(A)	83.0	84.0	85.0	86.0	87.0				89.0		90.0	89.0	90.0	92.0		
Sound pressure level	Cooling	Nom.		dB(A)	64.0	65.0	66.0	67.0		68.0	67.0	68.0	69.0	70.0		69.0	70.0	71.0		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~-52															
	Water side	Cooling	Min.~Max.	°CDB	-13~-18															
Refrigerant	Type/GWP				R-410A/2,088.0															
	Circuits	Quantity			2															
Refrigerant charge	Total			kg	28.0	31.0	33.0	40.0	48.0	52.0		62.0				70.0	72.0	83.0		
Piping connections	Evaporator water inlet/outlet (OD)				3"					4"		3"		4"						
Unit	Starting current	Max		A	276	332	346	401	472		501		618	632	646	628	754	801		
	Running current	Cooling	Nom.	A	107	116	125	139	180		204		226	239	255	300	347	380		
	current	Max		A	132	143	157	173	220		249		283	296	310	377	419	465		
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

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Cooling Only				EWAD-CZXS/XL	740	830	900	C10	C11	C12	C13	C14	C15	C16	C17	C18							
Space cooling	A Condition 35℃	Pdc		kW	734.12	828.54	898.15	1,033	1,090.04	1,232	1,303.04	1,444.04	1,538	1,616.03	1,701	1,795							
	ηs,c			%	191	196.2	197	202.2	197.8	205.8	204.6	206.2	201.4	199.8	203	207.4							
SEER					4.85	4.98	5	5.13	5.02	5.22	5.19	5.23	5.11	5.07	5.15	5.26							
Cooling capacity	Nom.			kW	734.1	828.5	898.2	1,033	1,090	1,232	1,303	1,444	1,538	1,616	1,701	1,795							
Power input	Cooling	Nom.		kW	238	269.5	309.2	343.3	379.9	404.3	446.6	493.7	538.4	564.3	595.9	618.7							
Capacity control	Method				Variable																		
	Minimum capacity			%	20									13									
EER					3.072	3.075	2.904	3.008	2.869	3.047	2.919	2.926	2.856	2.863	2.855	2.9							
ESEER					4.72	4.89	4.88	4.91	4.7	4.51	4.73	4.83	4.59	4.62	4.61								
IPLV					5.68	5.72	5.79	5.73	5.56	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		7,625			8,525			10,325			11,625		12,525		13,425		14,325		
Weight (XS)	Unit			kg	6,000	6,620	6,870	7,440		8,570		8,970		9,600		9,940		11,370		12,190		12,920	
	Operation weight			kg	6,250	6,860	7,110	7,880		8,960		9,360		9,980		10,320		12,220		13,040		13,790	
Weight (XL)	Unit			kg	6,280	6,900	7,150	7,720		8,850		9,250		9,880		10,220		11,790		12,610		13,340	
	Operation weight			kg	6,530	7,140	7,390	8,160		9,240		9,640		10,260		10,600		12,640		13,460		14,210	
Water heat exchanger	Type				Shell and tube																		
	Water volume			l	248	241		441		383		374		850		871							
	Water flow rate	Cooling	Nom.	l/s	35.2	39.7	43	49.5	52.3	59	62.4	69.2	73.7	77.4	81.5	86							
	Water pressure drop	Cooling	Nom.	kPa	82.7	58.2	64.6	63.2	70.3	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				12	14		16		20		22	24		26		28						
	Air flow rate	Nom.		l/s	65,026	75,863		86,701		108,376		119,214	130,051	129,455	140,143	151,130							
	Speed			rpm	900																		
Sound power level (XS)	Cooling	Nom.		dBA	102	103				104				106									
Sound power level (XL)	Cooling	Nom.		dBA	99	100				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	146	162		200		250			280	320	340	350							
	Circuits	Quantity			2																		
Piping connections	Evaporator water inlet/outlet (OD)				2									3									
Unit	Starting current	Max		A	377	420	451	501	540	590	626	709	772	848	899	949							
	Running current	Cooling	Nom.	A	406	442	485	537	591	636	698	769	837	881	931	970							
	current	Max		A	529	584	632	697	755	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



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Cooling Only				EWAD-CZXR	700	790	850	980	C10	C11	C12	C13	C14	C15	C16	C17	
Space cooling	A Condition 35°C	Pdc		kW	696.24	785.91	848.82	972.4	1,027.02	1,166	1,231.01	1,327	1,437	1,539	1,624.03	1,706.04	
	η _{s,c}			%	195.4	209	195.4	214.2	195.4	219	202.2	206.2	199.8	211.4	214.6	220.2	
SEER					4.96	5.3	4.96	5.43	4.96	5.55	5.13	5.23	5.07	5.36	5.44	5.58	
Cooling capacity	Nom.			kW	696.2	785.9	848.8	972.4	1,027	1,166	1,231	1,327	1,437	1,539	1,624	1,706	
Power input	Cooling	Nom.		kW	245.7	274.4	317.8	351.4	392.9	411.8	458	492	523.4	585.5	616.7	638.1	
Capacity control	Method				Variable												
	Minimum capacity			%	20										13		
EER					2.833	2.864	2.671	2.768	2.613	2.831	2.681	2.692	2.745	2.628	2.634	2.673	
ESEER					5.23	5.39	5.36	5.41	5.11	5.15	4.8	5.12	5.22	5.1	4.83	4.77	
IPLV					6.14	6.32	6.37	6.34	6.05	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		7,625		8,525		10,325		11,625		12,525		13,425	14,325
Weight	Unit			kg	6,470	7,100	7,360	7,950		9,120	9,530	10,180	10,530	12,150	12,990	13,740	
	Operation weight			kg	6,720	7,340	7,600	8,390		9,500	9,920	10,550	10,910	13,000	13,840	14,610	
Water heat exchanger	Type				Shell and tube												
	Water volume			l	248	241		441		383		374		850		871	
	Water flow rate	Cooling	Nom.	l/s	33.4	37.6	40.7	46.6	49.2	55.8	58.9	63.6	68.8	73.7	77.8	81.7	
	Water pressure drop	Cooling	Nom.	kPa	76	53.9	59.4	57.8	63.8	43.2	47.6	56.5	65.8	57.3	63.2	60.1	
Air heat exchanger	Type				High efficiency fin and tube type												
					Driven vapour compression												
Compressor	Type																
	Quantity				2										3		
Fan	Type				Direct propeller												
	Quantity				12	14		16		20		22	24		26	28	
	Air flow rate	Nom.		l/s	49,843	58,151		66,458		83,072		91,380	99,687		107,994	116,301	
	Speed			rpm	700												
Sound power level	Cooling	Nom.		dBA	95	96				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	146	162		200		250			280	320	340	350	
	Circuits	Quantity			2												
Piping connections	Evaporator water inlet/outlet (OD)				2										3		
Unit	Starting current	Max		A	369	410	442	490	528	576	606	686	756	825	873	921	
	Running current	Cooling	Nom.	A	416	449	498	549	610	647	709	782	859	912	960	998	
		Max		A	512	565	612	675	732	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

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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)	
ESEER					3.44		3.52	3.78	3.50	3.74	3.54	3.88	3.78	4.01	3.96	3.85	
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	HeightxWidthxDepth			mm	2,565 x2,480 x6,300		2,565 x2,480 x7,200	2,565x2,480x8,100		2,565 x2,480 x9,000		2,565x2,480x10,800				
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)				DN150PN16(168.3mm)					DN200PN16(219.1mm)				DN250PN16(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	
	current	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



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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															
	Minimum capacity				%	Stepless 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)	
ESEER					3.59	3.66	3.89	3.62	3.83	3.63	4.13	3.89	4.09	4.02	3.92	
IPLV					4.09	4.15	4.16	4.20	4.10	4.08	4.42	4.37	4.42		4.28	
Dimensions	Unit	HeightxWidthxDepth			mm	2,565x2,480x6,300	2,565x2,480x7,200	2,565x2,480x8,100		2,565x2,480x9,000		2,565x2,480x10,800				
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)					DN150PN16(168.3mm)					DN200PN16(219.1mm)			DN250PN16(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		580	647	645	717	738	800	862
	current	Max			A	462	493	542		585	649	708	783	847		901
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.

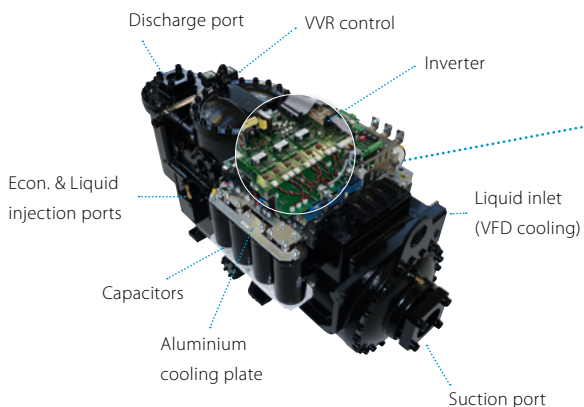
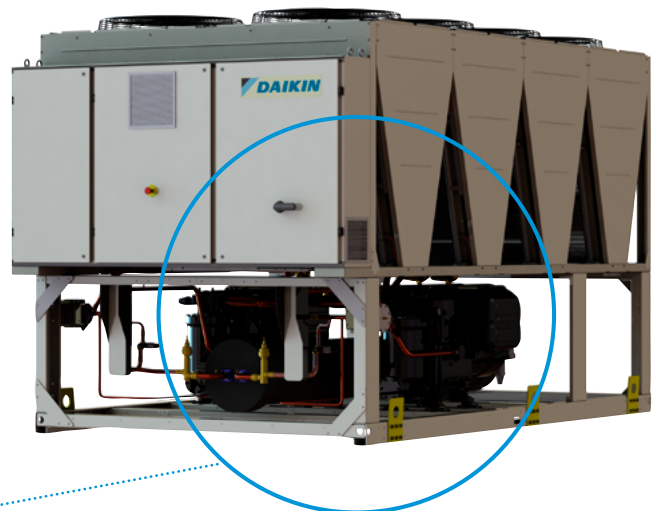
EWAD-TZB screw inverter chiller High efficiency in comfort and process cooling



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.

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



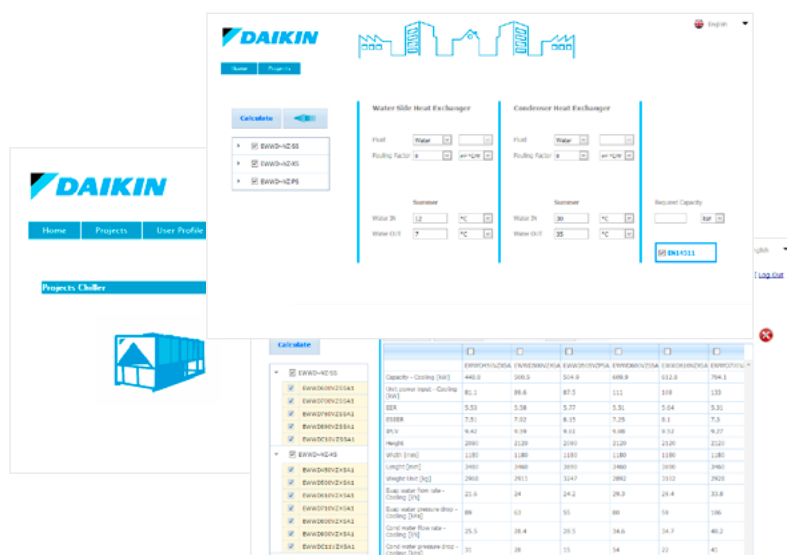
Web-based chiller selection software

A user-friendly interface allows users to quickly create new projects, open and change existing 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/>



Why choose EWAD-TZB?

High efficiencies both at full load and part load: ESEER up to 5.5 & EER up to 3.6

- › 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

Unrivalled 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

- › Daikin EWAD-TZB Screw Inverter Chiller

Check on
You Tube

www.youtube.com/DaikinEurope



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									
ESEER					4.37	4.46	4.30	4.4	4.42	4.5	4.46	4.44	4.49	4.54	4.59	4.63	4.7	4.43		4.44		4.51									
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	6,632	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				Driven vapour compression																										
Fan	Quantity				1				2																						
	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		
Sound power level (SSB)	Speed			rpm	700																	900									
					96				97				98				99				100				101	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)				3"				4"				5"				6"				168.3mm	219.1mm									
Unit	Running	Cooling	Nom.	A	102	123	188	177	188	200	246	372	366	361	377	396	414	429	501	528	563	597									
	current	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



› 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
ESEER					4.37	4.46	4.3	4.4	4.42	4.5	4.44	4.43	4.47	4.53	4.61	4.6	4.68	4.8	4.85	4.83	4.98	
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																	
				mm	2,258																	
				mm	2,283																	
		Depth			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																	
	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																	
	Water side	Cooling	Min.~Max.	°CDB	-8~18																	
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			TC02Eq	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)			3"	4"																	
Unit	Running	Cooling	Nom.	A	102	123	188	177	188	200	247	374	368	363	378	398	416	422	496	530	561	599
	current	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-TZXSXB/XLB				190	220	240	290	320	360	420	450	540	570	610	660	680	770	850	910	C10	C11	
Space cooling	A Condition 35℃	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				
ESEER					5.11	5.06	4.99	5.09	5.13	5.14	5.09	5	5.07		5.11	5.15		5.09		5.13	5.15	5.22				
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																					
		Width		mm	2,258																					
		Depth		mm	2,482																					
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			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			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			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				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)				3"		4"		5"				6"				168.3 mm		219.1 mm							
Unit	Running	Cooling	Nom.	A	110	113	186		192	225	231	371.0	383	392	390	387	395	394	451	469	500	537				
	current	Max	A	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

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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 ηs,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																						
SEER				%	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																						
ESEER					5.11	5.06	4.99	5.09	5.13	5.12	5.09	4.99	5.04	5.05	5.13	5.07		5.09	5.13	5.15	5.22																							
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																																							
		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.		dB(A)	88				89				90				91				92				94				95															
Sound pressure level	Cooling	Nom.		dB(A)	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			TC02Eq	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)				3"		4"				5"				6"				168.3mm				219.1mm																					
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	383	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
- › 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-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
ESEER					5.54	5.51	5.42	5.4	5.35	5.48		5.45	5.5	5.42	5.59	5.54	5.55
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)				3"		4"			6"			168.3 mm		219.1mm		
Unit	Running	Cooling	Nom.	A	101	104	172	177		208	211	346	258	298	316	375	424
	current	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 ηs,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	
				%	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	
ESEER					5.55	5.52	5.27	5.16	5.2	5.32	5.21	5.38	5.5	5.42	5.59	5.54	5.55	
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			TC02eq	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)				3"		4"			6"			168.3 mm		219.1mm			
Unit	Running	Cooling	Nom.	A	101	104	172	177		209	212	347	259	300	317	377	426	
	current	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

- › 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	
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	1,051.0	1,135.0	1,268.0	1,352.0	1,456.0		
	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				
SEER	3.8					4.1		4.2		4.1											
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			
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			
Capacity control	Method				Fixed																
	Minimum capacity			%	12.5																
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		
ESEER					3.86	3.73	3.74	3.87	3.95	4.05	3.87	3.89	3.82	3.89	3.74	3.77		3.79	3.8		
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		
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					
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						
	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						
Water heat exchanger	Type			Shell and tube																	
	Water volume			l	89	181	164	170	164	298	300	330	481	461	492	470	461				
	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
	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
Air heat exchanger	Type			Microchannel																	
Compressor	Type			Driven vapour compression																	
	Quantity			2																	
Fan	Type			Direct propeller, on/off fans																	
	Quantity			6		8		10		12		14		16		18	20				
	Air flow rate			Nom.	33,129		44,172		55,214		66,257		77,300		88,343		99,386	110,429			
	Speed			rpm	900																
Sound power level (SSB)	Cooling	Nom.	dBA	98	98		101					102			103						
Sound power level (SLB)	Cooling	Nom.	dBA	98	94	95	97			96		97	98	97	98						
Sound pressure level (SSB)	Cooling	Nom.	dBA	78		81			83		84			84							
Sound pressure level (SLB)	Cooling	Nom.	dBA	78	74	75	77		79		80			79							
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					
	Circuits			Quantity	2																
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				
Piping connections	Evaporator water inlet/outlet (OD)				114.3		139.7			6"			8"								
Unit	Starting current	Max		A	253	264	306	470	493		574	645	697	705	773	797	877	925	933		
	Running current	Cooling	Nom.	A	76.76	94.25	195.63	144.71	148.11	171.97	370.76	423.34	486.54	534.13	572.46	610	692.46	727.9	763.34		
	current	Max		A	211	242	272	345	373	395	492	536	621	675	709	768	838	897	956		
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																

Air cooled screw inverter 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	
Space cooling	A Condition 35°C	Pdc		kW	684.7	786.9	909.0	967.5	1,014.0	1,099.0	1,216.0	1,302.0	1,408.0	
	ηs,c			%	161.3	161.1	161.0	161.2	161.3	161.1	161.2			
SEER					4.1									
Cooling capacity	Nom.			kW	684.7	786.9	909	967.5	1,014	1,099	1,216	1,302	1,408	
Power input	Cooling	Nom.		kW	236.6	270.7	314.8	351.1	373	398	453.8	478.7	504.2	
Capacity control	Method				Fixed									
	Minimum capacity			%	12.5									
EER					2.894	2.907	2.89	2.755	2.719	2.762	2.681	2.722	2.793	
ESEER					3.89	3.9	3.85	3.79	3.73	3.76	3.75	3.77	3.81	
IPLV					4.9	4.56	4.57	4.45	4.39	4.44	4.43	4.49		
Dimensions	Unit	Height		mm	2,537									
		Width		mm	2,282									
		Depth		mm	5,976		6,876			7,776		8,676	9,576	
Weight	Unit			kg	5,527	5,525	5,858		6,229	6,520	6,780	8,084	8,426	
	Operation weight			kg	5,825		6,188		6,710	6,981	7,272	8,554	8,887	
Water heat exchanger	Type				Shell and tube									
	Water volume			l	298	300	330		481	461	492	470	461	
	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	
	Water pressure drop	Cooling	Nom.	kPa	49.2	30.7	37.5	42.2	39	30.8	31.7	41.6	57.7	
Air heat exchanger	Type				Microchannel									
Compressor	Type				Driven vapour compression									
	Quantity				2									
Fan	Type				Direct propeller, on/off fans									
	Quantity				12		14			16		18	20	
	Air flow rate	Nom.		l/s	52,172		60,868			69,563		78,258	86,954	
	Speed			rpm	760									
Sound power level	Cooling	Nom.		dBA	91				92			93		
Sound pressure level	Cooling	Nom.		dBA	73	74	73	74						
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	93.6		109.2		124.8		140.4	156		
	Circuits	Quantity			2									
Refrigerant charge	Per circuit			TCO2Eq	66.92		78.08		89.23		100.39	111.54		
Piping connections	Evaporator water inlet/outlet (OD)				6"						8"			
Unit	Starting current	Max		A	567	638	693	701	766	786	868	914	922	
	Running current	Cooling	Nom.	A	376.73	431.76	499.71	554.32	592.7	629.99	720.93	755.84	790.74	
		Max		A	478	523	605	659	693	750	820	876	933	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400									

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

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- › 2 or 3 independent refrigerant circuits for outstanding reliability and maximum safety for maintenance
- › Extremely wide range from 290kW to over 2 MW
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- › 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						
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	1,008.0	1,077.0	1,164.0	1,308.0	1,390.0	1,454.0						
	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							
SEER					3.9	4.0		4.1		4.3	4.4	4.3	4.2	4.3	4.2			4.3		4.2							
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						
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						
Capacity control	Method				Fixed																						
	Minimum capacity			%	12.5																						
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							
ESEER					4.01	3.98	4.15	3.97	3.96	4.11	4.13	4.05	3.94	3.95	4.05	3.95	3.89	3.88	3.95	3.94	3.87						
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						
Dimensions	Unit	Height		mm	2,537																						
					Width	2,258																					
						Depth	2,282																				
							4,130																				
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						
					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				
Water heat exchanger	Type				Shell and tube																						
					Water volume	l	134	129		170	164	170	289	300	330	461	492	481	470								
							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
											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
Air heat exchanger	Type				Microchannel																						
Compressor	Type				Driven vapour compression																						
	Quantity				2																						
Fan	Type				Direct propeller, on/off fans																						
	Quantity				8	10	12	16	18	20	22																
	Air flow rate	Nom.		l/s	44,172	55,214	66,257	88,343	99,386	110,429	121,472																
	Speed			rpm	900																						
Sound power level (XSB)	Cooling	Nom.		dBA	98	101	99	100	101																		
Sound power level (XLB)	Cooling	Nom.		dBA	95	97	98	99																			
Sound pressure level (XSB)	Cooling	Nom.		dBA	78	81	82	81	82	81	82																
Sound pressure level (XLB)	Cooling	Nom.		dBA	75	77	79	80	79	80	79	80	79														
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													
	Circuits	Quantity			2																						
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													
Piping connections	Evaporator water inlet/outlet (OD)				139.7mm								6"				8"										
Unit	Starting current	Max		A	253	296	311	399	422	475	493	574	645	703	705	778	802	883	931	939							
	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						
	current	Max		A	248	260	277	299	322.00	351	378	401	492	536	626	680	719	778	848	907	961						
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																						

Air cooled screw inverter 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	
Space cooling	A Condition 35°C	Pdc		kW	707.6	807.8	922.1	982.4	1,053.0	1,164.0	1,273.0	1,355.0	1,412.0	
	ηs,c			%	165.4	163.9	167.5	165.1	165.4	166.3	165.9	165.5	163.8	
SEER					4.2		4.3	4.2						
Cooling capacity	Nom.			kW	707.6	807.8	922.1	982.4	1,053	1,164	1,273	1,355	1,412	
Power input	Cooling	Nom.		kW	237.3	272.1	301.1	338.9	348	374.7	426.4	452	490.7	
Capacity control	Method				Fixed									
	Minimum capacity			%	12.5									
EER					2.982	2.968	3.063	2.898	3.018	3.108	2.986	2.998	2.879	
ESEER					3.94	3.87	4.07	3.85	3.91	3.89	3.96		3.88	
IPLV					4.92	4.56	5.1	4.57	4.65	4.67	4.65	4.69	4.62	
Dimensions	Unit	Height		mm	2,537									
		Width		mm	2,282									
		Depth		mm	5,976		7,776		8,676		9,576		10,476	
Weight	Unit				kg	5,315	5,525	6,121		7,798	8,126	8,386	8,751	8,765
	Operation weight			kg	5,604	5,825	6,451		8,259	8,587	8,878	9,232	9,235	
Water heat exchanger	Type				Shell and tube									
	Water volume			l	289	300	330		461		492	481	470	
	Water flow rate	Cooling	Nom.	l/s	33.8	38.6	44.1	47	50.4	55.8	60.9	64.8	67.6	
	Water pressure drop	Cooling	Nom.	kPa	31.6	34.9	39.2	43.9	49.8	60.5	34.4	38.5	48.2	
Air heat exchanger	Type				Microchannel									
Compressor	Type				Driven vapour compression									
	Quantity				2									
Fan	Type				Direct propeller, on/off fans									
	Quantity				12		16		18		20		22	
	Air flow rate	Nom.		l/s	52,172		69,563		78,258	110,429	86,954	95,649		
	Speed			rpm	760					900		760		
Sound power level	Cooling	Nom.		dB(A)	91		92		93					
Sound pressure level	Cooling	Nom.		dB(A)	73	74	73	74	73			74		
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	93.6		124.8		140.4		156		171.6	
	Circuits	Quantity				2								
Refrigerant charge	Per circuit			TCO2Eq	66.92		89.23		100.39	111.54		122.69		
Piping connections	Evaporator water inlet/outlet (OD)				6"				8"					
Unit	Starting current	Max		A	567	638	696	701	769	802	871	917	925	
	Running current	Cooling	Nom.	A	379.04	433.58	477.39	533.75	552.3	584.5	675.01	711.6	769.5	
		Max		A	478	523	608	662	699	778	826	882	936	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400									

New Daikin chiller range with inverter screw compressor and new ecological refrigerant

New EWAH-TZB and EWWH-VZ series with HFO R-1234ze(E) refrigerant



- 1 100% Daikin compressor
- 2 Single Screw design
- 3 Inverter technology
- 4 Variable Volume Ratio
- 5 Efficient
- 6 Environmental friendly
- 7 Long term solution

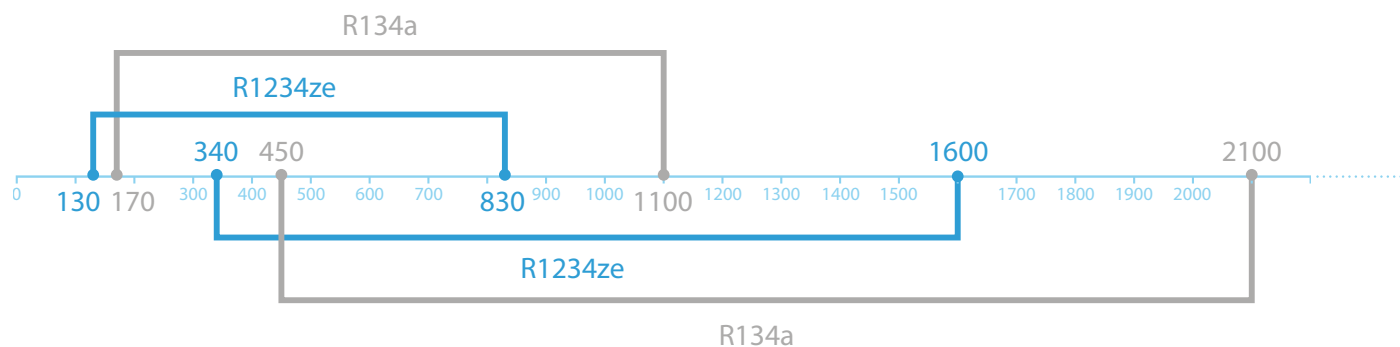
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☒ F-GAS

High energy efficiency and wide capacity range



EWAH-TZB

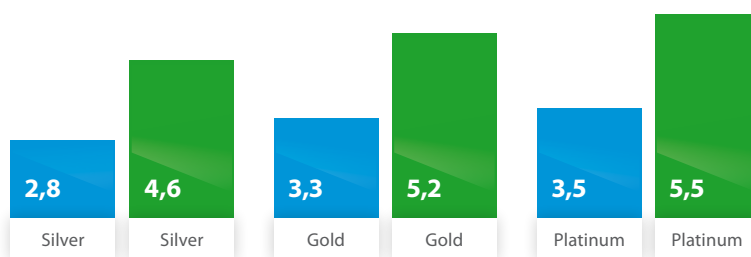


EWWH-VZ

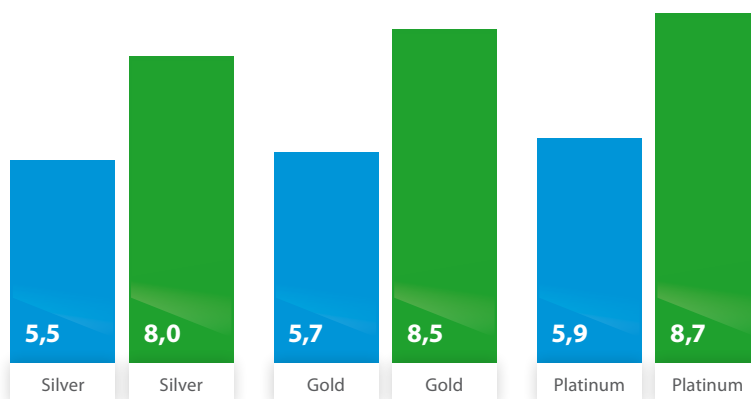
Efficiency (EER)



EWAH-TZB



EWWH-VZ



Full load efficiency Part load efficiency

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
ESEER					4.45	4.52	4.75		4.56	4.55	4.51	4.6	4.57	4.74	4.7	4.91	4.85	4.83	4.81	4.99	
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																
	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																
	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 (SLB)	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 Max	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	
Power supply	Phase/Frequency/Voltage			Hz/V	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	

Air cooled screw inverter chiller, standard efficiency, reduced sound



› 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				
ESEER					4.45	4.52	4.75		4.56	4.52	4.49	4.58	4.55	4.71	4.67	4.89	4.83	4.81	4.83	4.97				
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																			
					2,258																			
					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.		dB(A)	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.		dB(A)	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

› 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
ESEER					5.14	5.21	4.95	5.16	4.94	4.95	5.06	5.05		5.08	4.96	5.13	5.23	5.26	5.32	5.08
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-TZXS8/XLB/XRB

Microtech III

› More information about EWAH-TZXR8



Cooling Only				EWAH-TZXR8				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			
ESEER					5.14	5.21	4.95	5.16	4.93	4.94	5.03		5.02	5.06	4.95	5.09	5.21	5.24	5.31	5.07			
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.		dB(A)	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.		dB(A)	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	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			
	current	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

› 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
ESEER					5.18	5.46	5.23	5.34		5.54
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.		dB(A)	100.3	100.8	103.24	104.21	104.24	103.7
Sound power level (PLB)	Cooling	Nom.		dB(A)	95.48	96	98.71	99.63	99.73	98.5
Sound pressure level (PSB)	Cooling	Nom.		dB(A)	78.80		81.80	82.40	82.2	81.10
Sound pressure level (PLB)	Cooling	Nom.		dB(A)	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	Cooling	Nom.	A	175.85	205.4	233.82	272.98	316.97	364.19
	current	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



› 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
ESEER					5.17	5.44	5.22	5.31		5.53
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
	Water pressure drop		Cooling	Nom.	kPa	24.4	14.9	15.3	18	24.2
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.		dB(A)	92.37	92.94	94.94	95.73	95.97	94.72
Sound pressure level	Cooling	Nom.		dB(A)	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					
Unit	Running	Cooling	Nom.	A	176.22	205.83	234.54	273.8	317.85	365.38
	current	Max		A	272	319	350	424	491	536
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.



› 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
ESEER						4.45	4.49	5.25	5.24
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					Braze 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.	m³/min		53			72
		Heating	Nom.	m³/min		47.0			49.3
Sound power level	Cooling	Nom.		dBA		63	64	65	69
	Heating	Nom.		dBA					
Sound pressure level	Cooling	Nom.		dBA		48	49	52	53
	Heating	Nom.		dBA					
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)		
ESEER							4.31		4.30		4.33		4.43		4.44		4.36		
Space heating	Average climate water outlet 35°C	General	η _s (Seasonal space heating efficiency)		%	126		131		134		126		134		130			
			SCOP			3.22		3.34		3.41		3.22		3.41		3.30			
	Dimensions	Unit	Height	mm		A+													
				Width	mm		1,435												
					Depth	mm		1,420											
						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														
Fan	Quantity				1														
	Type				Propeller fan														
	Quantity				2														
	Air flow rate	Cooling	Nom.	m³/min		96.0		100		97.0				-					
Fan motor	Speed	Heating	Nom.	m³/min		90.0								-					
		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/CWP

BRC21A52

› More information
about EWYQ-CWN



› More information
about EWYQ-CWP



Heating & Cooling				EWYQ-CWN/CWP	016	021	025	032	040	050	064		
Cooling capacity	Nom.				kW	16.8(1)/17.0(2)	21.0(1)/21.2(2)	25.3(1)/25.5(2)	31.6(1)/31.8(2)	42.1(1)/42.3(2)	50.5(1)/50.7(2)	63.2(1)/63.3(2)	
	Max.				kW	20.0(1)/20.2(2)	25.0(1)/25.2(2)	30.1(1)/30.3(2)	37.6(1)/37.8(2)	50.1(1)/50.3(2)	60.1(1)/60.3(2)	75.2(1)/75.3(2)	
Heating capacity	Nom.				kW	16.8(1)/16.6(2)	21.0(1)/20.8(2)	25.1(1)/24.9(2)	31.4(1)/31.2(2)	41.9(1)/41.7(2)	50.3(1)/50.1(2)	62.9(1)/62.7(2)	
Power input	Cooling	Nom.				kW	5.93(1)/5.81(2)	7.61(1)/7.47(2)	9.60(1)/9.45(2)	12.9(1)/12.7(2)	15.1	19.2(1)/19.0(2)	25.7(1)/25.5(2)
	Heating	Nom.				kW	5.60(1)/5.49(2)	6.89(1)/6.76(2)	8.74(1)/8.58(2)	10.8(1)/10.6(2)	13.7	17.5(1)/17.4(2)	21.6(1)/21.4(2)
Capacity control	Method					Inverter controlled							
	Minimum capacity					25							
EER						2.84(1)/2.93(2)	2.77(1)/2.84(2)	2.63(1)/2.70(2)	2.45(1)/2.50(2)	2.79(1)/2.80(2)	2.63(1)/2.67(2)	2.46(1)/2.48(2)	
COP						3.00(1)/3.02(2)	3.05(1)/3.07(2)	2.87(1)/2.91(2)	2.91(1)/2.93(2)	3.06(1)/3.03(2)	2.87(1)/2.88(2)	2.91(1)/2.93(2)	
ESEER						4.37(1)/4.85(2)	4.26(1)/4.70(2)	4.17(1)/4.57(2)	3.87(1)/4.10(2)	4.28(1)/4.40(2)	4.18(1)/4.36(2)	3.87(1)/4.05(2)	
 Space heating	Average climate water outlet 35℃	General	η _{sp} (Seasonal space heating efficiency)	%	147(1)/144(2)	148(1)/154(2)	138(1)/139(2)	135(1)/138(2)	149	139	135(1)/138(2)		
			SCOP	%	3.75(1)/3.68(2)	3.78(1)/3.93(2)	3.53(1)/3.55(2)	3.45(1)/3.53(2)	3.80	3.55	3.45(1)/3.53(2)		
			Seasonal space heating eff. class		A+		A++		A+				
Dimensions	Unit	HeightxWidthxDepth			mm	1,684x1,370x774			1,684x1,680x774		1,684x2,360x780		1,684x2,980x780
Weight	Unit				kg	268(1)/280(2)	321(1)/332(2)	321(1)/332(2)	403(1)/414(2)	579(1)/604(2)	579(1)/604(2)	741(1)/765(2)	
Water heat exchanger	Type					Braze plate							
	Water flow rate	Cooling	Nom.		l/min	48	60	72	90	120	145	181	
	Water pressure drop	Cooling	Total		kPa	8	10	14	8	10	14	8	
	Water volume					l	3		5	6		9	
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.		m³/min	171	185	233	370	466			
		Heating	Nom.		m³/min	171	185	233	370	466			
Sound power level	Cooling	Nom.				dBA	78	80	81	83			
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					kg/TCO ₂ Eq	7.60/15.9			9.60/20.0	7.60/15.9		9.60/20.0	
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							

(1) EWYQ-CWN: Version without pump. (2) EWYQ-CWP: Version with pump.

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	
			ns (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)	
Sound power level		Heating	Nom.	l/min	60 (2)	90 (2)	120 (2)	181 (2)	
	Nom.			dBA	63				
	Operation range	Cooling	Ambient	Min.~Max.	°CDB	-5~43			
			Water side	Min.~Max.	°CDB	5 (4)~20			
Heating		Ambient	Min.~Max.	°CDB	-15~35				
Refrigerant		Water side	Min.~Max.	°CDB	25~50				
	Type / GWP				R-410A / 2,087.5				
	Circuits	Quantity			1				
	Control				2				
Water circuit	Piping connections diameter			inch	Electronic expansion valve				
	Piping			inch	1-1/4" (female)				
	Water pressure drop	Cooling	Nom.	kPa	2" (female)				
	Total water volume			l	17 (7)	24 (7)	19 (7)	29 (7)	
Power supply	Phase/Frequency/Voltage			Hz/V	4.2 (8)	5.8 (8)	7.9 (8)	11.0 (8)	
					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			
Fan	Type				Hermetically sealed scroll compressor				
	Type				Axial				
	Quantity				1				
	Air flow rate	Cooling	Nom.	m³/min	185	2			
	Heating	Nom.	m³/min	185	233				
					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 DB/WB 7°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 sufficient defrost energy for all applications, however, this volume can be multiplied by 0,66 if the heating setpoint 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	
ESEER						3.90	3.94	3.97	4.03	3.92	3.96		
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)	SCOP	%	131	129	142	140	142	138	140	
						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					Brazen 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					R-410A / 2,087.5						
Refrigerant charge	Type / GWP					1							
	Circuits	Quantity											
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												
	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	
ESEER						3.85	3.90	3.79	3.92	3.76	3.86	3.79	
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)	%	SCOP	131	129	142	140	142	138	140	
						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		
ESEER						3.73	3.89	3.81	3.71	4.07	4.19	3.99	3.96	4.14	4.20	3.98	4.06		
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)	SCOP	%	128	134	129		143	147	-							
						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				Scroll compressor														
Fan	Quantity				4												6		
	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		
			TCOeq		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"														
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														Staged		
	Minimum capacity					Step											
EER				%	25.0											17.0	
ESEER					4.33	4.39	4.38	4.19	4.63	4.68	4.37	4.44	4.60	4.83	4.50	4.62	
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) SCOP	%													
					128	134	129		143	147	-						
					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	
				TCO2eq	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

- › Optimum ESEER values
- › 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			
ESEER						3.93	3.92	3.89	3.95	3.89	3.90	3.82	3.91	3.89	4.18	4.01		3.93			
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	η _s (Seasonal space heating efficiency)	SCOP	%	125							-								
						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 _{eq}	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		
ESEER						4.06	4.04	4.03	4.17	4.09	4.04	4.01	4.06	4.02	4.18	4.16	4.10	3.98		
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)	SCOP	%	125							-							
						3.21		3.20		3.21			-							
Dimensions	Unit	Height	Width	Depth	mm	2,335										2,280				
						2,254														
						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.			dB(A)	94		95										97		
Sound pressure level	Cooling	Nom.			dB(A)	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 _{eq}	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					3~/50/400														

EWYD-4Z

Air to water

Multipurpose unit



4-pipe system solution with full inverter technology
For independent and simultaneous cooling and heating all year round

1

Top class efficiency

Total Energy Ratio up to 8.8

Full inverter technology:
the best choice for
every application

Daikin single screw compressor with integrated inverter and Variable Volume Ratio Technology

The inverter integrated in the compressor is refrigerant cooled:

- › Safe and robust cooling system, totally independent from outdoor ambient conditions and air quality.
- › Suitable even for aggressive installation such as industrial or desert application.

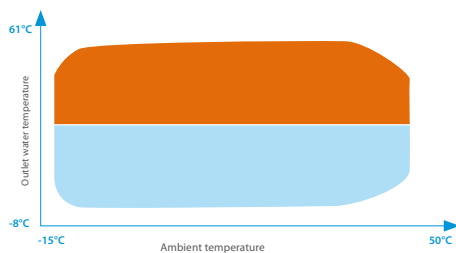
The volume ratio will change by moving the sliding valves.

VVR changes the point at which the gas leaves the compressor, and therefore changes the pressures at discharge which will be optimal at any condition.

2

Application flexibility

Wide operating envelope for cooling and heating



Extra capacity in Boosted operation

Thanks to the variable speed drive of the compressor is possible to benefit of an "extra" capacity during the coldest days in winter or the hottest days in summer.

Rapid Restart functionality

In case of power failure DAIKIN 4Z is able to restart in less than 30 sec. The UPS installed in electrical box keeps the unit controller always powered. Is also possible to give, if needed, priority to restore the cooling or the heating load.

3

Best solution for simultaneous cooling and heating

Big multipurpose buildings, hotels, hospital are just a few examples of application for multipurpose units

Check on
YouTube

www.youtube.com/DaikinEurope

› Daikin EWYD-4Z
Multipurpose Unit

› Daikin EWYD-4Z
Multipurpose Unit –
Behind the scenes



Air to Water Multipurpose unit

- › Best solution for independent and simultaneous cooling and heating all year round
- › Top class efficiency due to Full inverter technology
- › Daikin single screw compressor with integrated inverter and Variable Volume Ratio Technology
- › High Efficiency Inverter fans with optimized geometry ensures the best ratio between airflow and power input.
- › Wide operating envelope for cooling and heating with extra capacity in Boosted operation and Rapid Restart functionality



› More information
about EWYD-4ZXS



EWYD-4ZXS

Multipurpose			EWYD-4ZXS			400	450	500	550	600	650	700	800	900	C10	C11	C12	C13	C14	
SEER				4.77	5.02	5.11	5.14	5.17	5.21	5.25	5.28	5.35	5.45	5.85	5.82	5.86	5.85			
ηsc				187.8	197.8	201.4	202.6	203.8	205.4	207.0	208.2	211.0	215.0	231.0	229.8	231.4	231.0			
SCOP				3.68	3.84	3.82	3.80	3.80	-	-	-	-	-	-	-	-	-			
ηs				144.2	150.4	149.6	149.0	148.8	-	-	-	-	-	-	-	-	-			
Air to water – cooling only (1)	Nominal Rated Capacity – Gross	kW	403	453	504	552	604	655	705	804	903	1003	1103	1207	1307	1429				
	EER – Gross		3.19	3.28	3.27	3.28	3.27	3.23	3.41	3.40	3.32	3.30	3.35	3.31	3.34	3.20				
	Nominal Rated Capacity – Net	kW	402	452	503	551	602	654	703	802	901	1001	1101	1204	1303	1423				
	EER – Net		3.17	3.25	3.25	3.25	3.24	3.19	3.37	3.36	3.28	3.27	3.32	3.28	3.29	3.15				
Air to water – heating only (2)	Nominal Rated Capacity – Gross	kW	402	453	502	549	599	653	701	800	899	1001	1099	1199	1307	1423				
	COP – Gross		3.34	3.53	3.47	3.49	3.47	3.40	3.58	3.57	3.58	3.55	3.64	3.59	3.46	3.48				
	Nom. Rated Capacity – Net	kW	403	453	504	551	601	655	702	803	902	1003	1102	1202	1312	1429				
	COP – Net		3.33	3.52	3.45	3.47	3.45	3.38	3.55	3.54	3.55	3.53	3.62	3.56	3.43	3.45				
Water to water – Cooling + heating (3)	Nom. Rated Capacity COOLING – Gross	kW	314	356	395	432	476	513	551	632	708	794	869	950	1028	1120				
	Nom. Rated Capacity HEATING – Gross	kW	402	454	502	548	602	651	702	801	895	997	1095	1202	1299	1421				
	TER – Gross		8.14	8.32	8.35	8.43	8.57	8.44	8.30	8.47	8.57	8.82	8.72	8.55	8.59	8.44				
	Nom. Rated Capacity COOLNG – Net	kW	313	356	394	430	475	511	549	630	705	792	867	947	1023	1114				
	Nom. Rated Capacity HEATING – Net	kW	402	455	503	549	603	653	704	803	898	999	1097	1205	1303	1426				
	TER – Net		8.03	8.19	8.20	8.24	8.38	8.23	8.10	8.26	8.34	8.65	8.52	8.33	8.31	8.13				
Dimensions	Height	mm	2455																	
	Width	mm	2240																	
	Length	mm	5775		6675		7575		8475		9425	10375	11325	12275	13225	14175				
Weight	Unit Weight	kg	6600	6710	7480	7480	8250	9020	9020	9020	9790	10560	11330	12100	12870	14500				
	Operating Weight	kg	6898	7008	7982	7960	8828	9598	9607	9598	10350	11522	12262	13032	13772	15402				
	Cold/Hot side water connections	mm	139.7			168.3						219.1								
Sound level	Sound Power – Cooling (4)	dB(A)	99		99		100		102		103		103		104					
	Sound Pressure – Cooling at 1 m (5)	dB(A)	78	77		78		79	80		80		81		81					
	Sound Power – Heating (4)	dB(A)	98		99		100		101	102		103		104						
	Sound Pressure – Heating at 1 m (5)	dB(A)	78	77		78		79	80		80		81		81					
Water heat exchangers	Cold Side	Water Volume	149		262	240	298		307	280		481		451						
		Water flow rate (1)	l/s	19.2	21.6	24.0	26.3	28.8	31.3	33.6	38.3	43.1	47.8	52.6	57.6	62.4	68.2			
		Water pressure drop (1)	kPa	13.7	16.9	20.5	31.4	28.0	32.7	33.9	31.5	38.9	26.4	31.3	36.4	51.9	62.5			
	Hot Side	Water Volume	149		240		280		298		280	481	451							
		Water flow rate (2)	l/s	19.4	21.9	24.3	26.6	29.0	31.6	33.9	38.7	43.5	48.4	53.2	58.0	63.2	68.8			
		Water pressure drop (2)	kPa	13.0	16.1	23.9	27.6	30.0	35.3	32.8	42.5	37.4	23.4	34.4	40.2	48.7	55.8			
Fan	Quantity	n	10		12		14		16		18	20	22	24	26	30				
	Nominal air flow (1)	l/s	38889		46667		54444		62222		70000		77778	85556	93333	101111	116667			
Compressor	Type		Single screw																	
	Oil charge	l	26						36											
	Quantity	n.	2																	
Refrigerant circuit	Refrigerant type		R134a																	
	Refrigerant charge	kg	170	175	190	210	235	255	265	285	325	380	400	410	465	495				
	Circuits	n.	2																	
Power Supply	Phase/Frequency/Voltage	Hz/V	3~/50/400																	

Fluid: Water; Fouling factor = 0

(1) Operation in Air to water "Cooling only" mode rated at 35°C ambient temperature, 50% R.H.; Entering water temperature 12°C, Outlet water temperature 7°C.

(2) Operation in Air to water "Heating only" mode rated at 7°C ambient temperature, 85% R.H.; Entering water temperature 40°C, Outlet water temperature 45°C.

(3) Operation in Water to water "Cooling + Heating" mode rated with water flowing on cold and hot heat exchangers determined respectively at conditions (1) and (2) - Chilled water outlet temperature 7°C, Hot water outlet temperature 45°C.

(4) Sound power level are referred to condition (1) for Cooling and (2) for Heating. The data are measured in accordance with ISO 9614 and Eurovent 8/1 for Eurovent certified units.

The certification refers only to the overall sound power level.

(5) Sound pressure is calculated from the sound power level and it is for information only and not considered binding.

All the above data are referred to standard units without options and are subject to change without notice.

Air to Water Multipurpose unit

- › Best solution for independent and simultaneous cooling and heating all year round
- › Top class efficiency due to Full inverter technology
- › Daikin single screw compressor with integrated inverter and Variable Volume Ratio Technology
- › High Efficiency Inverter fans with optimized geometry ensures the best ratio between airflow and power input.
- › Wide operating envelope for cooling and heating with extra capacity in Boosted operation and Rapid Restart functionality

› More information
about EWYD-4ZXL



Multipurpose			EWYD-4ZXL			400	450	500	550	600	650	700	800	900	C10	C11	C12	C13	C14
SEER						4.91	5.14	5.20	5.31	5.34	5.36	5.44	5.52	5.53	5.65	6.11	6.06	6.15	6.05
ηsc						193.4	202.6	205.0	209.4	210.6	211.4	214.6	217.8	218.2	223.0	241.4	239.4	243.0	239.0
SCOP						4.08	4.35	4.25	4.33	4.23	-	-	-	-	-	-	-	-	-
ηs						160.2	171.2	166.9	170.3	166.0	-	-	-	-	-	-	-	-	-
Air to water – cooling only (1)	Nominal Rated Capacity – Gross	kW	399	449	500	548	599	650	697	794	892	991	1091	1192	1291	1411			
	EER – Gross		3.30	3.35	3.38	3.35	3.36	3.34	3.51	3.44	3.35	3.33	3.41	3.37	3.40	3.26			
	Nominal Rated Capacity – Net	kW	399	448	499	546	598	649	696	792	890	989	1088	1189	1287	1405			
	EER – Net		3.28	3.33	3.35	3.32	3.33	3.30	3.47	3.40	3.31	3.30	3.37	3.33	3.35	3.21			
Air to water – heating only (2)	Nominal Rated Capacity – Gross	kW	398	448	498	544	594	647	694	795	895	994	1087	1186	1296	1415			
	COP – Gross		3.61	3.80	3.75	3.75	3.75	3.68	3.87	3.88	3.91	3.77	3.85	3.84	3.69	3.78			
	Nom. Rated Capacity – Net	kW	398	449	499	545	595	649	696	798	897	996	1090	1189	1301	1420			
	COP – Net		3.59	3.78	3.73	3.73	3.72	3.66	3.84	3.85	3.88	3.75	3.83	3.81	3.66	3.74			
Water to water – Cooling + heating (3)	Nom. Rated Capacity COOLING – Gross	kW	311	352	395	432	470	513	545	632	709	795	870	939	1028	1121			
	Nom. Rated Capacity HEATING – Gross	kW	398	448	502	548	593	651	694	801	896	998	1095	1188	1299	1422			
	TER – Gross		8.13	8.30	8.35	8.44	8.61	8.45	8.30	8.48	8.57	8.82	8.73	8.53	8.60	8.45			
	Nom. Rated Capacity COOLNG – Net	kW	310	351	394	431	468	512	543	630	706	793	867	936	1024	1115			
	Nom. Rated Capacity HEATING – Net	kW	398	449	503	550	595	653	696	804	898	1000	1098	1192	1304	1427			
	TER – Net		8.02	8.17	8.20	8.25	8.42	8.24	8.10	8.26	8.35	8.66	8.53	8.32	8.33	8.15			
Dimensions	Height	mm	2455																
	Width	mm	2240																
	Length	mm	5775		6675		7575		8475		9425	10375	11325	12275	13225	14175			
Weight	Unit Weight	kg	6600	6710	7480		8250		9020		9790	10560	11330	12100	12870	14500			
	Operating Weight	kg	6898	7008	7982	7960	8828	9598	9607	9598	10350	11522	12262	13032	13772	15402			
	Cold/Hot side water connections	mm	139.7		168.3						219.1								
Sound level	Sound Power – Cooling (4)	dB(A)	93	92	93		94		96		97		98						
	Sound Pressure – Cooling at 1 m (5)	dB(A)	72	71	72		73		74	75									
	Sound Power – Heating (4)	dB(A)	92			93	93	94	95	96		97		98					
	Sound Pressure – Heating at 1 m (5)	dB(A)	72	71		72		74	75	74	75								
Water heat exchangers	Cold Side	Water Volume	149		262	240	298		307	280		481		451					
		Water flow rate (1)	l/s	19.0	21.4	23.9	26.1	28.6	31.0	33.3	37.9	42.6	47.3	52.0	56.9	61.6	67.3		
		Water pressure drop (1)	kPa	13.5	16.7	20.2	30.9	27.6	32.3	33.2	30.8	38.0	25.8	30.7	35.6	50.8	61.1		
	Hot Side	Water Volume	149		240		280		298		280	481	451						
		Water flow rate (2)	l/s	19.2	21.7	24.1	26.3	28.7	31.3	33.6	38.5	43.3	48.1	52.6	57.4	62.7	68.4		
		Water pressure drop (2)	kPa	12.8	15.8	23.5	27.1	29.5	34.7	32.3	41.9	37.1	23.2	33.8	39.5	48.0	55.2		
Fan	Quantity	n	10	10	12	12	14	16	16	16	18	20	22	24	26	30			
	Nominal air flow (1)	l/s	34722		41667		48611		55556		62500		69444	76389	83333	90278	104167		
Compressor	Type		Single screw																
	Oil charge	l	26						36										
Refrigerant circuit	Quantity	n.	2																
	Refrigerant type		R134a																
	Refrigerant charge	kg	170	175	190	210	235	255	265	285	325	380	400	410	465	495			
	Circuits	n.	2																
Power Supply	Phase/Frequency/Voltage	Hz/V	3~/50/400																

Fluid: Water; Fouling factor = 0

(1) Operation in Air to water "Cooling only" mode rated at 35°C ambient temperature, 50% R.H.; Entering water temperature 12°C, Outlet water temperature 7°C.

(2) Operation in Air to water "Heating only" mode rated at 7°C ambient temperature, 85% R.H.; Entering water temperature 40°C, Outlet water temperature 45°C.

(3) Operation in Water to water "Cooling + Heating" mode rated with water flowing on cold and hot heat exchangers determined respectively at conditions (1) and (2) - Chilled water outlet temperature 7°C, Hot water outlet temperature 45°C.

(4) Sound power level are referred to condition (1) for Cooling and (2) for Heating. The data are measured in accordance with ISO 9614 and Eurovent 8/1 for Eurovent certified units. The certification refers only to the overall sound power level.

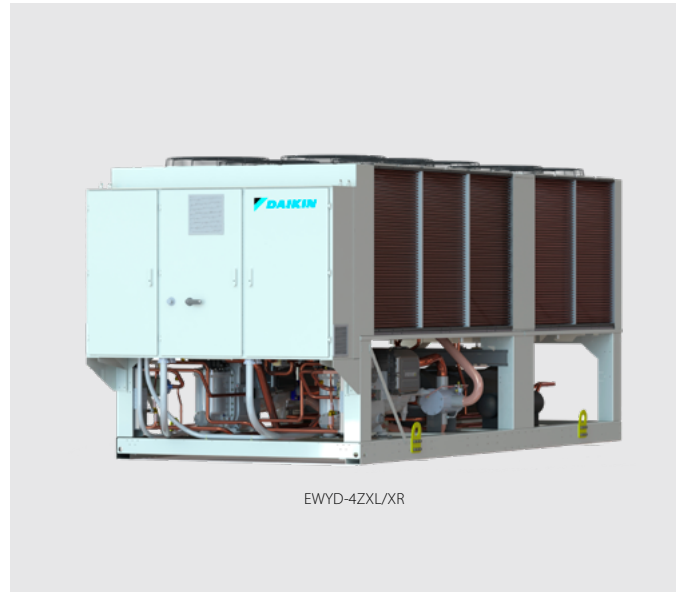
(5) Sound pressure is calculated from the sound power level and it is for information only and not considered binding.

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Air to Water Multipurpose unit



› More information
about EWYD-4ZXR



EWYD-4ZXL/XR

Multipurpose			EWYD-4ZXR	400	450	500	550	600	650	700	800	900	C10	C11	C12	C13	C14	
SEER				4.76	5.01	5.19	5.23	5.30	5.30	4.87	5.28	5.41	5.52	5.84	6	6.04	5.97	
ηsc				187.4	197.4	204.6	206.2	209.0	209.0	191.8	208.2	213.4	217.8	230.6	237.0	238.6	235.8	
SCOP				3.90	4.12	4.07	4.13	4.03	3.98	3.92	-	-	-	-	-	-	-	
ηs				152.9	161.9	159.8	162.2	158.1	156.3	153.7	-	-	-	-	-	-	-	
Air to water – cooling only (1)	Nominal Rated Capacity – Gross	kW	358	401	453	497	549	598	620	691	793	890	968	1071	1162	1274		
	EER – Gross		3.07	3.08	3.15	3.09	3.13	3.10	3.22	3.10	2.98	2.95	3.09	3.03	3.07	2.98		
	Nominal Rated Capacity – Net	kW	358	400	452	496	548	597	619	690	791	888	966	1068	1159	1270		
	EER – Net		3.05	3.06	3.12	3.06	3.11	3.07	3.19	3.08	2.95	2.93	3.06	3.01	3.03	2.94		
Air to water – heating only (2)	Nominal Rated Capacity – Gross	kW	358	398	451	492	549	599	620	689	794	890	968	1067	1161	1274		
	COP – Gross		3.49	3.66	3.66	3.65	3.61	3.58	3.70	3.74	3.74	3.72	3.80	3.75	3.75	3.72		
	Nom. Rated Capacity – Net	kW	358	399	452	493	551	601	621	691	796	892	970	1070	1165	1279		
	COP – Net		3.48	3.65	3.65	3.63	3.59	3.55	3.67	3.71	3.71	3.71	3.78	3.72	3.73	3.68		
Water to water – Cooling + heating (3)	Nom. Rated Capacity COOLING – Gross	kW	280	313	356	389	436	474	488	545	629	710	774	849	924	1010		
	Nom. Rated Capacity HEATING – Gross	kW	359	399	452	493	549	599	623	692	796	893	970	1066	1161	1276		
	TER – Gross		8.10	8.28	8.34	8.46	8.69	8.58	8.22	8.41	8.54	8.78	8.89	8.79	8.79	8.59		
	Nom. Rated Capacity COOLNG – Net	kW	280	313	355	388	435	473	486	544	628	709	772	846	920	1005		
	Nom. Rated Capacity HEATING – Net	kW	360	400	453	494	551	601	624	694	798	895	972	1069	1164	1280		
	TER – Net		7.99	8.17	8.20	8.29	8.51	8.38	8.05	8.23	8.35	8.63	8.72	8.60	8.55	8.32		
Dimensions	Height	mm	2455															
	Width	mm	2240															
	Length	mm	5775		6675		7575		8475		9425	10375	11325	12275	13225	14175		
Weight	Unit Weight	kg	7100	7210	7980	7980	8750	9520	9720	9720	10490	11260	12030	12800	13570	15200		
	Operating Weight	kg	7398	7508	8482	8460	9328	10098	10307	10298	11050	12222	12962	13732	14472	16102		
	Cold/Hot side water connections	mm	139.7	139.7	168.3	168.3	168.3	168.3	168.3	168.3	168.3	219.1	219.1	219.1	219.1	219.1		
Sound level	Sound Power – Cooling (4)	dB(A)	87	86	87		88		90		91		92		93		94	
	Sound Pressure – Cooling at 1 m (5)	dB(A)	66						68		69							
	Sound Power – Heating (4)	dB(A)	88		89		90		91		92			93			94	
	Sound Pressure – Heating at 1 m (5)	dB(A)	68	67	68				69		70							
Water heat exchangers	Cold Side	Water Volume	149		262	240	298		307	280		481		451				
		Water flow rate (1)	l/s	17.1	19.1	21.6	23.7	26.2	28.5	29.6	33.0	37.8	42.4	46.2	51.1	55.4	60.8	
		Water pressure drop (1)	kPa	11.1	13.6	16.9	25.8	23.4	27.7	26.7	24.0	30.7	21.3	24.8	29.2	41.6	50.9	
	Hot Side	Water Volume	l	149		240		280		298		280	481	451				
		Water flow rate (2)	l/s	17.3	19.3	21.8	23.8	26.6	29.0	30.0	33.3	38.4	43.1	46.8	51.6	56.2	61.6	
		Water pressure drop (2)	kPa	11.1	13.5	20.3	23.7	27.0	31.6	27.5	33.3	31.3	19.8	28.6	34.1	39.7	47.0	
Fan	Quantity	n	10		12		14		16		18	20	22	24	26	30		
	Nominal air flow (1)	l/s	19444		23333		27222		31111		35000	38889	42778	46667	50556	58333		
Compressor	Type		Single screw															
	Oil charge	l	26						36									
Refrigerant circuit	Quantity	n.	2															
	Refrigerant type		R134a															
	Refrigerant charge	kg	170	175	190	210	235	255	265	285	325	380	400	410	465	495		
	Circuits	n.	2															
Power Supply	Phase/Frequency/Voltage	Hz/V	3~/50/400															

Fluid: Water; Fouling factor = 0

(1) Operation in Air to water "Cooling only" mode rated at 35°C ambient temperature, 50% R.H.; Entering water temperature 12°C, Outlet water temperature 7°C.

(2) Operation in Air to water "Heating only" mode rated at 7°C ambient temperature, 85% R.H.; Entering water temperature 40°C, Outlet water temperature 45°C.

(3) Operation in Water to water "Cooling + Heating" mode rated with water flowing on cold and hot heat exchangers determined respectively at conditions (1) and (2) - Chilled water outlet temperature 7°C, Hot water outlet temperature 45°C.

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Condensing Unit

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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



› 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 - Chillers

Options - Small chillers

Chiller series	Integrated hydronics		LWE		Electrical
	Single pump	High Glycol	Low Glycol	Evaporator heater tape	
	OPSP	OPZH	OPZL	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	
EWWQ-KBW1N		Option	Option		
EWLQ-KBW1N		Option	Option		

(1) Impossible option combination: OPZH+OPZL

Options - Medium and large chillers (Part 1)

Description	Code	EWAQ~CAW EWYQ~CAW	EWAQ-G-	EWYQ-G-	EWAQ-FSS/XS	EWAQ-E-XS	EWAQ-F-SL/SR/XL/XR	EWAQ-E-XL/XR
Total heat recovery	01		Option					
Total heat recovery (1 circuit)	02							
Partial heat recovery	03a		Option	Option	Option	Option	Option	Option
Evaporator 1 Pass	03b							
Direct on line starter (DOL)	04		STD	STD	STD	STD	STD	STD
WyeDelta compressor starter (YD)	05							
Soft starter	06		Option	Option	Option	Option	Option	Option
Heat pump version	07							
Heat pump version (including pursuit mode)	07a (15)							
Brine version	08 (1)	Option	Option	Option	Option	Option	Option	Option
Double setpoint	10		STD	STD	STD	STD	STD	STD
Compressor thermal overload relays	11				Option	Option	Option	Option
Fans thermal relays	12							
Phase monitor	13				Option	Option	Option	Option
Inverter compressor starter	14							
Under / Over voltage control	15		Option	Option	Option	Option	Option	Option
Energy meter	16				Option	Option	Option	Option
Energy meter (including current limit)	16a							
Capacitors for power factor correction	17		Option	Option	Option	Option	Option	Option
Current limit	19							
Evaporator victaulic kit	20		STD	STD	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	STD	STD
Axial fans (100 Pa lift)	30							
Axial fans (250 Pa lift)	32				CF	CF		
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				Option	Option	Option	Option
Speedtrol (fan speed control device ON/OFF down to 10°C in cooling)	42a							
Condenser coil guards	43				Option	Option	Option	Option
Evaporator area guards	44				Option	Option	Option	Option
CuCu condenser coil	45				Option	Option	Option	Option
CuCuSn condenser coil	46				Option	Option	Option	Option
Condenser water side design pressure (16 Bar)	47							
Condenser water side design pressure (10 Bar)	47a							
Alucoat fins coil	49			STD	Option	Option	Option	Option
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 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	STD	STD
Evaporator flow switch	58		Option	Option	STD	STD	STD	STD
Condenser flow switch	59							
Electronic expansion valve	60		STD	STD	STD	STD	STD	STD
Discharge line shutoff valve	61				Option	Option	Option	Option
Suction line shutoff valve	62				Option	Option	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) 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) Compressor enclosure - (8) 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 (9) Special transport is required (flat rack truck and open top when option 01 is selected) for model sizes as follows: EWWD121-SS - EWWD181-SS (10) Forklift loading-unloading operations are not allowed when option 01 is selected for model sizes as follows: EWWD121-SS - EWWD181-SS - (11) Special Transport is required (flat rack truck and open top) for model sizes as follows: EWLD101-SS - EWLD171-SS or EWWQ118-SS - EWWQ208-SS or EWWQ108-XS, EWWQ128-XS - EWWQ218-XS - (12) Forklift loading-unloading operations are not allowed for model sizes as follows: EWLD101-SS - EWLD171-SS or EWWQ118-SS - EWWQ208-SS or EWWQ108-XS, EWWQ128-XS - EWWQ218-XS - (13) STD only for single circuit unit (14) STD only for Premium and High efficiency version - (15) Option 07a includes option 33 (20mm condenser insulation) - (16) Option T11 contains option 07a (Heat pump version, including pursuit mode) and option 33 (20mm condenser insulation)

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

Options - Medium and large chillers (Part 1)

EWYQ-F-XS EWYQ-F-XL	EWYQ-F-XR	EWAD-E-	EWAD-D-HS	EWAD-CZ	EWAD-TZB	EWAD-T	EWAD-CF	EWYD-BZSS	EWYD-BZSL	EWYD-4Z	ERAD-E-
		Option	Option Option	Option	Option	Option					Option
CF	CF	Option	Option	Option	Option	Option		Option	Option	Option	Option
STD	STD										
		STD	STD			STD	STD				STD
Option	Option	Option	Option			Option	Option				Option
Option STD Option	Option STD Option	Option STD Option	Option STD Option	Option STD STD	Option STD STD	Option STD Option	Option STD Option	Option STD	Option STD	Option STD STD	Option STD Option
		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 STD	Option Option	Option Option	Option Option	Option Option	Option STD	Option Option
					Option					Option	
Option	Option	Option Option	Option Option	Option	Option	Option Option	Option Option	Option	Option		Option Option
STD	STD			Option STD Option	STD Option	STD Option	STD	STD	STD	STD Option	
			STD							Option	
STD	STD	Option	STD	STD	STD	STD	STD	Option	Option	STD	
			CF								
										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
STD	STD	Option	Option	Option			Option	Option	Option	STD	Option
STD STD	STD STD	STD Option	STD Option	STD Option	STD Option	Option	STD Option	STD Option	STD Option	STD Option	
STD Option Option	STD Option Option	STD STD STD	STD STD STD	STD STD STD	STD STD STD	STD STD Option	STD STD Option	STD STD STD	STD STD STD	STD STD Option	STD STD

Options - Medium and large chillers (Part 2)

Description	Code	EWAQ~CAW EWYQ~CAW	EWAQ-G	EWYQ-G	EWAQ-F-SS/XS	EWAQ-E-XS	EWAQ-F-SL/ XR/XL/XR	EWAQ-E-XL/XR
High pressure side manometers	63				Option	Option	Option	Option
Low pressure side manometers	64				Option	Option	Option	Option
Ambient outside temperature sensor and setpoint reset	67		STD	STD	STD	STD	STD	STD
Hour run meter	68		STD	STD	STD	STD	STD	STD
General fault contactor	69		STD	STD	STD	STD	STD	STD
Container Kit	71		Option	Option	Option	Option	Option	Option
Rubber anti vibration mounts	75		Option	Option	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	Option	Option
One centrifugal pump (low lift)	78	Option	Option	Option				
One centrifugal pump --- SPK1	78-a				Option	Option	Option	Option
One centrifugal pump --- SPK2	78-b				Option	Option	Option	Option
One centrifugal pump --- SPK3	78-c				Option	Option	Option	Option
One centrifugal pump --- SPK4	78-d				Option	Option	Option	Option
One centrifugal pump --- SPK5	78-e					Option		Option
One centrifugal pump --- SPK6	78-f							
One centrifugal pump --- SPK7	78-g							
One centrifugal pump --- SPK8	78-h							
One centrifugal pump --- SPK9	78-i							
One centrifugal pump --- SPK10	78-j							
One centrifugal pump --- SPK1a	78-l							
One centrifugal pump --- SPK1b	78-m							
One centrifugal pump --- SPK1c	78-n							
One centrifugal pump (high lift)	79	Option	Option	Option				
Two centrifugal pump (low lift)	80		Option	Option				
Two centrifugal pump --- DPK1	80-a							
Two centrifugal pump --- DPK2	80-b							
Two centrifugal pump --- DPK3	80-c							
Two centrifugal pump --- DPK4	80-d							
Two centrifugal pump --- DPK5	80-e							
Two centrifugal pump --- DPK6	80-f							
Two centrifugal pump --- DPK7	80-g							
Two centrifugal pump --- DPK8	80-h							
Two centrifugal pump (high lift)	81		Option	Option				
External tank without cabinet (500 L)	83 (3)		Option	Option	Option	Option	Option	Option
External tank without cabinet (1000 L)	84 (3)		Option	Option	Option	Option	Option	Option
External tank with cabinet (500 L)	87 (3)		Option	Option	Option	Option	Option	Option
External tank with cabinet (1000 L)	88 (3)		Option	Option	Option	Option	Option	Option
Acoustic test	89							
Setpoint reset, Demand limit and Alarm from external device	90				Option	Option	Option	Option
Double pressure relief valve with diverter	91		Option	Option	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	Option	Option
Fans circuit breakers	96		Option	Option	Option	Option	Option	Option
Main switch interlock door	97		STD	STD	STD	STD	STD	STD
Emergency stop	98							
Fans speed regulation (+ fan silent mode)	99 (2)				Option	Option	Option	Option
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							
Liquid receiver	105							
Rapid restart	110							
High temperature kit	111							
Transport kit	112		Option	Option	Option	Option	Option	Option
Optimized free cooling (VFD fans regulation)	113-a							
Optimized free cooling (On/Off fans)	113-b							
Nordic kit	114			Option				
Water filter	115		Option	Option	STD	STD	STD	STD
Condenser coil protection panels	116				Option	Option	Option	Option
Blygold coil treatment	117			Option	Option	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	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							
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							
100 PA ESP fans	160			Option				
200 PA ESP fans	161							
Cu-Ni Evaporator tubes	164							
Marine version	167							
120 Pa ESP fans	168							

[illegible]

Accessories - Air cooled chillers

	Air-cooled chillers								
Panels	EWAQ~BVP EWYQ~BVP	EWAQ~AC EWYQ~AC	EWAQ~CAW EWYQ~CAW	EWYQ-F-	EWYD~BZ	EWYD~4Z	EWAD~TZ (&B)	EWAD~T- (B)	EWAD~E
EKDICMPAB (a) (b) iCM Primary Basic							•	•	•
EKDICMPAL (a) (b) iCM Primary for evaporator peripherals Light							•	•	•
EKDICMPAF (a) (b) iCM Primary for evaporator peripherals Full							•	•	•
EKPWPRO PlantWatchPRO monitoring system					•				
EKPWPROM PlantWatchPRO monitoring system (modem & webserver included)					•				
EKTSMS Temperature sensor for master/slave configuration				•					
EKRUMCL1 User Interface	•								
Serial Cards & Communication Modules	EWAQ~BVP EWYQ~BVP	EWAQ~AC EWYQ~AC	EWAQ~CAW EWYQ~CAW	EWYQ-F-	EWYD~BZ	EWYD~4Z	EWAD~TZ (&B)	EWAD~T- (B)	EWAD~E
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				•		•	•	•	•
EKCLON LON communication module				•		•	•	•	•
EKCMBACMSTP BACnet/MSTP communication module				•	•	•	•	•	•
EKCMBACIP BACnet/IP communication module				•		•	•	•	•
EKACPG Communication cards									
Other Systems & Accessories	EWAQ~BVP EWYQ~BVP	EWAQ~AC EWYQ~AC	EWAQ~CAW EWYQ~CAW	EWYQ-F-	EWYD~BZ	EWYD~4Z	EWAD~TZ (&B)	EWAD~T- (B)	EWAD~E
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				•		•	•	•	•
EKPWPPOEXT PlantWatchPro I/O extension module for hardwiring and retrofit					•				
EKGWWEB Gateway web (Ethernet LAN SNMP)					•				
EKGWMODEM Gateway for modem					•				
EKRPIAHT 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



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 $\pm 0.5^{\circ}\text{C}$ 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.

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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 μC^2SE controller for direct connection to a Modbus based BMS or to a remote user interface



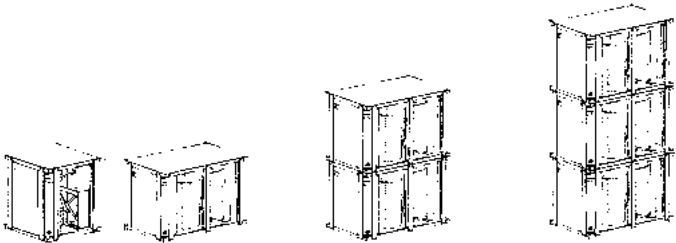
› More information
about EWWQ-KBW1N



Cooling only/Heating only				EWWQ-KBW1N	014	025	033	049	064	098	113	128	147	162	177	192	
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	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	
ESEER					4.52	4.58	4.72	4.56	4.71	4.65	4.64	4.66	4.7	4.69	4.70	4.71	
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					Braze 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					Braze 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.			dB(A)	64		71	67	74	71	75	77	73	77	78	79
Sound pressure level	Cooling	Nom.			dB(A)	50		57	53	60	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
Piping connections	Circuits	Quantity				1			2			4			6		
	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
	current	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 screw chiller, standard efficiency, standard sound

- › Stepless single-screw compressor
- › 1-2 truly independent refrigerant circuits
- › Standard electronic expansion valve
- › DX shell and tube evaporator – one pass refrigerant side for easy oil circulation and return
- › Partial and total heat recovery option available
- › MicroTech III controller with superior control logic and easy interface

› More information
about EWWD-G-SS



Heating only & Cooling only					EWWD-G-SS	170		210	260	300
Cooling capacity	Nom.		kW			165		200	252	279
Heating capacity	Nom.		kW			209		253	319	357
Capacity control	Method					Stepless				
	Minimum capacity		%			25.0				
Power input	Cooling	Nom.	kW			43.8		52.6	67.4	78.5
	Heating	Nom.	kW			43.8		52.6	67.4	78.5
EER						3.77		3.80	3.74	3.55
COP						4.77		4.80	4.74	4.55
ESEER						4.50		4.54	4.46	4.25
IPLV						5.36		5.35	5.30	5.04
Space heating	Average climate water outlet 35°C	General	η _{sp} (Seasonal space heating efficiency)		%	160	159		154	-
			SCOP			4.20	4.17	4.18	4.06	-
Dimensions	Unit	HeightxWidthxDepth			mm	1,860x920x3,435				
Weight	Unit				kg	1,393		1,410	1,503	
	Operation weight				kg	1,470		1,480	1,650	
Water heat exchanger - evaporator	Type					Single pass shell and tube				
	Water volume				l	13		56	123	
	Water flow rate			Nom.	l/s	7.9		9.6	12.1	13.4
Water heat exchanger - condenser	Type					Single pass shell and tube				
	Water volume				l	60		15		
	Water flow rate			Nom.	l/s	10.0		12.1	15.3	17.1
	Water pressure drop	Cooling	Nom.	kPa		38		39	60	73
Compressor	Type					Single screw compressor				
	Quantity					1				
Sound power level	Cooling	Nom.	dBA			88				
Sound pressure level	Cooling	Nom.	dBA			70				
Operation range	Evaporator	Cooling	Min.~Max.		°CDB	-8 ~15				
	Condenser	Cooling	Min.~Max.		°CDB	20~55				
Refrigerant	Type/GWP					R-134a/1,430				
	Circuits	Quantity				1				
Refrigerant charge					kg/TCO2Eq	60.0/85.8				
Piping connections	Evaporator water inlet/outlet (OD)					88.9			114.3	
	Condenser water inlet/outlet (OD)					5"				
Power supply	Phase/Frequency/Voltage				Hz/V	3~/50/400				
Unit	Starting current	Max			A	288				
	Running current	Cooling	Nom.	A		75		85	105	122
		Max		A		114		136	165	186

Water cooled screw chiller, high efficiency, standard sound



EWWD-G-SS/XS

MicroTech III



› More information
about EWWD-G-XS

Cooling only/Heating only				EWWD-G-XS	190	230	280	380	400	460	500	550	650	
Space cooling	A Condition 35℃	Pdc		kW	185.5	222.3	276.2	365.1	407.2	443.1	494.6	539.3	601.8	
	ηs,c			%	222.4	228.8	230.4	256.4	266.4	264.0	277.2	275.6	262.0	
SEER					5.8	5.9	6.0	6.6	6.9	6.8	7.1		6.8	
Cooling capacity	Nom.			kW	185.5	222.3	276.2	365.1	407.2	443.1	494.6	539.3	601.8	
Power input	Cooling	Nom.		kW	40.59	49.4	61.09	81.09	89.06	97.13	107.4	117.50	141.20	
Capacity control	Method				Fixed									
	Minimum capacity			%	25			12.5						
EER					4.57	4.5	4.521	4.502	4.572	4.561	4.606	4.589	4.261	
ESEER					5.37	5.31	5.33	5.54	5.62	5.61	5.68	5.67	5.27	
IPLV					6.45	6.36	6.35	6.47	6.57	6.55	6.65	6.64	6.17	
Dimensions	Unit	Height		mm	1,860			1,880						
		Width		mm	920			860						
		Depth		mm	3,435			4,305						
Weight	Unit			kg	1,650	1,665	1,680	2,800	2,945	2,955	2,975		2,990	
	Operation weight			kg	1,800	1,810	1,820	3,020	3,280	3,290	3,315		3,340	
Water heat exchanger - evaporator	Type				Shell and tube									
	Water volume			l	125	120	110	170	285		280			
	Water flow rate	Nom.		l/s	8.9	10.6	13.2	17.5	19.5	21.2	23.7	25.8	28.8	
	Water pressure drop	Cooling	Nom.	kPa	23	31	30	28	21	24	33	39	47	
Water heat exchanger - condenser	Type				Shell and tube									
	Water volume			l	22	25		44	47	50	59	68		
	Water flow rate	Nom.		l/s	10.87	13.06	16.21	21.46	23.87	25.98	28.95	31.6	35.74	
	Water pressure drop	Cooling	Nom.	kPa	17	20	25	16	17					16
Compressor	Type				Driven vapour compression									
	Quantity				1			2						
Sound power level	Cooling	Nom.		dBA	88			90						
Sound pressure level	Cooling	Nom.		dBA	70			72						
Operation range	Evaporator	Cooling	Min.~Max.	℃CDB	-8 ~15									
	Condenser	Cooling	Min.~Max.	℃CDB	20~55									
Refrigerant	Type/GWP				R-134a/1,430									
	Charge			kg	60			130	120	130	120			
	Circuits				1			2						
Refrigerant charge				kg/TCO2Eq	60.0/85.8				60.0/85.8	65.0/93.0	60.0/85.8			
Piping connections	Evaporator water inlet/outlet (OD)				114.3mm			139.7mm	168.3mm					
	Condenser water inlet/outlet (OD)				5"									
Unit	Starting current	Max		A	288			380	397		420		438	
	Running current	Cooling	Nom.	A	71	81	96	142	152	161	174	186	210	
	current	Max		A	114	136	165	229	250	272	301	330	373	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400									

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			
ESEER					4.70	4.84	4.65	4.86	4.80	4.89	4.86	4.83	4.79	4.90	4.83			
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 Type - evaporator					Plate heat exchanger													
Water heat exchanger - condenser	Water volume			l	6	8		10	12	13	15	17		27	34			
Water heat exchanger - evaporator	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 Type - condenser					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			10.0/20.9			13.0/27.1			15.0/31.3			19.0/39.7	
	Condenser water inlet/outlet (OD)				1" 1/2			13.0/27.1			15.0/31.3			19.0/39.7				
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

- › 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
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EWWQ-G-SS

MicroTech III



› 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				
ESEER					5.51	5.52	5.51	5.53	5.51	5.53	5.52								
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

- › Dual refrigerant circuit (4 scroll compressors) with single evaporator
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- › MicroTech III controller with superior control logic and easy interface



› More information about EWWQ-L-SS



Cooling only/Heating only				EWQ-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		
ESEER					5.54		5.52	5.53	5.54	5.53	5.54	5.52	5.51	5.55	5.51		5.52		
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															
		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.		dB(A)	83	86	88	90	91		93		95		96				
Sound pressure level	Cooling	Nom.		dB(A)	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)																		
Unit	Starting current	Max		A	263	320	333	388	403	456	484	597	626	785	822	860	898		
	Running	Cooling	Nom.	A	83	89	96	109	121	137	151	171	189	210	236	260	284		
	current	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														



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.

EWWD-VZ at a glance

Single compressor

450 kW - 1,053 kW



Full inverter water cooled chiller



Dual compressor & dual circuit unit

1,200 kW - 2,100 kW

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



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: ESEER up to 8.5 – 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

You Tube
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

- › Optimized 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



EWWD-VZSS

Microtech III

› 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		%													
EER					5.5	5.31	5.3	5.52	5.29	5.07	5.11	5	4.93	5.08	4.93	5.08	
ESEER					7.62	7.5	7.63	7.54	7.52	7.86	7.81	7.9	7.46	7.99	7.49	7.95	
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
				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
		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
		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
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												
Refrigerant		Type/GWP			R-134a/1,430												
		Charge		kg													100
		Circuits	Quantity		1					2							
Piping connections				mm	139.7			168.3		219.1							
		Condenser water inlet/outlet (OD)			168.3mm			219.1mm		168.3 / 168.3 mm				219.1 / 219.1 mm			
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
		current	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		
ESEER					7.51	7.92	8.1	8.2	8.22	7.92	8.17	8.36	8.25	8.47	8.24	8.45	8.2	8.33		
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 heat exchanger - condenser	Water pressure drop			Cooling	Nom.	kPa	89	63	59	63	55	67	59	52	62	52	67	58	58	
	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		
Compressor	Water pressure drop			Cooling	Nom.	kPa	31	28	22	20	24	25		28		21	32	27	37	28
	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				mm	139.7			168.3			219.1				273					
	Condenser water inlet/outlet (OD)				168.3mm			219.1mm				168.3 / 219.1 mm		219.1 / 219.1 mm						
Unit	Starting current	Max		A	155	173	179	214	256	295	344	-								
	Running	Cooling	Nom.	A	126	140	171	201	229	249	299	340	372	400	450	498	554	596		
	current	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

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EWWD-VZPS

Microtech III

› 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
ESEER					8.15	8.48	8.25	8.66	8.53	8.71
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				mm	139.7	219.1				273
	Condenser water inlet/outlet (OD)				219.1mm			219.1 / 219.1 mm		
Unit	Starting current	Max		A	173	214	295	-		
	Running current	Cooling	Nom.	A	138	200	247	338	447	497
	current	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

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EWWH-VZSS

MicroTech III

› 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	
ESEER					7.98	7.83	7.9	8.03	7.99	7.93	7.95	8.12	8	8.46	8	8.48	
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		
		Width	mm		1,178	1,179		1,233		1,303		1,484	1,487		1,484	1,580	1,627
		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 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	
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				mm	139.7			168.3	219.1								
	Condenser water inlet/outlet (OD)				168.3mm			219.1mm	168.3 / 168.3 mm				219.1 / 219.1 mm				
Unit	Running	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	
	current	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												

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EWWH-VZXS

MicroTech III

› 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			
ESEER					7.14	7.56	8.32		8.34	8.46	8.55	8.26		8.5	8.54	8.81	8.61	8.72		
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 heat exchanger - condenser	Water pressure drop			Cooling	Nom.	kPa	54	38	35	37	31	39	36	29	34	28	37	32	28	33
	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				mm	139.7			168.3			219.1							273		
	Condenser water inlet/outlet (OD)				168.3mm		219.1mm					168.3 / 219.1 mm		219.1 / 219.1 mm						
Unit	Running	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		
	current	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															

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EWWH-VZPS

MicroTech III



› 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
ESEER					7.9	8.64	8.83	8.54	8.85	9
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				mm	139.7	219.1				273
	Condenser water inlet/outlet (OD)				219.1mm			219.1 / 219.1 mm		
Unit	Running	Cooling	Nom.	A	104.0	150.0	185.0	257.0	338.0	378.0
	current	Max		A	199.0	246.0	277.0	445.0	523.0	649.0
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	
ESEER					4.51	4.20				4.28	4.68	4.01
IPLV					5.18	5.06		5.05	5.16		5.70	4.88
Space heating	Average climate water outlet 35℃	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	
			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 heat exchanger - condenser	Water volume			l	20		23	25	29		32	
Water heat exchanger - evaporator	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				mm	76.2							
	Condenser water inlet/outlet (OD)				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	



Water cooled centrifugal chiller, high efficiency, standard sound

- › Totally oil-free operation resulting in reduced maintenance costs and increased reliability
- › An inverter driven compressor allows the capacity to be adjusted precisely to match variations in room and outside temperatures
- › Onboard digital electronics provide smart controls



EWWD-FZXS

Microtech II

› More information
about EWWD-FZXS



Cooling Only				EWWD-FZXS	320	430	520	640	860	C10
Space cooling	A Condition	Pdc		kW	316.9	440.6	521.9	640.5	889.5	1,056.0
	ηs,c			%	308.0	321.2	332.0	304.8	308.0	327.2
SEER					7.9	8.2	8.5	7.8	7.9	8.4
Cooling capacity	Nom.			kW	316.9	440.6	521.9	640.5	889.5	1,056.0
Power input	Cooling	Nom.		kW	65.81	90.42	106.6	128.6	179.4	208.1
Capacity control	Method		Variable							
EER					4.815	4.873	4.898	4.98	4.959	5.076
ESEER					8.11	8.39	8.66	8.35	8.52	8.88
IPLV					9.25	9.64	9.89	9.5	9.74	10.06
Dimensions	Unit	Height		mm	1,823			1,755	1,748	1,794
		Width		mm	1,276			1,790	1,853	1,904
		Depth		mm	3,254			3,419	3,441	3,289
Weight	Unit			kg	2,360	2,416	2,546	3,709	4,095	4,765
	Operation weight			kg	2,520	2,634	2,812	4,074	4,548	5,330
Water heat exchanger - evaporator	Type		Shell and tube							
	Water volume			l	78	107	134	184	210	302
	Water flow rate			l/s	15.12	21.02	24.90	30.56	42.44	50.39
	Water pressure drop	Cooling	Nom.	kPa	30.2	31.9	32.6	35.4	32	31.5
Water heat exchanger - condenser	Type		Shell and tube							
	Water volume			l	83	111	133	181	243	263
	Water flow rate			l/s	18.35	25.47	30.15	36.91	51.28	60.67
	Water pressure drop	Cooling	Nom.	kPa	24.3	26.1	28.5	23.1	32.5	29.1
Compressor	Type		Driven vapour compression							
	Quantity				1			2		
Sound power level	Cooling	Nom.		dBA	89	90	91	92	94	95
Sound pressure level	Cooling	Nom.		dBA	71	72	73	74	75	76
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	2~15					
	Condenser	Cooling	Min.~Max.	°CDB	18~46					
Refrigerant	Type/GWP		R-134a/1,430							
	Charge			kg	240	220	180	220		300
	Circuits	Quantity			1					
Refrigerant charge	Per circuit			kg	240.0	220.0	180.0	220.0		300.0
	TCO _{2eq}				343.2	314.6	257.4	314.6		429.0
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm			219.1mm		273mm
	Condenser water inlet/outlet (OD)				168.3mm			219.1mm		
Unit	Starting current	Max		A	2					
	Running current	Cooling	Nom.	A	104	142	168	207	285	335
	current	Max		A	135	210	176	270	420	352
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
- › 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



EWWD-DZXE/XS

MicroTech III



› More information
about EWWD-DZXS



› More information
about EWWD-DZXE

Cooling Only				EWWD-DZXE/XS	340	440	470	530	570	610	640	670	680	700	740	880	950	C10	C11	C14	C15			
Space cooling	A Condition	Pdc		kW	341.01	443.01	474.02	528	566	610.02	638.01	670	682	699.97	741.96	883.01	946	1,056	1,130	1,402	1,477.93			
	ηs,c			%	335	314	316	324	326	344	349	345	349	342	346	350	352	363	365	362	366			
SEER					8.57	8.05	8.09	8.29	8.34	8.81	8.92	8.82	8.93	8.75	8.86	8.95	9.00	9.27	9.32	9.26	9.35			
Cooling capacity	Nom.			kW	341	443	474	528	566	610	638	670	682	700	742	883	946	1,056	1,130	1,402	1,478			
Power input	Cooling	Nom.		kW	69.9	88.5	93.5	102	108	124.7	131	138.4	138	126	131	176	186	205	216	256	263			
Capacity control	Method				Variable																			
	Minimum capacity			%	29	21	20	21	20	16	15			18	17	11	10	11	10	9				
EER					4.88	5	5.07	5.14	5.22	4.89	4.85	4.84	4.91	5.53	5.65	5.01	5.08	5.15	5.23	5.46	5.6			
ESEER					7.81	7.92	7.83	8.2	8.11	7.78	8.16	7.52	8	8.08	8.09		7.96	8.39	8.26	8.29	8.22			
IPLV					9.57	9.67	9.62	10		9.66	9.78	9.61	9.63	10.1	10.2	9.86	9.79	10.2	10.1	10.5	10.4			
Dimensions	Unit	Height		mm	1,865					1,985										2,200				
		Width		mm	1,055					1,160										1,270				
		Depth		mm	3,625					3,585			3,625	3,585			3,580							
				kg	1,750	1,900	1,950	2,000	2,050	2,850			2,600	2,650	2,900	3,000	3,600	3,700	3,800	3,900				
Weight	Operation weight			kg	2,033	2,216	2,276	2,347	2,407	3,197	3,344	3,197	3,354	3,102	3,162	3,458	3,568	4,292	4,412	4,579	4,699			
Water heat exchanger - evaporator	Type				Flooded shell and tube																			
	Water volume			l	70	96			107			134	107	134			156			199		229		
	Water flow rate	Nom.		l/s	16.4	21.2	22.7	25.3	27.1	29.1	30.5	32	32.7	33.5	35.6	42.3	45.3	50.6	54.1	67.2	70.9			
	Water pressure drop	Cooling	Nom.	kPa	54.2	40.6	46.5	45	51.5	59.1	51	71.4	58.3	61.3	68.7	64	73.2	60.4	68.9	74	82			
Water heat exchanger - condenser	Type				Shell and tube																			
	Water volume			l	83	100			120			170	120	170	188			211			263		320	
	Water flow rate	Nom.		l/s	19.6	25.3	27	30.1	32.1	35.1	36.7	38.6	39.1	39.4	41.6	50.5	53.9	60.1	64.1	79.1	83			
	Water pressure drop	Cooling	Nom.	kPa	56.4	59.5	68.4	54.5	62.4	74	46.2	90	52.9	41.6	46.7	50.9	58.3	50.3	57.6	52.9	58.5			
Compressor	Type				Driven vapour compressor																			
	Quantity				1					2					1					2				
Sound power level	Cooling	Nom.		dBA	87.9	88.9			89.9			91.1	91	91.1	91	91.1			92	93.3	94.3			
Sound pressure level	Cooling	Nom.		dBA	69.6	70.6			71.6			72.6					73.6			74.6		75.6		
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		
Refrigerant	Type/GWP				R-134a/1,430																			
	Charge			kg	130	120	130	120	130	120	180	120	200	180	190	180	200	230	250	230	250			
	Circuits	Quantity			1																			
Refrigerant charge				TCO2Eq	186	172	186	172	186	172	257	172	286	257	272	257	286	329	358	329	358			
Piping connections				mm	139.7					168.3					139.7					168.3				
				mm	139.7					168.3					139.7					168.3				
Unit	Running current	Cooling	Nom.	A	105.42	138.22	144.7	155.23	162.48	203.41	200.56	212.9	210.15	190.23	196	274.86	287.44	309.17	323.53	383.87	392			
		Max		A	134	208			166			267			196			417			331		392	
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)



› 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 ₂ Eq	1,001 - 2,002	429 - 1,430

* not Eurovent certified



Options - Water cooled chillers

Description	Code	EWQ-B	EWWD-J-SS	EWWD-G-	EWWD-I-SS	EWWD-I-XS	EWWD-VZ	EWLD-J-SS	EWLD-G-SS	EWLD-I-SS	EWWD-FZXS
Total heat recovery	01			Option	Option		Option				
Total heat recovery (1 circuit)	02										
Partial heat recovery	03a	Option		Option	Option	Option			Option		
Evaporator 1 Pass	03b						Option				
Direct on line starter (DOL)	04										
WyeDelta compressor starter (YD)	05	STD	STD	STD	STD	STD		STD	STD	STD	
Soft starter	06	Option	Option(4)	Option	Option	Option		Option(4)	Option	Option	
Heat pump version	07										
Heat pump version (including pursuit mode)	07a (15)		Option	Option	Option	Option	Option				
Brine version	08 (1)	Option	Option	Option	Option	Option	Option	Option	Option	Option	
Double setpoint	10	STD	STD	STD	STD	STD	STD		STD	STD	
Compressor thermal overload relays	11	Option	Option	Option	Option	Option	STD		Option	Option	
Fans thermal relays	12										
Phase monitor	13	STD	STD	STD	STD	STD	STD	STD	STD	STD	
Inverter compressor starter	14						STD				STD
Under / Over voltage control	15	Option	Option	Option	Option	Option	STD	Option	Option	Option	
Energy meter	16	Option	Option	Option	Option	Option		Option	Option	Option	Option
Energy meter (including current limit)	16a						Option				
Capacitors for power factor correction	17	Option	Option	Option	Option	Option			Option	Option	
Current limit	19	Option	Option	Option	Option	Option		Option	Option	Option	STD
Evaporator victaulic kit	20	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Evaporator flange kit	21										
Evaporator marine waterbox victaulic (2 passes)	22										CF
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	Option	Option				Option
Evaporator water side design pressure (10 Bar)	27	STD		STD	STD	STD	STD		STD	STD	STD
Evaporator water side design pressure (16 Bar)	28										
20mm evaporator insulation	29	Option	STD	Option	Option	Option	STD	STD	Option	Option	STD
Axial fans (100 Pa lift)	30										
Axial fans (250 Pa lift)	32										
20mm condenser insulation	33	Option	Option	Option	Option	Option	Option				Option
Condenser victaulic kit	36	Option	STD	Option	Option	Option	STD				STD
Condenser marine waterbox victaulic (2 passes)	38										CF
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	STD	STD	STD	STD					
Condenser water side design pressure (10 Bar)	47a						STD				STD
Alucoat fins coil	49										
CuNi 9010 condenser tubes	50	Option	Option(5)	Option (5)	Option (5)	Option (5)	Option		Option (5)		Option (5)
Condenser 1 pass (ΔT 48 °C)	51			STD	STD		STD		STD		
Condenser 2 passes (ΔT 48 °C)	52		STD			STD					STD
Condenser 2 passes (ΔT 915 °C)	53				NCSO						
Condenser 4 passes	54					NCSO					
Water pressure differential switch on condenser	55										STD
Water pressure differential switch on evaporator	56										STD
Evaporator electric heater	57	Option									
Evaporator flow switch	58	Option	STD	Option	Option	Option	Option	STD	Option	Option	Option
Condenser flow switch	59						Option				Option
Electronic expansion valve	60	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Discharge line shutoff valve	61	Option	STD	STD	Option	Option	Option	STD	STD	Option	
Suction line shutoff valve	62	Option	STD	STD	Option	Option	Option	STD	STD	Option	Option
High pressure side manometers	63	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option
Low pressure side manometers	64	Option	Option	Option	Option	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	STD	STD	STD
General fault contactor	69	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Container Kit	71	Option(11)	Option	Option	Option (9)	Option	Option	Option	Option	Option(11)	Option
Rubber anti vibration mounts	75	Option	Option	Option	Option	Option		Option	Option	Option	Option
Sound proof system	76										
Sound proof system (integral)	76-a	Option (8)			Option (8)	Option (8)				Option (8)	Option (8)
Sound proof system (compressor)	76-b		Option (6)	Option (7)			Option	Option (6)	Option (7)		
Spring anti vibration mounts	77										
One centrifugal pump (low lift)	78										
One centrifugal pump --- SPK1	78-a										
One centrifugal pump --- SPK2	78-b										
One centrifugal pump --- SPK3	78-c										
One centrifugal pump --- SPK4	78-d										
One centrifugal pump --- SPK5	78-e										
One centrifugal pump --- SPK6	78-f										
One centrifugal pump --- SPK7	78-g										
One centrifugal pump --- SPK8	78-h										
One centrifugal pump --- SPK9	78-i										
One centrifugal pump --- SPK10	78-j										

(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) Compressor enclosure - (8) 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 - (9) Special transport is required (flat rack truck and open top when option 01 is selected) for model sizes as follows: EWWDIC181-SS - EWWDIC181-SS (10) Forklift loading-unloading operations are not allowed when option 01 is selected for model sizes as follows: EWWDIC181-SS - EWWDIC181-SS - (11) Special Transport is required (flat rack truck and open top) for model sizes as follows: EWLDIC101-SS - EWLDIC171-SS or EWWDIC118-SS - EWWDIC208-SS or EWWDIC108-XS, EWWDIC128-XS - EWWDIC218-XS - (12) Forklift loading-unloading operations are not allowed for model sizes as follows: EWLDIC101-SS - EWLDIC171-SS or EWWDIC118-SS - EWWDIC208-SS or EWWDIC108-XS, EWWDIC128-XS - EWWDIC218-XS - (13) STD only for single circuit unit (14) STD only for Premium and High efficiency version - (15) Option 07a includes option 33 (20mm condenser insulation) - (16) Option 111 contains option 07a (Heat pump version, including pursuit mode) and option 33 (20mm condenser insulation)

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

Description	Code	EWQ-B-	EWQ-J-SS	EWQ-G-	EWQ-I-SS	EWQ-I-XS	EWQ-VZ	EWQ-J-SS	EWQ-G-SS	EWQ-I-SS	EWQ-FZXS
One centrifugal pump --- SPK1a	78-l										
One centrifugal pump --- SPK1b	78-m										
One centrifugal pump --- SPK1c	78-n										
One centrifugal pump (high lift)	79										
Two centrifugal pump (low lift)	80										
Two centrifugal pump --- DPK1	80-a										
Two centrifugal pump --- DPK2	80-b										
Two centrifugal pump --- DPK3	80-c										
Two centrifugal pump --- DPK4	80-d										
Two centrifugal pump --- DPK5	80-e										
Two centrifugal pump --- DPK6	80-f										
Two centrifugal pump --- DPK7	80-g										
Two centrifugal pump --- DPK8	80-h										
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	STD	STD	STD	STD	STD	STD	STD	STD
Double pressure relief valve with diverter	91	Option	Option	Option	Option	Option	STD	Option	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				
Fans circuit breakers	96										
Main switch interlock door	97	STD	STD	STD	STD	STD	STD	STD	STD	STD	
Emergency stop	98	STD	STD	STD	STD	STD		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	Option	Option	
Evaporator 1 pass	103						Option				NCSO
Evaporator 2 passes	103a						STD				STD
Evaporator 3 passes	103b						Option				
Evaporator double flange kit	104	Option		Option	Option	Option	Option		Option	Option	Option
Liquid receiver	105							Option	Option	Option	
Rapid restart	110						Option				
High temperature kit	111						Option				
Transport kit	112	Option(12)	Option	Option	Option(10)	Option	Option	Option	Option	Option(12)	Option
Optimized free cooling (VFD fans regulation)	113-a										
Optimized free cooling (On/Off fans)	113-b										
Nordic kit	114										
Water filter	115										
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				
Discharge and suction line shut-off valve	126										
High and low pressure side manometers	127										
Master/slave	128						STD				
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										
Variable primary flow	143										
Diff pressure transd (shipped loose)	144										
EC motor fans	145										
Compressor thermal insulation	146						Option				
Knock-down electrical panel	147						Option				
Automatic transfer switch (free standing)	149						Option				
Inverter EN61800-3 class C2 compliant	150						Option				
Rubber pads	152						Option				
Blue coat	153										
Evaporator Optimized for high delta T	154										
Daikin on site modem (with antenna)	155						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										
100 PA ESP fans	160										
200 PA ESP fans	161										
Cu-Ni Evaporator tubes	164										
Marine version	167						Option				
120 Pa ESP fans	168										

Accessories - Water cooled chillers

DWSC & DWDC EWW~FZ	Water-cooled chillers									Centrifugals
Panels	EWWP~KB EWLP~KB	EWQ~KB	EWLQ~KB	EW_Q-G EW_Q-L	EWWD~G- EWLD~G-	EWWD~I- EWLD~I-	EWWD~J- EWLD~J-	EWQ~B-	EWWD~VZ A	DWSC & DWDC EWWD~FZ
EKDICMPAB (a) (b) iCM Primary Basic				•	•	•	•	•	•	•
EKDICMPAL (a) (b) iCM Primary for evaporator peripherals Light				•	•	•	•	•	•	•
EKDICMPAF (a) (b) iCM Primary for evaporator peripherals Full				•	•	•	•	•	•	•
EKPWPRO PlantWatchPRO monitoring system										•
EKPWPROM PlantWatchPRO monitoring system (modem & webserver included)										•
EKTSM Temperature sensor for master/slave configuration				•						
EKRUMCL1 User Interface										

Serial Cards & Communication Modules	EWWP~KB EWLP~KB	EWQ~KB	EWLQ~KB	EW_Q-G EW_Q-L	EWWD~G- EWLD~G-	EWWD~I- EWLD~I-	EWWD~J- EWLD~J-	EWQ~B-	EWWD~VZ A	DWSC & DWDC EWWD~FZ
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				•	•	•	•	•	•	
EKCMLOL LON communication module				•	•	•	•	•	•	
EKCMBACMSTP BACnet/MSTP communication module				•	•	•	•	•	•	
EKCMBACIP BACnet/IP communication module				•	•	•	•	•	•	
EKACPG Communication cards										

Other Systems & Accessories	EWWP~KB EWLP~KB	EWQ~KB	EWLQ~KB	EW_Q-G EW_Q-L	EWWD~G- EWLD~G-	EWWD~I- EWLD~I-	EWWD~J- EWLD~J-	EWQ~B-	EWWD~VZ A	Centrifugals DWSC & DWDC EWWD~FZ
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				•	•	•	•	•	•	
EKPWPPOEXT 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	•	•	•							
EKBT Buffertank 200 l (for N & P models)										
EHMC10A10 Hydraulic module 5/8/10 and 14/22 Hp-units	•									
EHMC10A80 Hydraulic module 5/8/10 and 14/22 Hp-units	•									
EHMC15A10 Hydraulic module 28/35 Hp-units	•									
EHMC15A80 Hydraulic module 28/35 Hp-units	•									
EHMC30A10 Hydraulic module 45/55/65 Hp-units	•									
EHMC30A80 Hydraulic module 45/55/65 Hp-units	•									
EKLS1 Low noise kit 014 Hp-units	•									
EKLS2 (d) Low noise kit 22/28/35/45/55/65 Hp-units	•	•	•							
ECB2MUAW (e) Controller kit	•									
ECB3MUAW (e) Controller kit	•									
ECB2MUBW (e) Controller kit		•								
ECB3MUBW (e) Controller 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				•	•	•	•	•	•	•

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 modular 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



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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^2SE controller for direct connection to a Modbus based BMS or to a remote user interface



EWLQ-KBW1N

 μC^2SE

› 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				Braze 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



› 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															
	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

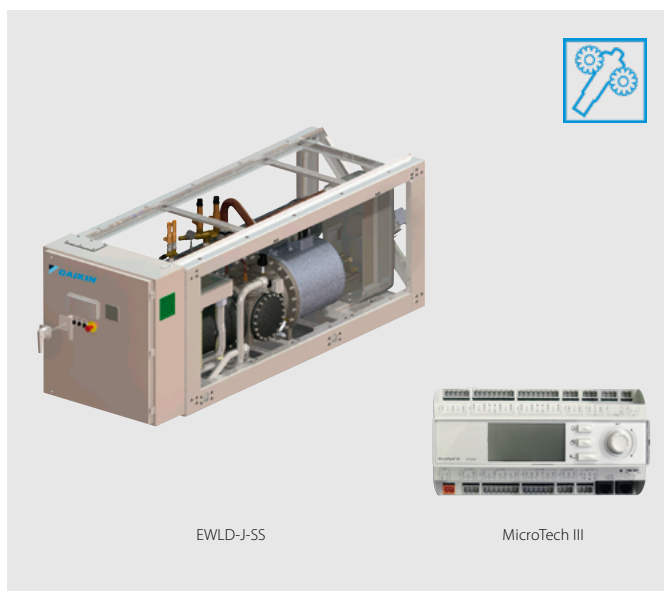
› More information about EWLQ-L-SS



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.		dB(A)	83	86	88	90	91		93	95		96			
Sound pressure level	Cooling	Nom.		dB(A)	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	290	310	330	360	390	430	470	500	530						
Cooling capacity	Nom.			kW	110	128	142	163	236	191	264	285	306	327	355	382	428	473	501	529						
Power input	Cooling	Nom.		kW	31.2	38.4	43.8	50.4	66.0	56.0	75.3	87.4	94.0	100	106	111	122	132	141	150						
Capacity control	Method			%	25.0							Stepless							12.5							
	Minimum capacity																									
EER					3.51	3.33	3.25	3.24	3.58	3.42	3.51	3.26	3.25	3.35	3.43	3.52	3.59	3.55	3.52							
Dimensions	Unit	Height		mm	1,020							913							2,000							
		Width		mm																						
		Depth		mm																						
Weight	Unit			kg	1,124	1,141	1,237	1,263	1,489	1,305	1,489	2,474	2,500	2,526	2,568	2,611	2,795	2,979								
	Operation weight			kg	1,138	1,159	1,253	1,281	1,518	1,327	1,518	2,505	2,533	2,562	2,608	2,655	2,845	3,036								
Water heat exchanger - evaporator	Type			Plate heat exchanger																						
	Water volume			l	14	18	14	17	26	20	26	29	31	33	37	41	46	52								
	Water flow rate			Nom.	l/s	5.2	6.1	6.8	7.8	11.3	9.2	12.6	13.6	14.6	15.6	17.0	18.3	20.5	22.6	24.0	25.3					
Compressor	Water pressure drop			Cooling	Nom.	kPa	14	13	39	37	26	33	32	39	37			34	33	29	26	29	32			
	Type			Single screw compressor																						
	Quantity			1																	2					
Sound power level	Cooling	Nom.		dBA	89							94							96							
Sound pressure level	Cooling	Nom.		dBA	79							82							83							
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							2														
Piping connections	Evaporator water inlet/outlet (OD)			76.2 mm																						
Unit	Maximum starting current			A	151		195		288		195		288		281		293		310		403		422		440	
	Nominal running current (RLA)			Cooling	A	52	62	72	81	107	91	120	145	153	162	171	181	197	214	227	241					
	Maximum running current			A	76	97	107	122	167	143	189	215	230	245	265	286	311	335	357	378						
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																					

Condenserless screw chiller, standard efficiency, standard sound

- › Stepless single-screw compressor
- › Optimised for use with **R-134a**
- › **1-2 truly independent refrigerant circuits**
- › Standard electronic expansion valve
- › DX shell and tube evaporator – one pass refrigerant side for easy oil circulation and return
- › All models are PED pressure vessel approved
- › Partial heat recovery available
- › MicroTech III controller with superior control logic and easy interface



EWLD-G-SS

MicroTech III

› More information
about EWLD-G-SS



Cooling only				EWLD-G-SS	160	190	240	280	320	360	380	420	480	550
Cooling capacity	Nom.			kW	160	188	243	269	315	350	379	426	474	524
Power input	Cooling	Nom.		kW	46.2	55.3	66.9	75.7	92.3	101	110	122	133	151
Capacity control	Method				Stepless									
	Minimum capacity			%										
EER					3.47	3.40	3.64	3.55	3.41	3.46	3.43	3.51	3.56	3.48
	Dimensions	Unit	Height	mm	1,860				1,880	1,942				
			Width	mm	1,000				1,100					
			Depth	mm	3,700				4,400					
Weight	Unit			kg	1,280		1,398		2,442	2,446		2,501	2,506	
	Operation weight			kg	1,337		1,516		2,560			2,670		
Water heat exchanger - evaporator	Type				Single pass shell and tube									
	Water volume			l	60	56	123		118	113		173	168	
	Water flow rate			Nom. l/s	7.7	9.0	11.6	12.9	15.1	16.8	18.2	20.4	22.7	25.1
	Water pressure drop			Cooling Nom. kPa	42	58	40	49	55	54	63	48	49	59
Compressor	Type				Single screw compressor									
	Quantity				1				2					
Sound power level	Cooling	Nom.		dBA	88				90					
Sound pressure level	Cooling	Nom.		dBA	70				72					
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					
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm				114.3mm			139.7mm		
Unit	Maximum starting current			A	288				380	397		420		438
	Nominal running current (RLA)			Cooling A	79	90	107	120	157	169	181	197	213	240
	Maximum running current			A	114	136	165	186	229	250	272	301	330	373
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	
Compressor	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
	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

(!) Impossible option combination: OPZH+OPZL





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.

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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
You Tube
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

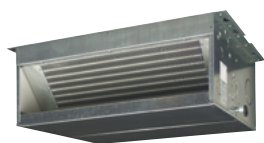
- › Less fluctuation of air temperature and relative humidity
- › More consistent output level
- › Stepless speed change for gradual air output
- › More accurate adjustments to reach set point

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



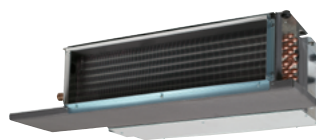
FWR-AT/AF



FWS-AT/AF



FWC-BT/BF



FWP-AT



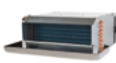
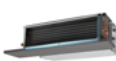
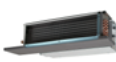
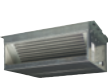
FWZ-AT/AF

Fan coil units





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 - 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	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 mounting - 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 - Available 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

AIRCOOLED CHILLERS

WATERCOOLED CHILLERS

CONDENSERLESS AND CENTRIFUGAL CHILLERS

FAN COIL UNITS

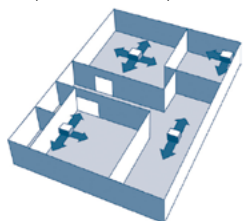
AIR HANDLING UNITS

CONTROL SYSTEMS

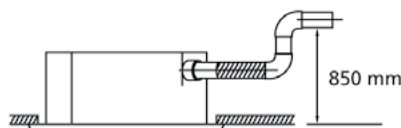
Round flow cassette

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



› 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	
Latent capacity	High	kW	1.3	1.4	1.5	1.6	1.7		1.8	1.9		
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			
Fan	Type				Turbo fan							
	Quantity				1							
	Air flow rate	High	m³/h	1,068	1,236	1,518	1,776	1,032	1,200	1,476	1,746	
		Medium	m³/h	894	1,038	1,200	1,410	864	1,002	1,164	1,374	
	Low	m³/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								

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



› 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	
Latent capacity	High		kW	1.39	2.37	3.38	0.55	1.45	1.83		
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			
FCCOP					B			A			
Dimensions	Unit	HeightxWidthxDepth		mm	265x820x820			300x820x820	265x820x820	268x820x820	300x820x820
Weight	Unit			kg	26.0	28.0	32.0	26.0	28.0	32.0	
	Operation weight			kg	32	34	39	35	34	39	
Casing	Colour				Without powder paint						
Decoration panel	Dimensions	Unit	HeightxWidthxDepth	mm	85x990x990						
	Weight			kg	4.0						
Heat exchanger	Water volume			l	1	2		1	2		
Air filter	Type				Washable Saranet						
Fan	Type				Turbo fan						
	Quantity				1						
	Air flow rate	High		m³/h	1,053	1,512	1,801	1,053	1,512	1,801	
		Medium		m³/h	799	1,223	1,478	799	1,223	1,478	
Low			m³/h	595	951	1,155	595	951	1,155		
Total sound power level	High		dBA	46	57	59	46	57	59		
	Medium		dBA	40	52	55	40	52	55		
	Low		dBA	34	49		34	49			
Sound pressure level	High		dBA	37	47	51	37	47	51		
	Medium		dBA	31	42	46	31	42	46		
	Low		dBA	23	37	41	23	37	41		
Water flow	Cooling	High		l/h	1,030	1,530	2,040	770	1,250	1,570	
		Medium		l/h	1,030	1,530	2,040	770	1,250	1,570	
		Low		l/h	1,030	1,530	2,040	770	1,250	1,570	
	Heating	High		l/h	1,030	1,530	2,040	670	970	1,360	
		Medium		l/h	1,030	1,530	2,040	670	970	1,360	
		Low		l/h	1,030	1,530	2,040	670	970	1,360	
Piping connections	Drain	OD	mm	19							
Power supply	Phase/Frequency/Voltage			Hz/V	1N~/50/220-240						
Current input	High		A	0.26	0.74	0.95	0.26	0.74	0.95		
	Medium		A	0.19	0.43	0.55	0.19	0.43	0.55		
	Low		A	0.13	0.28	0.35	0.13	0.28	0.35		

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



› 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
	Latent capacity	High	kW	0.58	1.17		1.11
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		
FCEER				E	D		E
FCCOP				E			
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			
Heat exchanger	Water volume		l	-	1		
Air filter	Type			Washable Saranet			
Fan	Type			Turbo fan			
	Quantity			1			
	Air flow rate	High	m³/h	646	680		748
		Medium	m³/h	493	527		664
Low		m³/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	
Water flow	Cooling	High	l/h	460	780		810
		Medium	l/h	460	780		810
		Low	l/h	460	780		810
	Heating	High	l/h	460	780		810
		Medium	l/h	460	780		810
		Low	l/h	460	780		810
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	0.32		
	Low	A		0.21	0.31		

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	02	03	06
					2-pipe			4-pipe		
Cooling capacity (standard conditions)	Total capacity	High	kW	1.94	2.91	4.48	1.77	2.86	4.64	
		Medium	kW	1.69	2.37	3.64	1.55	2.32	3.79	
		Low	kW	1.35	1.75	2.99	1.25	1.72	3.10	
	Sensible capacity	High	kW	1.49	2.09	3.62	1.44	2.06	3.54	
		Medium	kW	1.30	1.69	2.90	1.21	1.65	2.85	
		Low	kW	1.04	1.25	2.31	0.97	1.23	2.27	
	Latent capacity	High	kW	0.54	0.82	0.98	0.33	0.80	1.19	
Heating capacity (standard conditions)	High	kW	2.15	2.94	4.88	1.76	2.68	4.64		
	Medium	kW	1.81	2.37	4.11	1.56	2.31	4.07		
	Low	kW	1.50	1.76	3.36	1.36	1.88	3.55		
Power input	High	kW	0.019	0.016	0.033	0.019	0.016	0.033		
	Medium	kW	0.01			0.02	0.01		0.02	
	Low	kW								
FCEER				B	A			B	A	
FCCOP				B	A			B	A	
Dimensions	Unit	HeightxWidthxDepth	mm	564x774x226	564x984x226	564x1,190x226	564x774x226	564x984x226	564x1,190x226	
Weight	Unit		kg	20.6	26.7	32.3	20.6	26.7	32.3	
Casing	Colour	White - RAL9010								
Heat exchanger	Water volume		l	1						
Air filter	Type	Polypropylene net								
Fan	Type	Centrifugal								
	Quantity			1	2		1	2		
	Air flow rate	High	m³/h	344	442	785	327	431	763	
		Medium	m³/h	271	341	605	261	332	593	
	Low	m³/h	211	241	470	205	237	460		
Total sound power level	High		dBA	50	48	56	50	47	58	
	Medium		dBA	44	42	49	44	41	53	
	Low		dBA	40	36	43	38	33	48	
Sound pressure level	High		dBA	45	43	51	45	42	54	
	Medium		dBA	39	37	44	39	36	48	
	Low		dBA	35	31	38	33	28	43	
Water flow	Cooling	High	l/h	337	503	774	307	493	802	
		Medium	l/h	292	408	628	267	400	654	
		Low	l/h	234	302	515	216	297	535	
	Heating	High	l/h	373	506	866	154	234	406	
		Medium	l/h	315	408	709	136	202	357	
		Low	l/h	260	301	575	119	165	311	
Electric heater	Power input		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						

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



› 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	3.29													
Latent capacity	High	kW	0.34	0.44	0.54	0.82	0.76	1.18	0.98	1.80	2.06	0.32	0.42	0.33	0.53	0.80	0.75	1.17	1.19	1.79	2.03																
	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																
Power input	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																
	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																	
FCEER				E				D		E		D		E				D		E		D		E													
FCCOP				E				D				E				D				E																	
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																
Casing	Colour			White - RAL9010																																	
Heat exchanger	Water volume			l	0				1				2		0				1				2														
Additional heat exchanger	Water volume			l	-																																
Air filter	Type			Polypropylene net																																	
Fan	Type			Centrifugal																																	
	Quantity			1				2								1				2																	
Air flow rate	High	m³/h	319	344		442		640		706		785		1,011		1,393		307		330		327		432		431		628		690		763		998		1,362	
	Medium	m³/h	233	271		341		450		497		605		771		1,022		225		261		334		332		444		490		593		765		1,007			
	Low	m³/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	49	50	48		52		53		56		61		67		45		49		50		48		47		53		56		58		60		66	
	Medium	dBA	42	44		43		42		43		49		54		60		39		44		43		41		45		46		53		54		58			
	Low	dBA	37	38	40	35		36		35		43		47		49		33		40		38		34		33		36		39		48		46		48	
Sound pressure level	High	dBA	42	44	45	43		47		48		51		56		62		40		44		45		43		42		46		51		54		55		61	
	Medium	dBA	37	39		38		37		38		44		49		55		34		39		38		36		38		41		48		49		53			
	Low	dBA	32	33	35	30		31		30		38		42		44		28		33		29		28		29		32		43		41		43			
Water flow	Cooling	High	l/h	264	299	337	415	503	602	743	774	1,152	1,376	250	291	307	409	493	594	730	802	1,138	1,352														
		Medium	l/h	213	261	292	348	408	451	561	628	905	1,071	196	254	267	343	400	447	554	654	898	1,058														
		Low	l/h	179	216	234	275	302	340	431	515	682	706	169	212	216	272	297	336	425	535	676	699														
	Heating	High	l/h	317	320	373	469	506	704	736	866	1,129	1,455	146	154	222	234	368	334	406	610	643															
		Medium	l/h	256	300	315	393	408	545	563	709	898	1,135	130	137	136	191	202	304	281	357	527	551														
		Low	l/h	211	252	260	302	301	415	430	575	690	764	115	120	119	156	165	247	238	311	440	425														
Electric heater	Power input	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																																		
Current input	High	A	0.16	0.20		0.27		0.40		0.39		0.80		1.07		0.16		0.20		0.27		0.40		0.39		0.80		1.07									
	Medium	A	0.11	0.14		0.20		0.29		0.28		0.57		0.78		0.11		0.14		0.20		0.29		0.28		0.57		0.78									
	Low	A	0.09	0.11		0.14		0.19		0.39		0.54		0.09		0.11		0.14		0.19		0.39		0.54		0.09		0.11									

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



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Indoor unit				FWR-AT/AF	02	03	06	02	03	06
					2-pipe			4-pipe		
Cooling capacity (standard conditions)	Total capacity	High	kW	1.94	2.91	4.48	1.77	2.86	4.64	
		Medium	kW	1.69	2.37	3.64	1.55	2.32	3.79	
		Low	kW	1.35	1.75	2.99	1.25	1.72	3.10	
	Sensible capacity	High	kW	1.49	2.09	3.62	1.44	2.06	3.54	
		Medium	kW	1.30	1.69	2.90	1.21	1.65	2.85	
		Low	kW	1.04	1.25	2.31	0.97	1.23	2.27	
	Latent capacity	High	kW	0.54	0.82	0.98	0.33	0.80	1.19	
Heating capacity (standard conditions)	High	kW	2.15	2.94	4.88	1.76	2.68	4.64		
	Medium	kW	1.81	2.37	4.11	1.56	2.31	4.07		
	Low	kW	1.50	1.76	3.36	1.36	1.88	3.55		
Power input	High	kW	0.019	0.016	0.033	0.019	0.016	0.033		
	Medium	kW	0.01		0.02	0.01		0.02		
	Low	kW	0.01							
FCEER					B	A		B	A	
FCCOP					B	A		B	A	
Dimensions	Unit	HeightxWidthxDepth	mm	564x774x246	564x984x246	564x1,190x246	564x774x246	564x984x246	564x1,190x246	
Weight	Unit		kg	21.2	27.5	33.6	21.2	27.5	33.6	
Casing	Colour	White - RAL9010								
Heat exchanger	Water volume	1								
Air filter	Type	Polypropylene net								
Fan	Type	Centrifugal								
	Quantity									
	Air flow rate	High	m³/h	344	442	785	327	431	763	
		Medium	m³/h	271	341	605	261	332	593	
		Low	m³/h	211	241	470	205	237	460	
Total sound power level	High	dBA	50	48	56	50	47	58		
	Medium	dBA	44	42	49	44	41	53		
	Low	dBA	40	36	43	38	33	48		
Sound pressure level	High	dBA	45	43	51	45	42	54		
	Medium	dBA	39	37	44	39	36	48		
	Low	dBA	35	31	38	33	28	43		
Water flow	Cooling	High	l/h	337	503	774	307	493	802	
		Medium	l/h	292	408	628	267	400	654	
		Low	l/h	234	302	515	216	297	535	
	Heating	High	l/h	373	506	866	154	234	406	
		Medium	l/h	315	408	709	136	202	357	
		Low	l/h	260	301	575	119	165	311	
Electric heater	Power input	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							

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



› 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																																																																		
Latent capacity	High	kW	0.34	0.44	0.54	0.82	0.76	1.18	0.98	1.80	2.06	0.32	0.42	0.33	0.53	0.80	0.75	1.17	1.19	1.79	2.03																																																																				
	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																																																																				
Power input	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																																																																				
	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	0.037	0.053	0.057	0.056																																																																			
	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																																																																			
FCEER				E					D					E					D					E																																																																	
FCCOP				E					D					E					D					E																																																																	
Dimensions	Unit	HeightxWidthxDepth	mm	564x774x246					564x984x246					564x1,190x246					564x1,400x271					564x984x246					564x1,190x246					564x1,400x271																																																							
Weight	Unit		kg	20.6					21.2					26.5					27.5					32.5					33.5					33.6					43.1																																																		
Casing	Colour			White - RAL9010																																																																																					
Heat exchanger	Water volume		l	0					1					2					0					1					2																																																												
Additional heat exchanger	Water volume		l	-																							1																																																														
Air filter	Type			Polypropylene net																																																																																					
Fan	Type			Centrifugal																																																																																					
	Quantity			1					2					1					2																																																																						
	Air flow rate	High	m³/h	319	344					442					640					706					785					1,011					1,393					307					330					327					432					431					628					690					763					998					1,362				
		Medium	m³/h	233	271					341					450					497					605					771					1,022					225					261					334					332					444					490					593					765					1,007									
Low	m³/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	49	50	48					52	53	56	61	67	45	49	50	48	47	53	56	58	60	66																																																																
	Medium	dBA	42	44					43	42	43					49	54	60	39	44	43	41	45	46	53	54	58																																																														
	Low	dBA	37	38	40	35					36	35					43	47	49	33	40	38	34	33	36	39	48	46	48																																																												
Sound pressure level	High	dBA	42	44	45	43					47	48	51	56	62	40	44	45	43	42	46	51	54	55	61																																																																
	Medium	dBA	37	39					38	37	38					44	49	55	34	39	38	36	38	41	48	49	53																																																														
	Low	dBA	32	33	35	30	31	30					38	42	44	28	33	29	28	29	32	43	41	43																																																																	
Water flow	Cooling	High	l/h	264	299	337	415	503	602	743	774	1,152	1,376	250	291	307	409	493	594	730	802	1,138	1,352																																																																		
		Medium	l/h	213	261	292	348	408	451	561	628	905	1,071	196	254	267	343	400	447	554	654	898	1,058																																																																		
		Low	l/h	179	216	234	275	302	340	431	515	682	706	169	212	216	272	297	336	425	535	676	699																																																																		
	Heating	High	l/h	317	320	373	469	506	704	736	866	1,129	1,455	146	154	222	234	368	334	406	610	643																																																																			
		Medium	l/h	256	300	315	393	408	545	563	709	898	1,135	130	137	136	191	202	304	281	357	527	551																																																																		
		Low	l/h	211	252	260	302	301	415	430	575	690	764	115	120	119	156	165	247	238	311	440	425																																																																		
Electric heater	Power input	kW	1.0	1.5					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																																																																																					
Current input	High	A	0.16	0.20					0.27					0.40					0.39					0.80					1.07					0.16					0.20					0.27					0.40					0.39					0.80					1.07																									
	Medium	A	0.11	0.14					0.20					0.29					0.28					0.57					0.78					0.11					0.14					0.20					0.29					0.28					0.57					0.78																									
	Low	A	0.09	0.11					0.14					0.19					0.39					0.54					0.09					0.11					0.14					0.19					0.39					0.54																																			

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



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about FWS-AF



Indoor unit				FWS-AT/AF	02	03	06	02	03	06
					2-pipe			4-pipe		
Cooling capacity (standard conditions)	Total capacity	High	kW	1.94	2.91	4.48	1.77	2.86	4.64	
		Medium	kW	1.69	2.37	3.64	1.55	2.32	3.79	
		Low	kW	1.35	1.75	2.99	1.25	1.72	3.10	
	Sensible capacity	High	kW	1.49	2.09	3.62	1.44	2.06	3.54	
		Medium	kW	1.30	1.69	2.90	1.21	1.65	2.85	
		Low	kW	1.04	1.25	2.31	0.97	1.23	2.27	
	Latent capacity	High	kW	0.54	0.82	0.98	0.33	0.80	1.19	
Heating capacity (standard conditions)	High	kW	2.15	2.94	4.88	1.76	2.68	4.64		
	Medium	kW	1.81	2.37	4.11	1.56	2.31	4.07		
	Low	kW	1.50	1.76	3.36	1.36	1.88	3.55		
Power input	High	kW	0.019	0.016	0.033	0.019	0.016	0.033		
	Medium	kW	0.01			0.02	0.01		0.02	
	Low	kW	0.01							
FCEER				B	A			B	A	
FCCOP				B	A			B	A	
Dimensions	Unit	HeightxWidthxDepth		mm	535x584x224	535x794x224	535x1,000x224	535x584x224	535x794x224	535x1,000x224
Weight	Unit			kg	16.9	22.1	26.6	16.9	22.1	26.6
Heat exchanger	Water volume			l	1					
Air filter	Type				Polypropylene net					
Fan	Type				Centrifugal					
	Quantity				1	2		1	2	
	Air flow rate	High	m³/h	344	442	785	327	431	763	
		Medium	m³/h	271	341	605	261	332	593	
Total sound power level		Low	m³/h	211	241	470	205	237	460	
		High	dBA	50	48	56	50	47	58	
		Medium	dBA	44	42	49	44	41	53	
Sound pressure level		Low	dBA	40	36	43	38	33	48	
		High	dBA	45	43	51	45	42	54	
		Medium	dBA	39	37	44	39	36	48	
Water flow	Cooling	Low	dBA	35	31	38	33	28	43	
		High	l/h	337	503	774	307	493	802	
		Medium	l/h	292	408	628	267	400	654	
	Heating	Low	l/h	234	302	515	216	297	535	
		High	l/h	373	506	866	154	234	406	
		Medium	l/h	315	408	709	136	202	357	
		Low	l/h	260	301	575	119	165	311	
		Power input	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					

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



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› 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																			
	Sensible capacity	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																			
		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																			
	Latent capacity	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	0.34	0.44	0.54	0.82	0.76	1.18	0.98	1.80	2.06	0.32	0.42	0.33	0.53	0.80	0.75	1.17	1.19	1.79	2.03																					
	Medium	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																					
	Low	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																					
Power input	High	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																					
	Medium	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																								
	Low	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																					
			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																					
FCEER				E			D	E	D		E						D	E	D		E																					
FCCOP				E				D				E						D				E																				
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										
Heat exchanger	Water volume		l	0				1				2				0				1								2														
Additional heat exchanger	Water volume		l									-												1																		
Air filter	Type		Polypropylene net																																							
Fan	Type		Centrifugal																																							
	Quantity			1				2				1				2																										
	Air flow rate	High	m³/h	319	344		442	640	706	785	1,011	1,393	307	330	327	432	431	628	690	763	998	1,362																				
	Medium	m³/h	233	271		341	450	497	605	771	1,022	225	261		334	332	444	490	593	765	1,007																					
	Low	m³/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	49	50	48	52	53	56	61	67	45	49	50	48	47	53	56	58	60	66																					
	Medium	dBA	42	44		43	42	43	49	54	60	39	44		43	41	45	46	53	54	58																					
	Low	dBA	37	38	40	35	36	35	43	47	49	33	40	38	34	33	36	39	48	46	48																					
Sound pressure level	High	dBA	42	44	45	43	47	48	51	56	62	40	44	45	43	42	46	51	54	55	61																					
	Medium	dBA	37	39		38	37	38	44	49	55	34	39		38	36	38	41	48	49	53																					
	Low	dBA	32	33	35	30	31	30	38	42	44	28	33		29	28	29	32	43	41	43																					
Water flow	Cooling	High	l/h	264	299	337	415	503	602	743	774	1,152	1,376	250	291	307	409	493	594	730	802	1,138	1,352																			
		Medium	l/h	213	261	292	348	408	451	561	628	905	1,071	196	254	267	343	400	447	554	654	898	1,058																			
		Low	l/h	179	216	234	275	302	340	431	515	682	706	169	212	216	272	297	336	425	535	676	699																			
	Heating	High	l/h	317	320	373	469	506	704	736	866	1,129	1,455	146	154		222	234	368	334	406	610	643																			
		Medium	l/h	256	300	315	393	408	545	563	709	898	1,135	130	137	136	191	202	304	281	357	527	551																			
		Low	l/h	211	252	260	302	301	415	430	575	690	764	115	120	119	156	165	247	238	311	440	425																			
Electric heater	Power input	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																																							
Current input	High	A	0.16	0.20		0.27		0.40	0.39	0.80	1.07	0.16	0.20		0.27		0.40	0.39	0.80	1.07																						
	Medium	A	0.11	0.14		0.20		0.29	0.28	0.57	0.78	0.11	0.14		0.20		0.29	0.28	0.57	0.78																						
	Low	A	0.09	0.11		0.14		0.19		0.39	0.54	0.09	0.11		0.14		0.19		0.39	0.54																						

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
- › 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



› 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			
	Latent capacity	Super high	kW	0.56	0.78	1.07	1.51	2.00	1.82	2.38	0.55	0.79	1.56	1.62	1.88	2.46				
		High	kW	0.48	0.70	0.91	1.38	1.67	2.16	0.48	0.70	0.69	1.39	1.41	1.70	2.22				
		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	253x590x705	253x590x875	253x590x1,010	253x590x1,210	253x590x1,460	253x590x1,560	253x590x1,820	253x590x705	253x590x875	253x590x1,010	253x590x1,210	253x590x1,460	253x590x1,560	253x590x1,820			
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			
	Operation weight		kg	17	20	24	28	37	39	46	18	22	25	30	40	41	49			
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	1	2	3	4						
	Air flow rate	Super high	m³/h	430	638	910	1,195	1,559	1,753	2,177	416	626	835	1,193	1,548	1,742	2,166			
		High	m³/h	311	518	619	926	1,188	1,413	1,735	302	501	571	905	1,173	1,386	1,729			
		Medium	m³/h	238	385	413	630	851	1,016	1,202	232	371	377	618	846	1,001	1,199			
		Low	m³/h	150	256	284	426	569	688	808	142	256	257	414	569	684	804			
Total sound power level	Super high	dBA	51	61	58	62	64	65	51	61	58	62	64	65						
	High	dBA	49	56	50	55	57	58	60	49	56	50	55	57	58	60				
	Medium	dBA	37	49	40	48	47	50	37	49	40	48	47	50						
	Low	dBA	31	38	32	39	38	41	40	31	38	32	39	38	41	40				
Sound pressure level	Super high	dBA	41	51	48	52	54	55	41	51	48	52	54	55						
	High	dBA	39	46	38	45	47	48	49	39	46	38	45	47	48	49				
	Medium	dBA	26	39	28	36	37	40	39	26	39	28	36	37	40	39				
	Low	dBA	21	28	22	29	27	31	29	21	28	22	29	27	31	29				
Water flow	Cooling	Super high	l/h	254	382	526	768	886	1,023	1,229	246	374	478	767	879	918	1,223			
		High	l/h	212	331	404	668	733	899	1,050	206	320	373	653	724	800	1,046			
		Medium	l/h	191	294	343	559	631	784	870	188	284	313	547	628	705	866			
		Low	l/h	115	184	209	327	388	497	565	109	184	193	319	388	459	563			
	Heating	Super high	l/h	449	692	899	1,216	1,562	1,757	2,085	334	515	658	881	1,153	1,243	1,501			
		High	l/h	370	592	707	1,051	1,279	1,531	1,773	280	445	540	764	970	1,094	1,318			
		Medium	l/h	326	518	593	821	970	1,172	1,520	253	398	460	664	861	974	1,156			
		Low	l/h	192	322	364	530	650	780	995	148	250	290	406	589	665	773			
Piping connections	Drain	OD	mm	R 3/4"																
Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/220-240																	
Current input	Super high	A	0.21	0.31	0.37	0.53	0.73	0.81	1.03	0.21	0.31	0.37	0.53	0.73	0.81	1.03				
	High	A	0.17	0.24	0.26	0.43	0.58	0.65	0.78	0.17	0.24	0.26	0.43	0.58	0.65	0.78				
	Medium	A	0.15	0.21	0.22	0.33	0.47	0.52	0.65	0.15	0.21	0.22	0.33	0.47	0.52	0.65				
	Low	A	0.13	0.18	0.19	0.27	0.40	0.46	0.54	0.13	0.18	0.19	0.27	0.40	0.46	0.54				

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



› More information
about FWP-AT

Indoor unit				FWP-AT	02	03	04	05	06	07	
					2-pipe						
Cooling capacity (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		
	Latent capacity	High	kW	0.67	0.92	1.06	1.35	1.41	1.87		
Heating capacity (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	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	
Heat exchanger	Water volume			l	1	2				3	
Air filter	Type	Acrylic fiber - Filtering class G2 (G3 on request)									
Fan	Type	Centrifugal									
	Quantity				1				2		
	Air flow rate	High	m³/h		371				722		
		Low	m³/h		184				283	331	
Total sound power level	High	dBA			58				60		
	Low	dBA			36				38		
Sound pressure level	High	dBA			53				55		
	Low	dBA			31				33		
Water flow	Cooling	High	l/h	418	502	555	799	847	1,009		
		Flow	l/h	219	256	283	318	400	465		
	Heating	High	l/h	442	486	521	819	898	969		
		Low	l/h	242	256	265	372	448	469		
Electric heater	Power input			kW	2.0				2.5		
Piping connections	Drain	OD	mm	17							
Power supply	Phase/Frequency		Hz	1~/50							

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



› More information
about FWB-BT

Indoor unit				FWB-BT	02	03	04	05	06	07	08	09	10
					2-pipe								
Cooling capacity (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	
Latent capacity		High	kW	0.67	0.92	1.06	1.35	1.41	1.87	1.80	2.09	2.63	
		Low	kW	2.54	2.80	3.00	4.70	5.15	5.56	5.95	6.57	7.18	
Heating capacity (standard conditions)			kW	1.39	1.48	1.53	2.14	2.81	2.71	4.11	4.42	4.69	
Power input	High	kW		0.106				0.192				0.294	
	Low	kW		0.03				0.08				0.16	
FCEER				D			C		D				
FCCOP				C				D		C		D	
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
Heat exchanger	Water volume	l		1	2				3		2	3	4
Air filter	Type	Acrylic fiber - Filtering class G2 (G3 on request)											
Fan	Type	Centrifugal											
	Quantity												
	Air flow rate	High	m³/h	371				722			905		
		Low	m³/h	184				283	331		572		
Total sound power level	High	dBA		58			60			69			
Sound pressure level	Low	dBA		36		38		39		53			
	High	dBA		53			55			64			
	Low	dBA		31		33		34			48		
Water flow	Cooling	High	l/h	418	502	555	799	847	1,009	1,028	1,162	1,363	
		Low	l/h	219	256	283	318	400	465	683	758	874	
	Heating	High	l/h	442	486	521	819	898	969	1,040	1,148	1,256	
		Low	l/h	242	256	265	372	448	469	714	768	815	
Electric heater	Power input	kW		2.0				2.5			3.0		
Piping connections	Drain	OD	mm	17									
Power supply	Phase/Frequency		Hz	1~/50									

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



› 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	
Latent capacity	High	kW	0.82	1.09	1.54	1.61	1.28	1.66	0.81	1.08	1.52	1.58	1.27	1.64		
	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		
Heating capacity (standard conditions)	Low	kW	3.04	3.55	5.59	6.29	6.47	7.28		3.23	5.25	5.21	7.02	6.99		
	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			
Power input	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
Heat exchanger	Water volume			l	1		2		3		1		2		3	
Additional heat exchanger	Water volume			l	-								1			
Air filter	Type			Acrylic - Filtering class EU2												
Fan	Type			Centrifugal												
	Quantity			1		2				1		2				
	Air flow rate	High	m³/h	802	791	1,238	1,203	1,606	1,581	793	783	1,211	1,182	1,576	1,550	
		Medium	m³/h	700	692	1,134	1,107	1,384	1,371	694	686	1,115	1,088	1,362	1,349	
	Low	m³/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		69		72		66		69		72	
	Medium			dBA	61		63		67		61		63		67	
	Low			dBA	54		59	61	62		54		59	61	62	
Sound pressure level	High			dBA	61		64		67		61		64		67	
	Medium			dBA	56		58		62		56		58		62	
	Low			dBA	49		54	56	57		49		54	56	57	
Water flow	Cooling	High	l/h	671	817	1,059	1,169	1,344	1,501	666	810	1,040	1,148	1,322	1,476	
		Medium	l/h	607	732	990	1,093	1,202	1,336	602	727	978	1,079	1,187	1,319	
		Low	l/h	493	587	915	1,008	1,085	1,197	491	584	904	998	1,075	1,185	
	Heating	High	l/h	705	840	1,114	1,259	1,369	1,551	342	340	501	496	700	695	
		Medium	l/h	641	758	1,048	1,183	1,236	1,397	322	320	483	477	654	651	
		Low	l/h	529	617	972	1,094	1,124	1,264	283		460	456	614	612	
Electric heater	Power input			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											

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



› 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				
Latent capacity	High	kW	0.82	1.54	1.28	1.65	2.63	3.71	4.25	0.82	1.52	1.27	1.64	2.60	3.70	4.25					
	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					
Heating capacity (standard conditions)	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					
	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				
Power input	Low	kW	0.14	0.35	0.29		0.37		0.87		0.14	0.35	0.29		0.37		0.87				
	FCEER			E														D		E	
	FCCOP			D														E		E	
Dimensions	Unit	HeightxWidthxDepth	mm	559x754x280	559x964x280	559x1,170x280		718x1,170x353	718x1,380x353		559x754x280	559x964x280	559x1,170x280		718x1,170x353	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				
Heat exchanger	Water volume		l	1	2		3		5	6	1	2		3		5	6				
Additional heat exchanger	Water volume		l	-								1				2					
Air filter	Type			Acrylic fiber - Filtering class G2 (G4 on request)																	
Fan	Type			Centrifugal																	
	Quantity			1	2					1		2									
	Air flow rate	High	m³/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				
Total sound power level	Medium	m³/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	m³/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					
	High	dB(A)	66	69	72			74		78		66	69	72		74		78			
Sound pressure level	Medium	dB(A)	61	63	67				73		61	64	67			73					
	Low	dB(A)	54	59	62			60		69		54	61	62		60		69			
	High	dB(A)	61	64	67			69		73		61	64	67		69		73			
Water flow	Medium	dB(A)	56	58	62				68		56	59	62			68					
	Low	dB(A)	49	54	57			55		64		49	56	57		55		64			
	Cooling	High	l/h	671	1,059	1,344	1,501	2,163	2,953	3,270	666	1,040	1,322	1,476	2,130	2,940	3,254				
Electric heater	Medium	l/h	607	990	1,202	1,336	1,827	2,561	2,823	602	978	1,187	1,319	1,808	2,550	2,811					
	Low	l/h	493	915	1,085	1,197	1,509	2,145	2,365	491	904	1,075	1,185	1,493	2,138	2,358					
	Heating	High	l/h	705	1,114	1,369	1,551	2,209	3,008	3,311	342	501	700	695	1,264	1,690	1,680				
	Medium	l/h	641	1,048	1,236	1,397	1,884	2,617	2,852	322	483	654	651	1,105	1,503	1,490					
	Low	l/h	529	972	1,124	1,264	1,573	2,203	2,389	283	460	614	612	950	1,302	1,295					
Piping connections	Drain	OD	mm	17																	
Power supply	Phase/Frequency/Voltage	Hz/V		1~/50/230																	

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)



› More information
about FWT-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	
	Latent capacity	High	kW	0.58	0.68	0.67	1.11	1.18	
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	0.04	0.06		
FCEER				D				C	D
FCCOP				C					
Dimensions	Unit	HeightxWidthxDepth		mm	288x800x206			310x1,070x224	
Weight	Unit			kg	9.00			14.0	
	Operation weight			kg	10			15	
Casing	Colour			White					
Heat exchanger	Water volume		l	1					
Air filter	Type			Washable Saranet					
Fan	Type			Cross flow fan					
	Quantity			1					
	Air flow rate	High	m³/h	442	476	629	866	1,053	
		Medium	m³/h	391	425	544	765	883	
Total sound power level	Low	m³/h	340	374	442	663	782		
	High	dBA	45	48	55		59		
	Medium	dBA	41	44	50	51	54		
Sound pressure level	Low	dBA	36	39	45	47	51		
	High	dBA	34	35	42		46		
	Medium	dBA	29	30	39	38	42		
	Low	dBA	25		32	34	39		
Water flow	Cooling	High	l/h	420	460	570	780	910	
		Medium	l/h	420	460	570	780	910	
		Low	l/h	420	460	570	780	910	
	Heating	High	l/h	420	460	570	780	910	
		Medium	l/h	420	460	570	780	910	
		Low	l/h	420	460	570	780	910	
Piping connections	Drain	OD	mm	19					
Power supply	Phase/Frequency/Voltage		Hz/V	1N~/50/220-240					
Current input	High	A	0.19	0.20	0.21	0.29	0.34		
	Medium	A	0.18	0.20		0.26	0.32		
	Low	A	0.17	0.19		0.25	0.31		

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					ERPVO2A6 (2 class) ERPVO3A6 (3 class) ERPVO6A6 (6 class) ERPVI0A6 (8 class)	ERPVO2A6 (1, 15 & 2 class) ERPVO3A6 (25 & 3 class) ERPVO6A6 (35, 4 & 6 class) ERPVI0A6 (8 & 10 class)	ERPVO2A6 (2 class) ERPVO3A6 (3 class) ERPVO6A6 (6 class) ERPVI0A6 (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
ERP02A6 (1,15 & 2 class) ERP03A6 (25 & 3 class) ERP06A6 (35, 4 & 6 class) ERP10A6 (8 & 10 class)	ERP02A6 (2 class) ERP03A6 (3 class) ERP06A6 (6 class) ERP10A6 (8 class)	ERP02A6 (1,15 & 2 class) ERP03A6 (25 & 3 class) ERP06A6 (35,4 & 6 class) ERP10A6 (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	

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
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 x2	EKMV2C09B x2				
	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)	EK2MV3B10CS	E2MV107A6	E2MV107A6	ED2MV04A6 (4 class) ED2MV10A6 (6, 8 & 10 class) ED2MV12A6 (12 class) ED2MV18A6 (16 & 18 class)	ED2MV04A6 (4 & 5 class) ED2MV10A6 (6 up to 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)	EK2MV3B10CS			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 to 10 class)	
			EK2MV2B10CS					
			EK4MV2B10CS					
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				
	Electrical 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							
	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) EDEH06A6 (6 class) EDEH10A6 (8 & 10 class) EDEH12A6 (12 class) EDEH18A6 (16 & 18 class)	EDEH04A6 (4 & 5 class) EDEH06A6 (6 & 7 class) EDEH10A6 (8 & 10 class)	
						EDEH04A6 (4 class) EDEH06A6 (6 class) EDEH10A6 (8 & 10 class) EDEH12A6 (12 class) EDEH18A6 (16 & 18 class)	EDEH04A6 (4 & 5 class) EDEH06A6 (6 & 7 class) EDEH10A6 (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)						
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	



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.

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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 CO₂ 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

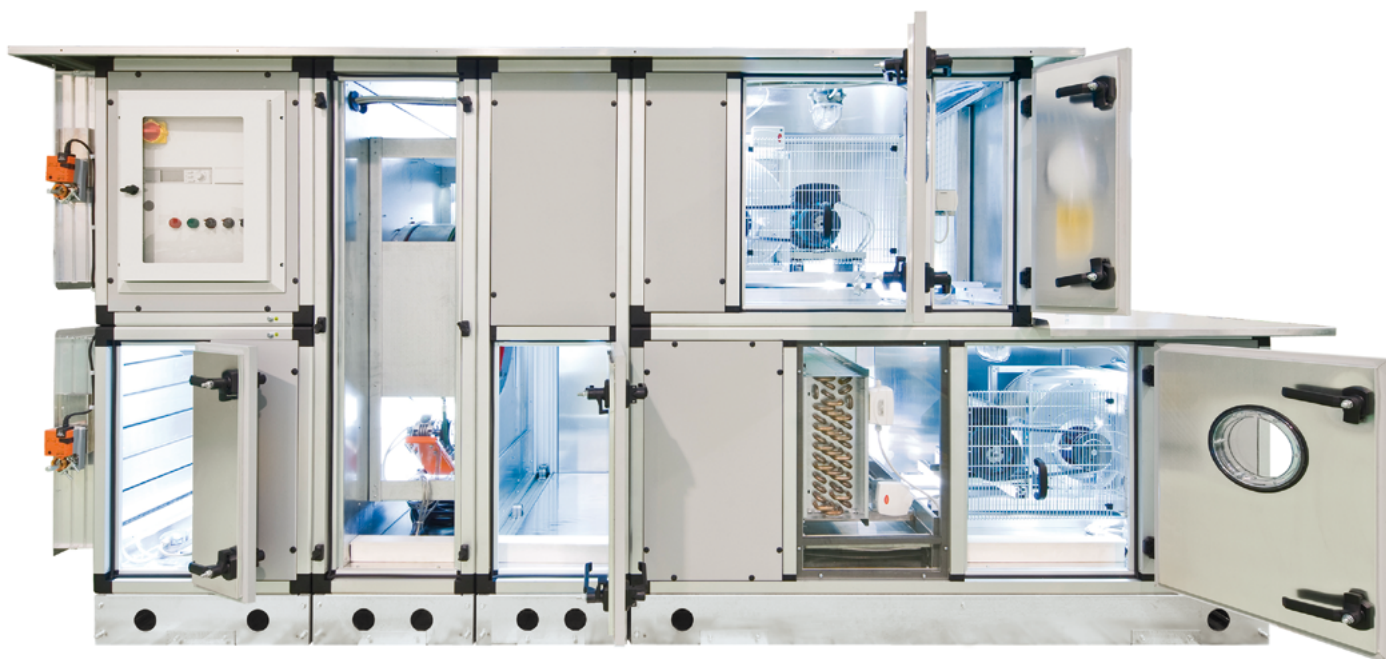
Easy start-up and commissioning

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

Daikin Fresh air package



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



Air handling units



SMART CONTROLS



DAMPER AND EC FAN



HEAT RECOVERY
WHEEL AND FILTER



D-AHU MODULAR R
INSTALLATION

Air handling units

INTRODUCTION

AIRCOOLED CHILLERS

WATERCOOLED CHILLERS

CONDENSERLESS AND
CENTRIFUGAL CHILLERS

FAN COIL UNITS

AIR HANDLING UNITS

CONTROL SYSTEMS

PREVIOUS



COMFORTABLE
INDOOR CLIMATE

Products overview



D-AHU Professional

Air flow (m³/h x 1,000)

140

120

100

90

80

70

60

50

40

20

0



Professional

- › Pre-configured sizes
- › **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.

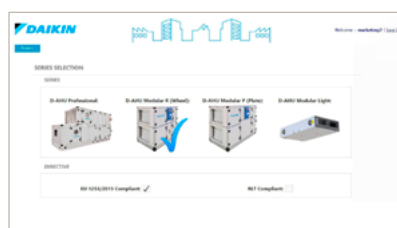
Quickly select your air handling unit by following the wizard:

- 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



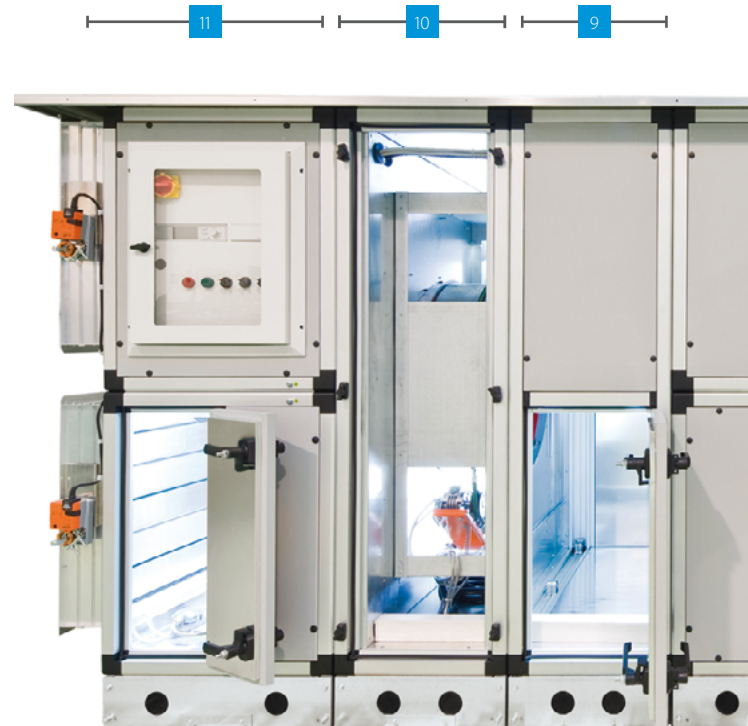
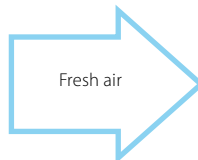
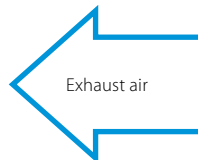
Result sp65		Eurovent Classification according to EN1886				
D1	Casing strength class	D1	D2	D3		
	Max. relative deflection mm x m ⁻¹	4.00	10.00	EXCEEDING10		
L1	Casing air leakage class at -400 Pa	L1	L2	L3		
	Max. leakage rate (f ₄₀₀) l x s ⁻¹ x m ⁻²	0.15	0.44	1.32		
L1	Casing air leakage class	L1	L2	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 manometer and hinged door
- 3 Heat recovery system (plate heat exchanger or rotation 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

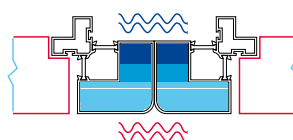
Control system on plug and play solution basis

- › Air temperature control
- › Chilled water and DX cooling system control
- › Free cooling
- › CO₂ automatic control

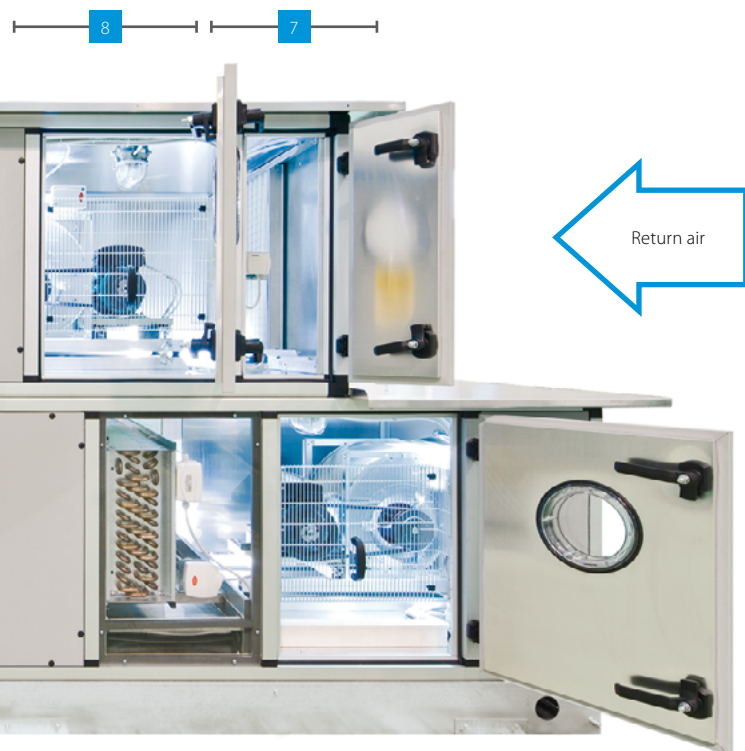
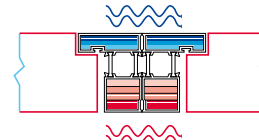
Unique section to section thermal break profile

- › 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
- › ...

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 m³/h up to 144,000 m³/h.
- › All the units can be modularly designed to facilitate the transport and the assembly on site.



Variable dimensioning

Size	Airflow (m ³ /h)	Height - mm	Width - mm
1	1,800	640	720
2	2,200	640	810
3	3,500	740	980
4	5,400	840	1,190
5	6,600	840	1,390
6	7,600	940	1,390
7	9,000	1,090	1,380
8	11,000	1,150	1,550
9	14,000	1,270	1,720
10	18,300	1,390	1,970
11	23,800	1,570	2,190

Size	Airflow (m ³ /h)	Height - mm	Width - mm
12	29,800	1,690	2,480
13	33,800	1,870	2,510
14	43,200	1,990	2,940
15	51,000	2,110	3,230
16	63,000	2,290	3,620
17	68,000	2,290	3,890
18	77,000	2,290	4,410
19	87,000	2,410	4,660
20	95,400	2,470	4,960
21	111,200	2,590	5,460
22	127,000	2,650	6,060

Example

Airflow (m ³ /h)	Unit Size	Height (mm)	Width (mm)	Face Velocity (m/s)
47,000	Size 15	2,110	3,230	2.27
	1,920x2,720	2,110	2,950	2.5

- › 1 cm increment for width & height dimensions
- › No additional cost for customized unit size
- › No additional lead time

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 CO₂ 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

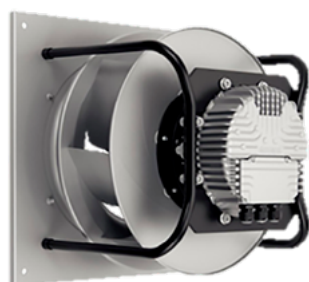
Energy efficiency and indoor air quality

- › 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



EC Fan

- › Air flow or pressure control (Variable Air Volume - Constant Air Volume)
- › Nominal air flow programmed at factory
- › Silent operation



Simple, quick installation

The Modular series' Plug and play design is more than just a convenient feature for installers. It offers cost-saving benefits as there is no need for expensive adjustments before the unit is commissioned. Plug and play makes everyone's life simpler, safer and more economical.

D-AHU Modular R		1	2	3	4	5	6	7	8	9	10
Airflow	m ³ /h	1,200	1,700	2,700	4,100	5,500	6,100	7,000	9,100	11,500	15,000
Temp. efficiency winter	%	82.4	82.4	82.4	82.6	82.2	82.4	83	82.6	82.5	82.7
External static pressure	Nom. Pa	200	200	200	200	200	200	200	200	200	200
Current	Nom. A	2.38	3.18	1.65	2.58	3.35	3.86	4.32	5.36	7.15	9.50
Power input	Nom. kW	0.55	0.73	1.14	1.79	2.32	2.68	2.99	3.72	4.95	6.58
SFPv	kW/m ³ /s	1.64	1.55	1.52	1.57	1.52	1.58	1.54	1.47	1.55	1.58
Electrical supply	Phase	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
	Voltage	V	230	230	400	400	400	400	400	400	400
Dimensions unit	Width	mm	720	720	990	1,200	1,400	1,400	1,940	1,940	2,300
	Height	mm	1,320	1,320	1,540	1,740	1,740	1,920	2,180	2,460	2,570
	Length	mm	1,700	1,700	1,800	1,920	2,080	2,280	2,400	2,280	2,400
Weight unit	kg	325	350	475	575	750	790	950	1,330	1,410	1,750

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



EC Fan

- › Inverter driven with IE4 premium efficiency motor
- › High-efficient blade profiling
- › Reduced energy consumption
- › Optimized SFP (Specific Fan Power) for an efficient unit operation

Heat exchanger

- › Premium quality counter flow plate heat exchanger
- › Up to 93% of the thermal energy recovered
- › No cross contamination

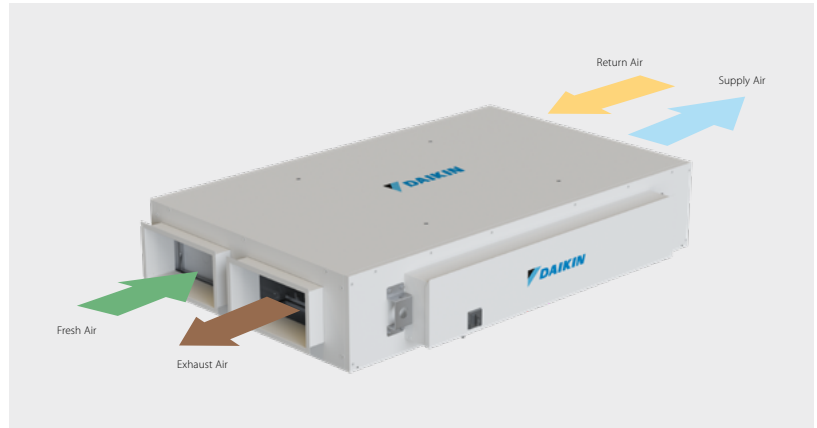
D-AHU Modular P			1	2	3	4	5	6	7	8	9	10
Airflow	m³/h		1,100	1,600	2,400	3,100	3,700	4,750	5,500	8,000	10,400	12,500
Thermal efficiency	%		93.9	93.6	93.2	93.1	93.1	93.1	93.1	93.3	93.1	93.1
External static pressure	Nom.	Pa	200	200	200	200	200	200	200	200	200	200
Current	Nom.	A	1.75	2.51	1.28	1.67	2.09	2.69	3.04	4.14	5.88	6.97
Power input	Nom.	kW	0.40	0.58	0.89	1.15	1.45	1.86	2.11	2.87	4.07	4.83
SFPv		kW/m³/s	1.32	1.30	1.33	1.34	1.41	1.41	1.38	1.29	1.41	1.39
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	1,200	1,400	1,400	1,600	1,940	1,940	2,300
	Height	mm	1,320	1,320	1,540	1,740	1,740	1,920	1,920	2,180	2,460	2,570
	Length	mm	2,030	2,200	2,610	2,660	2,800	3,210	3,340	3,840	4,060	4,190
Weight unit		kg	343	358	512	604	785	852	964	1,449	1,700	2,071

Modular L

Premium efficiency heat recovery unit

Highlights

- › 6 Predefined sizes
- › Compliant with VDI 6022
- › Exceeding ERP 2018 requirement
- › Plug & Play Controls
- › Best choice when Compactness is needed (only 280 mm height up to 550 m³/h)
- › Easy installation and commissioning



EC centrifugal fan

- › Inverter driven with IE4 premium efficiency motor
- › High-efficient blade profiling
- › Reduced energy consumption
- › Optimized SFP (Specific Fan Power) for an efficient unit operation
- › Maximum ESP available 550 Pa (depending on model sizes and air-flow)

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

Technical details

D-AHU Modular L		2	3	4	5	6	7
Airflow	m³/h	300	600	1200	1500	2500	3000
Heat exchanger thermal efficiency¹.	%	93	93	93	92	94	93
External static pressure	Nom. Pa	100	100	100	100	100	100
Current	Nom. A	0,52	1,17	1,91	2,48	4,39	5,39
Power input	Nom. kW	0,12	0,27	0,44	0,57	1,01	1,24
SFPv².	kW/m³/s	1,24	1,49	1,25	1,31	1,42	1,46
ERP compliant		ErP 2018 Compliant					
Electrical supply	Phase	ph	1	1	1	1	1
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60
	Voltage	V	220/240 Vac	220/240 Vac	220/240 Vac	220/240 Vac	220/240 Vac
Main unit dimensions	Width	mm	920	1100	1600	1600	2000
	Height	mm	280	350	415	415	500
	Length	mm	1660	1800	2000	2000	2000
Rectangular duct flange	Width	mm	250	400	500	500	700
	Height	mm	150	200	300	300	400
Unit Sound Power Level (Lwa)	dB	50	57	57	53	61	58
Unit Sound Pressure Level³.	dBA	33	39	39	35	43	40
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



Plug and play connection of AHU to Daikin VRV and ERQ

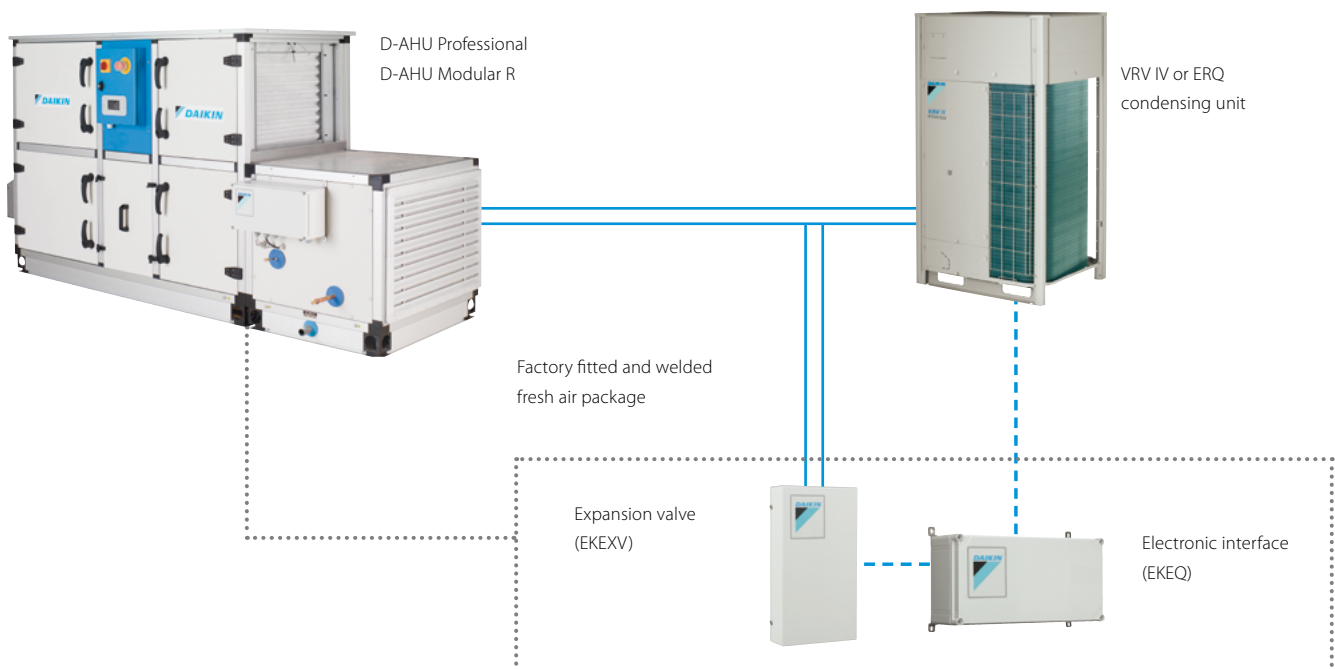
The Daikin fresh air package provides a complete solution, including all unit controls (expansion valve, control box and AHU controller) and sensors factory mounted and configured.

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.



Construction type		SP 65	SP 45
Profile	Anodized aluminium	option	option
	Anodized aluminium with thermal break	option	option
Corner	Glass fibre reinforced nylon	standard	standard
Panel insulation	Polyurethane foam density 40 kg/m ³ thermal conductivity 0.022 W/m*K fire reaction class b-s2, diam. as per EN13501-1	standard	standard
	Mineral wool density 120 kg/m ³ thermal conductivity 0.036 W/m*K (referred to 20°C) fire reaction class A1 as per EN 135011	option	option
External sheet material	Pre-coated galvanized steel	option	option
	Aluzinc	standard	standard
	Galvanized steel	option	option
	Aluminium	option	option
Internal sheet material	AISI 304 stainless steel	option	option
	Pre-coated galvanized steel	option	option
	Aluzinc	standard	standard
	Aluminium	option	option
Base frame	AISI 304 stainless steel	option	option
	Aluminium up to 35,000 m ³ /h	standard	standard
Handle	Galvanized steel from 35,000 m ³ /h	standard	standard
	Glass fibre reinforced nylon	standard	standard
Type	Compression type	standard	standard
	Hinge function type (possibility to remove door)	option	option

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 CO₂ 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.

Table of content

Control Systems

Mini building management system

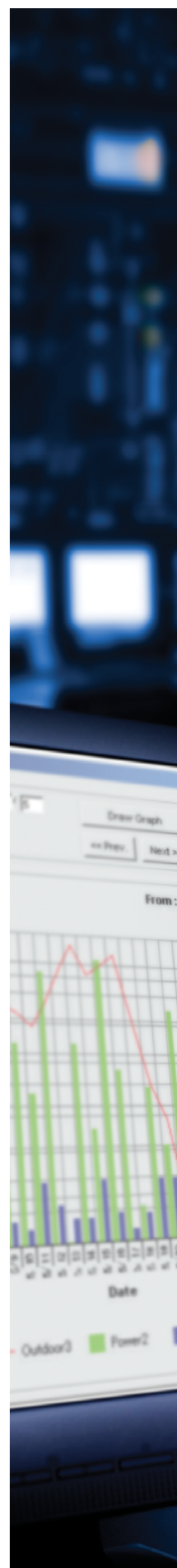
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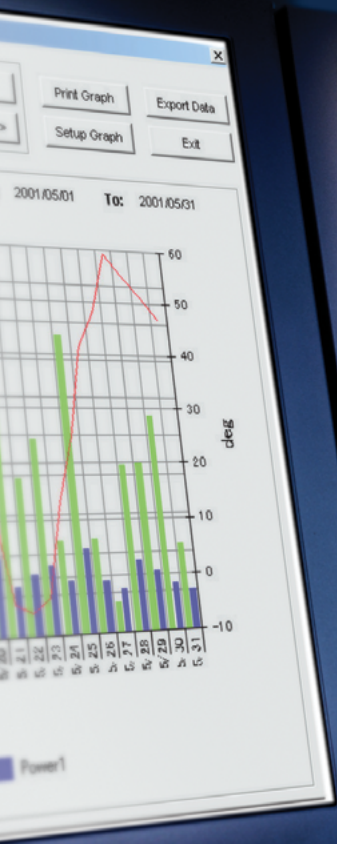
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Centralised control systems

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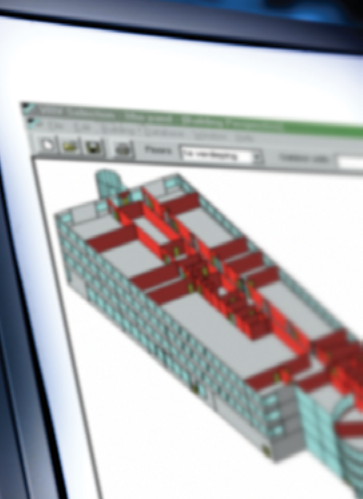




Software interface for outdoor unit selection. The window is titled "Edit Outdoor Unit Selection". It contains several sections:

- System:** Name: Out 1, Model: DPM250AAR1, PS: 400V 3Ph, Combination %: 100, Capacity index: 100, Maximum for model: 500, Actual: 100.
- Design conditions:** Heating: $^{\circ}\text{C}$ 2.0, Cooling: $^{\circ}\text{C}$ 32.0, Heat load: 36,00W, Cool load: 40,00W.
- Available capacities:** Heating: 37,00W, Integrated capacity at 100%: 40,00W, P1 heating: 15,40W, Full load P1 at $T_a 7^{\circ}\text{C}$ (44,00W), Cooling: 40,00W.
- Piping:** Enter individual piping lengths manually, Equivalent piping length: 10, First branch to indoor units: 10, Position of outdoor unit relative to indoor units: Higher, Same level, Lower.

The outdoor unit is on the same level as the indoor units.



Mini BMS

with full integration
across all product pillars

DCM601A51



- 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

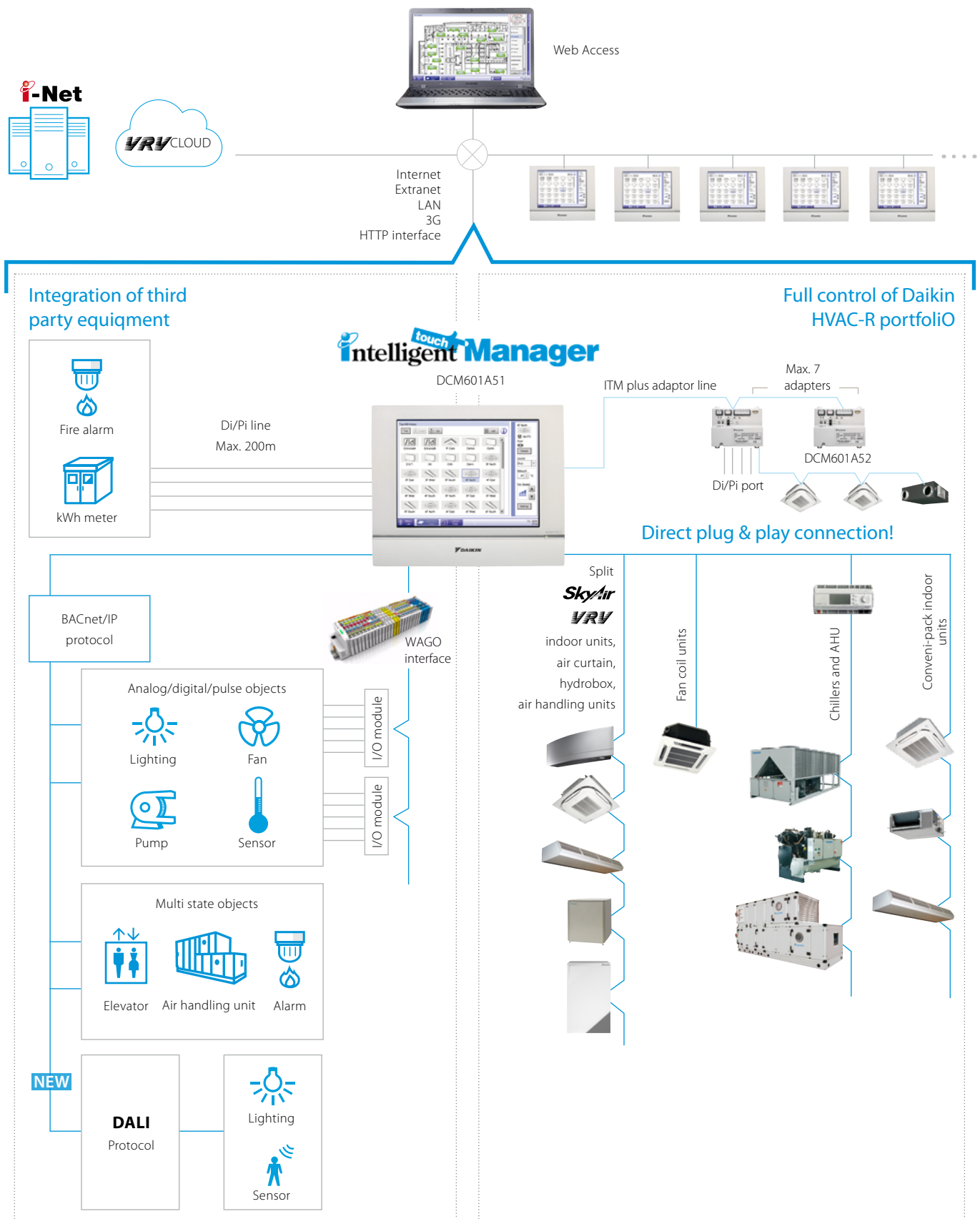
- › Easy selection of WAGO materials
- › Material list creation
- › Time saving
 - Includes wiring schemes
 - Contains commissioning/preset data for iTM



Check on
You Tube

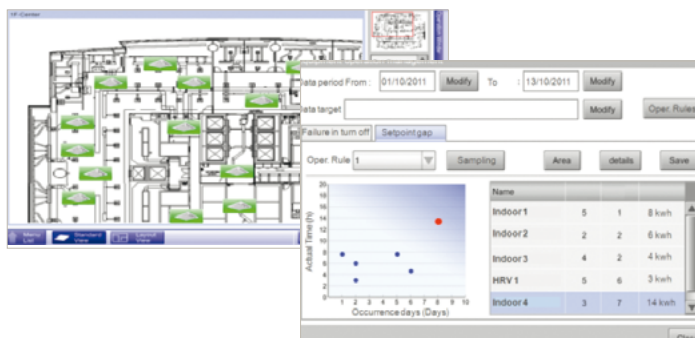
[www.youtube.
com/DaikinEurope](http://www.youtube.com/DaikinEurope)

System overview



User friendliness

- › Intuitive user interface
- › Visual lay out view and direct access to indoor unit main functions
- › 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

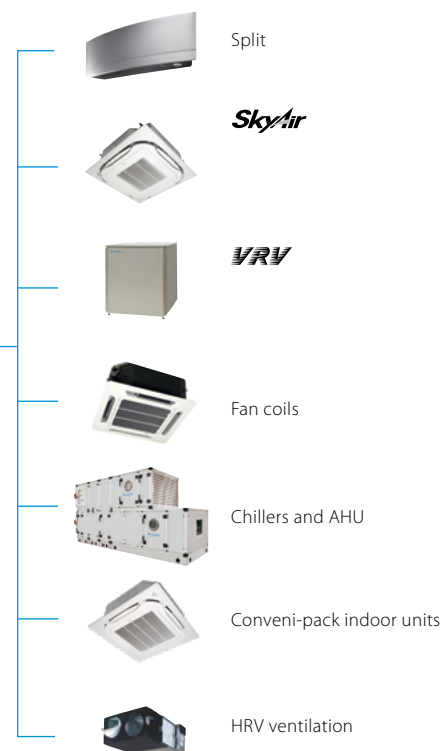
Flexibility

- › 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

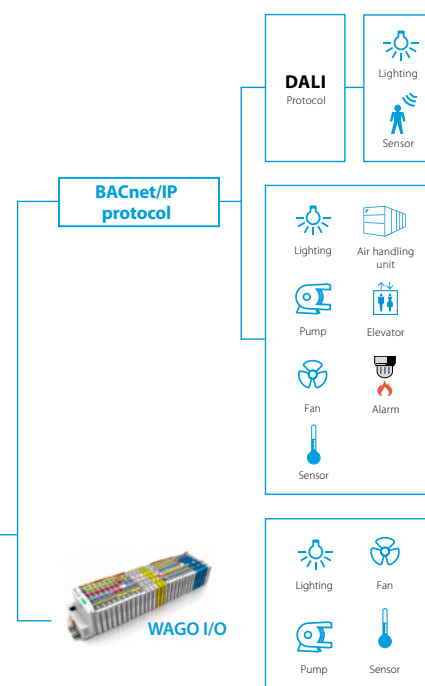
Easy servicing and commissioning

- › 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



Flexibility in size
64 up to 512 groups



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 calendar, 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, VRF
- 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**





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

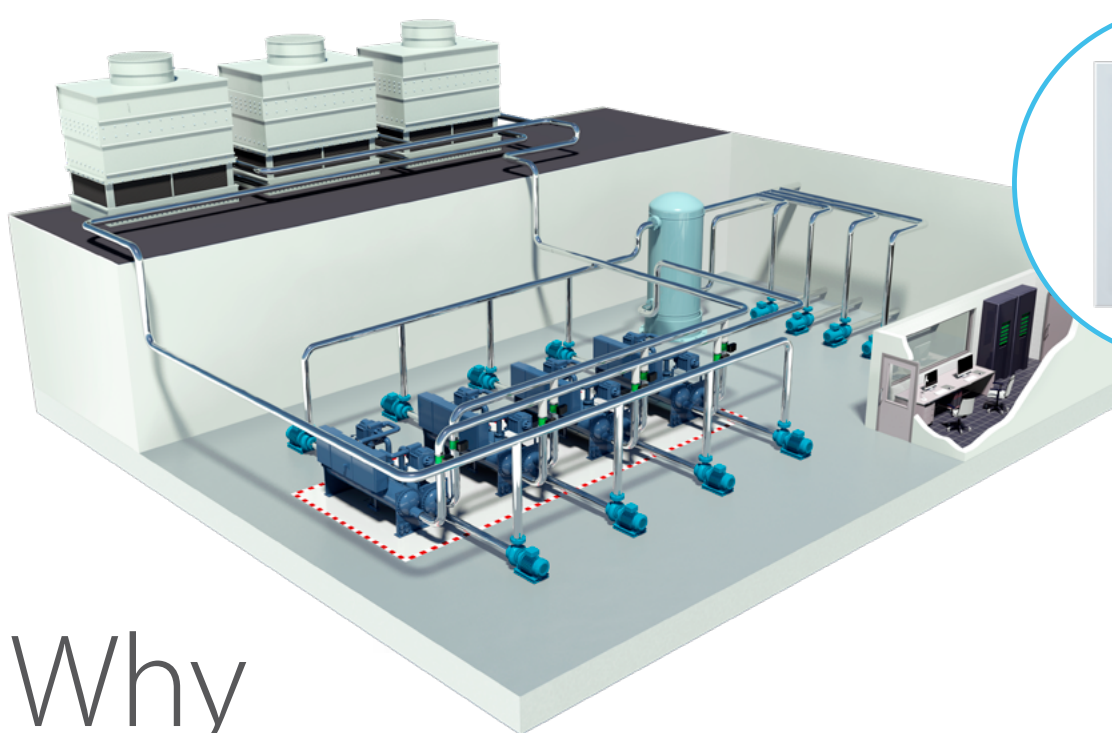
Calculates **energy-optimal stage-up/stage-down** of the chiller by determining the increased capacity demand by capacity control, compensation of temperature and rotation. This function aims at providing the most energy-efficient combination of chillers on a continuous basis.

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)



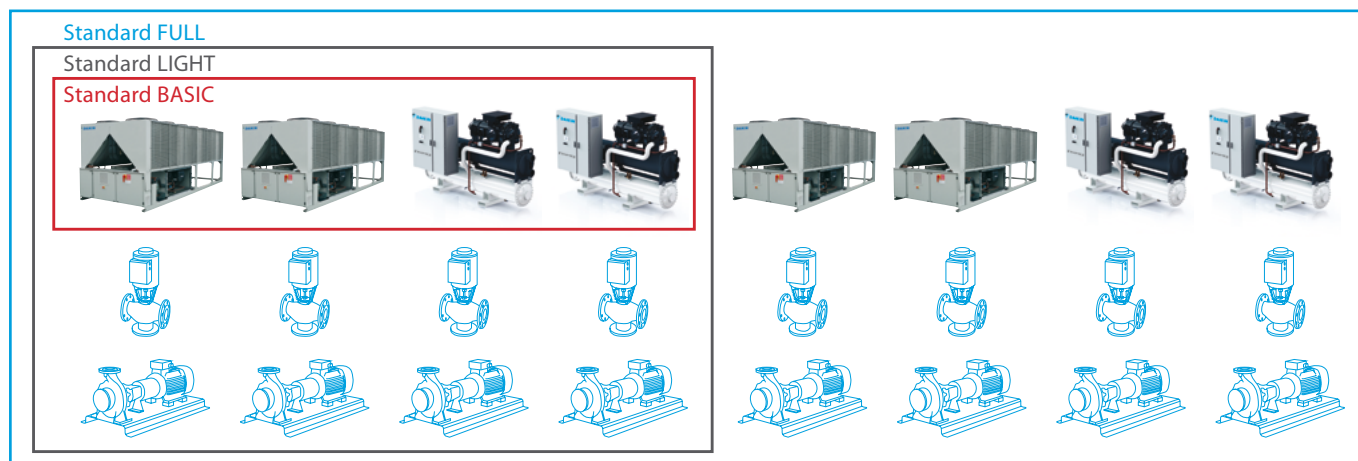
(Customised)

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)
- › Only a primary, or a primary-secondary system
- › Constant or variable primary flow



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		P
Modbus RS485		P
Dry contact control		P
Output signal (operation error)		P
Space heating / cooling operation		P
Domestic hot water control		P
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

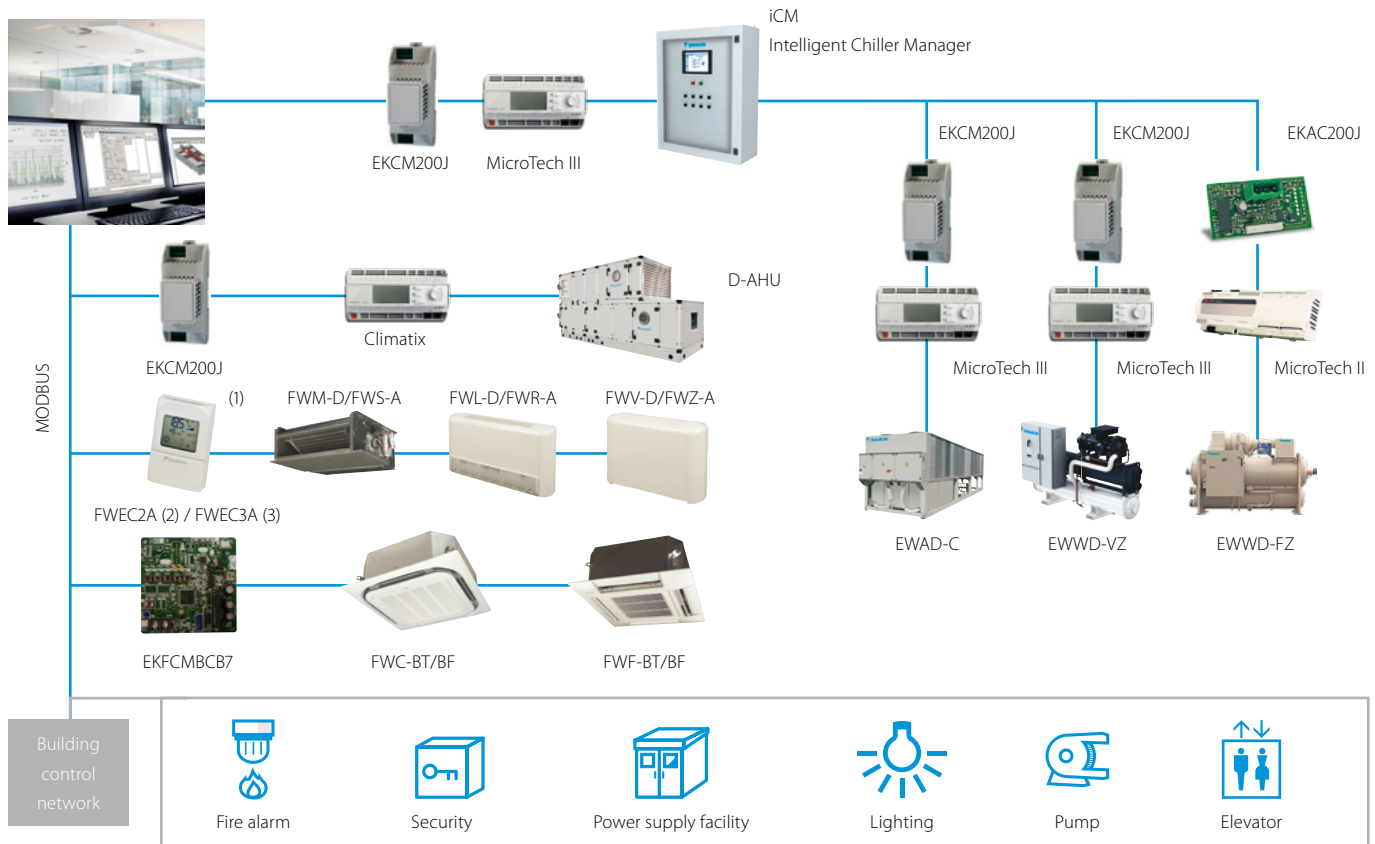
M : Modbus / R: Resistance / V : Voltage / C: control

* : only when room is occupied / ** : setpoint limitation / (*) if available

*** : no fan speed control on the CYV air curtain / **** : run & fault

Modbus interface

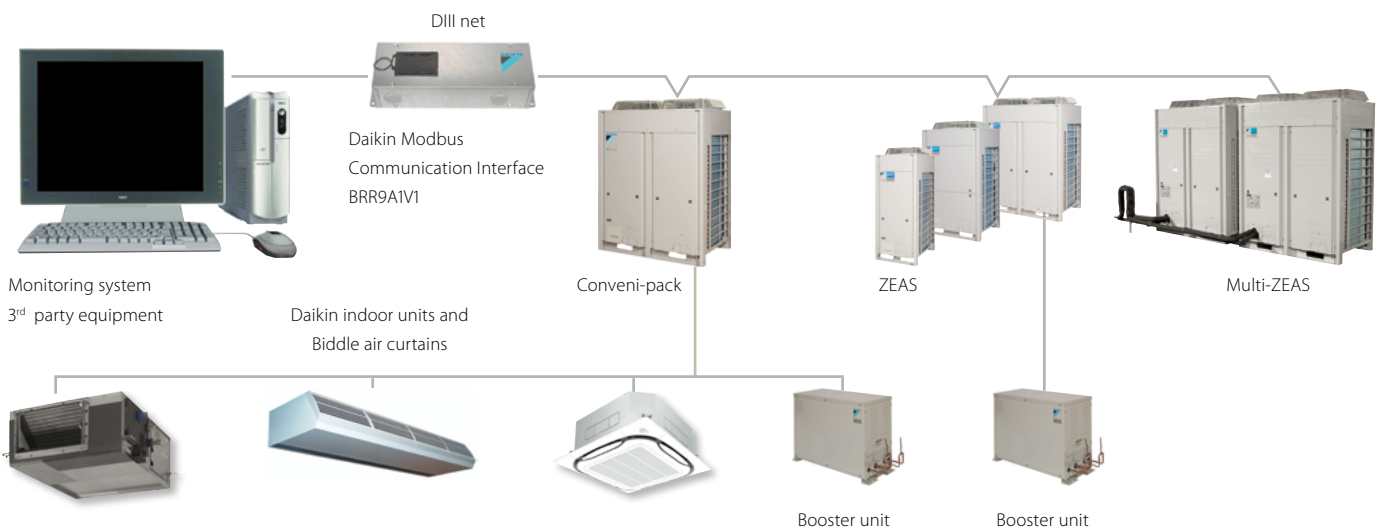
Integrate chillers, fan coil units and air handling units in BMS systems via modbus protocol



(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

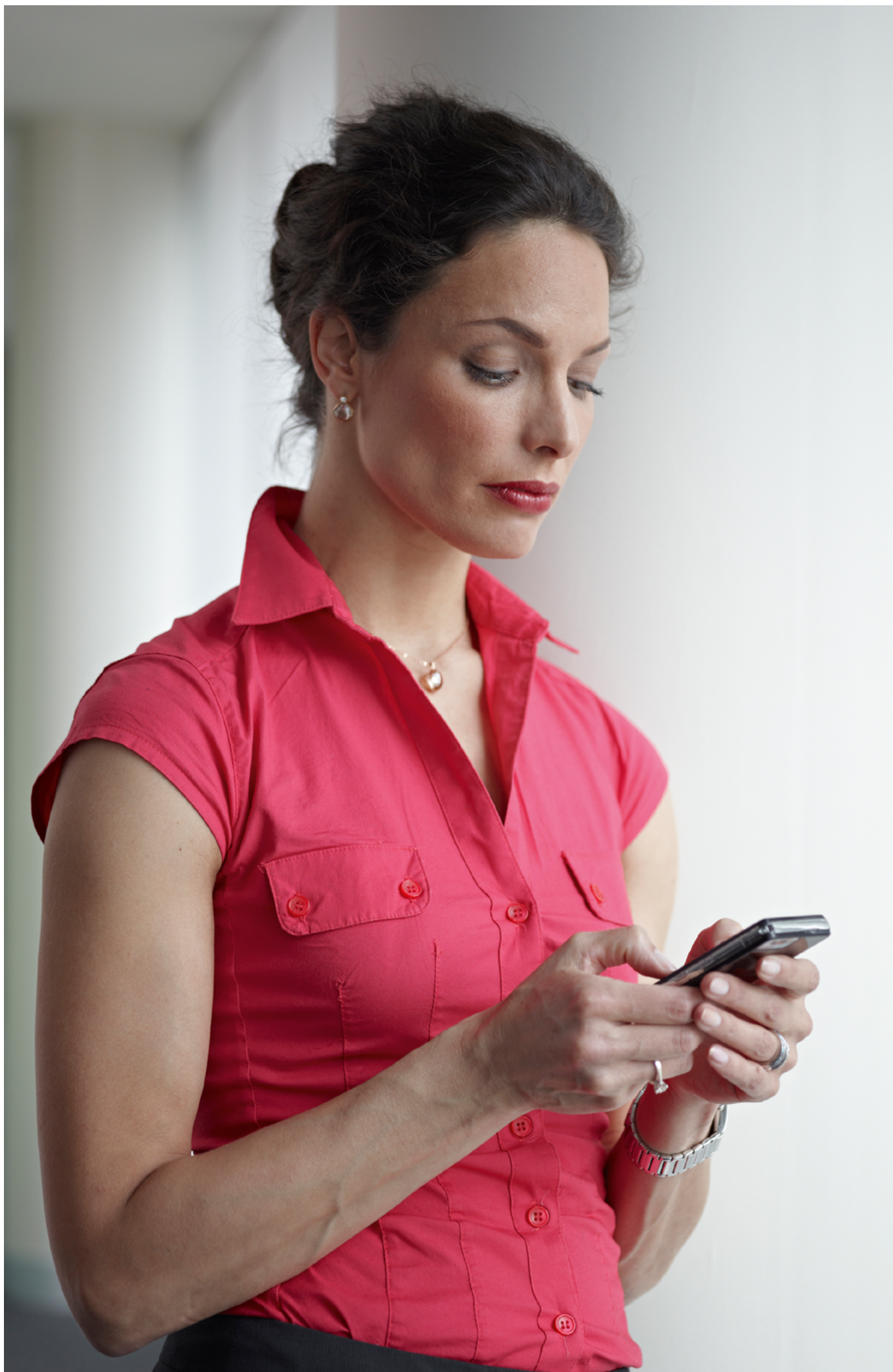


- › Communication via Modbus RS485 protocol
- › Detailed monitoring and control of the VRV total solution
- › Easy and fast installation via DIII-net protocol
- › As the Daikin DIII-net protocol is being used, only one modbus interface is needed for a group of Daikin systems (up to 10 outdoor unit systems).



* 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

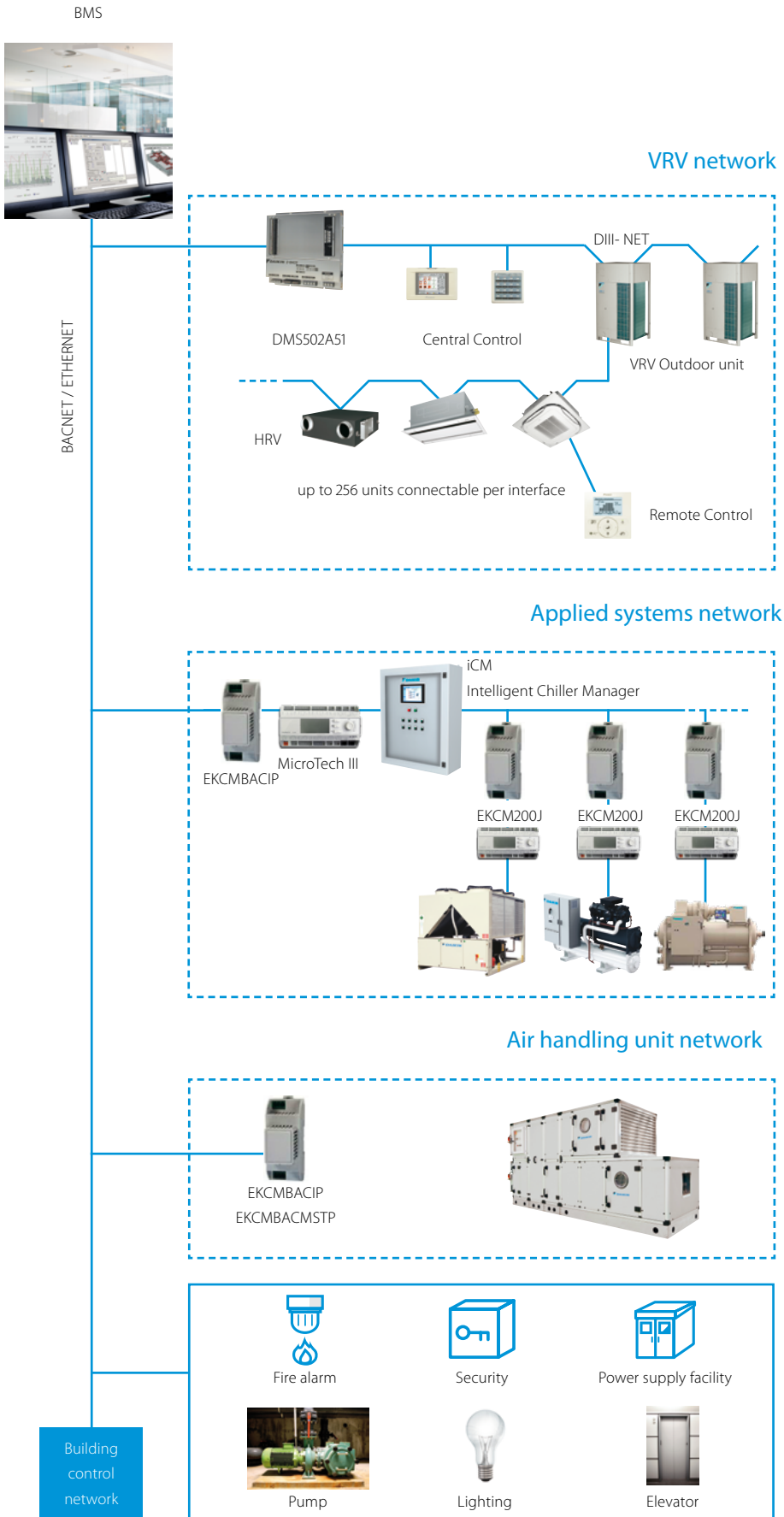


BACnet Interface

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

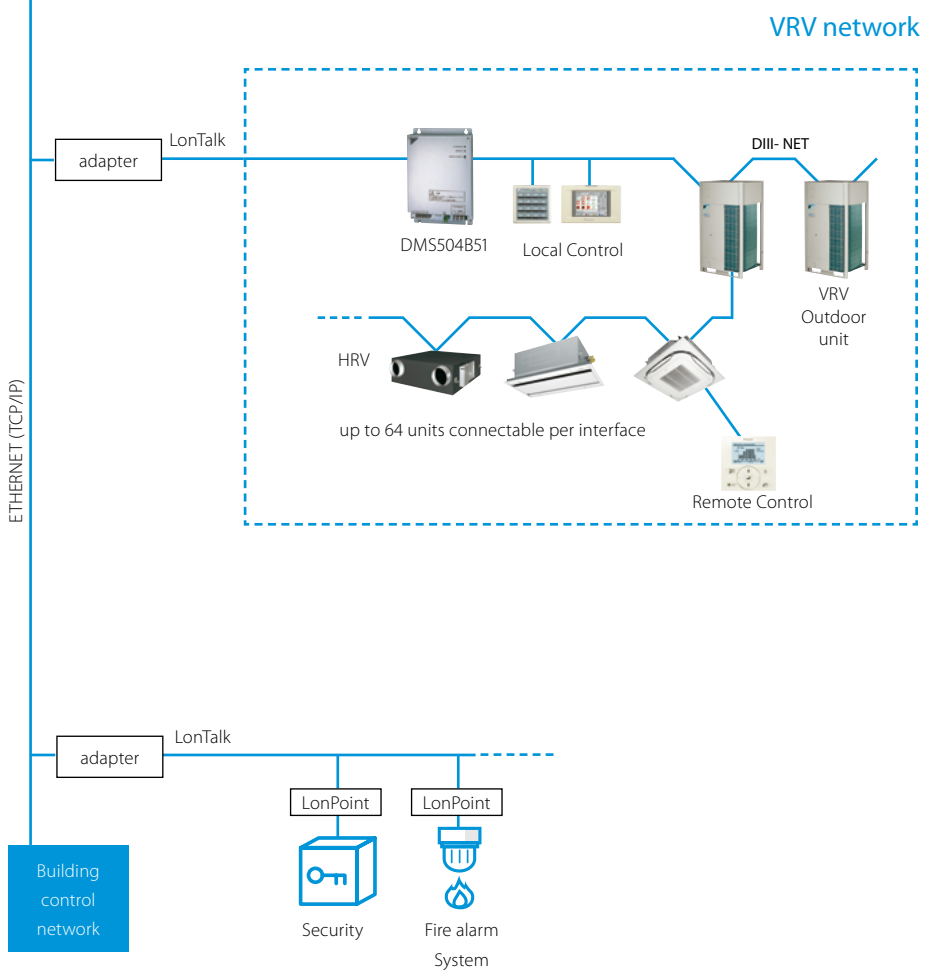
Open network integration of VRV and applied systems monitoring and control functions into LonWorks networks

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

LON BMS



ETHERNET (TCP/IP)



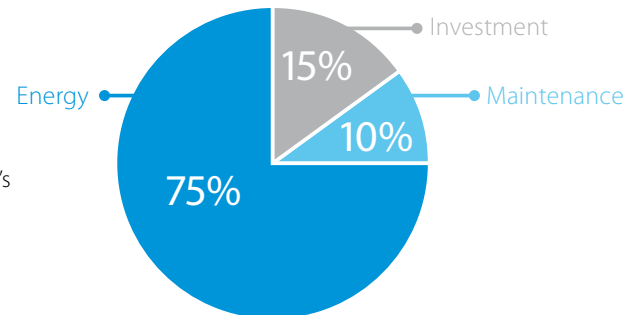


Why Daikin on Site?

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.

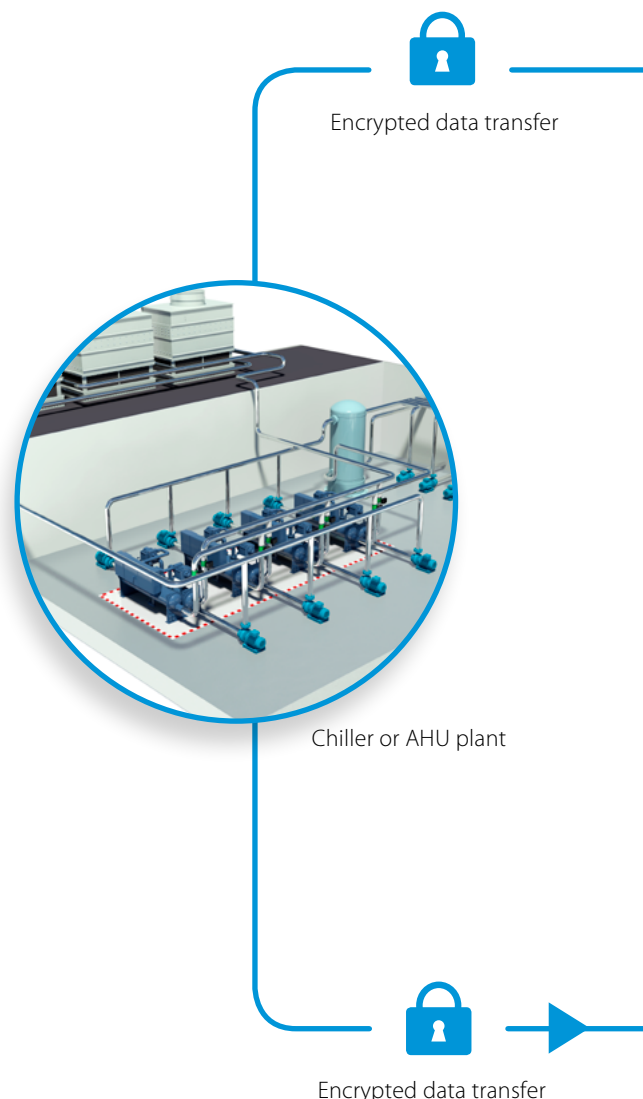
Daikin on Site has predefined user roles like:

- › operator
- › service provider
- › Daikin specialists

The Daikin on Site platform's features are designed to:

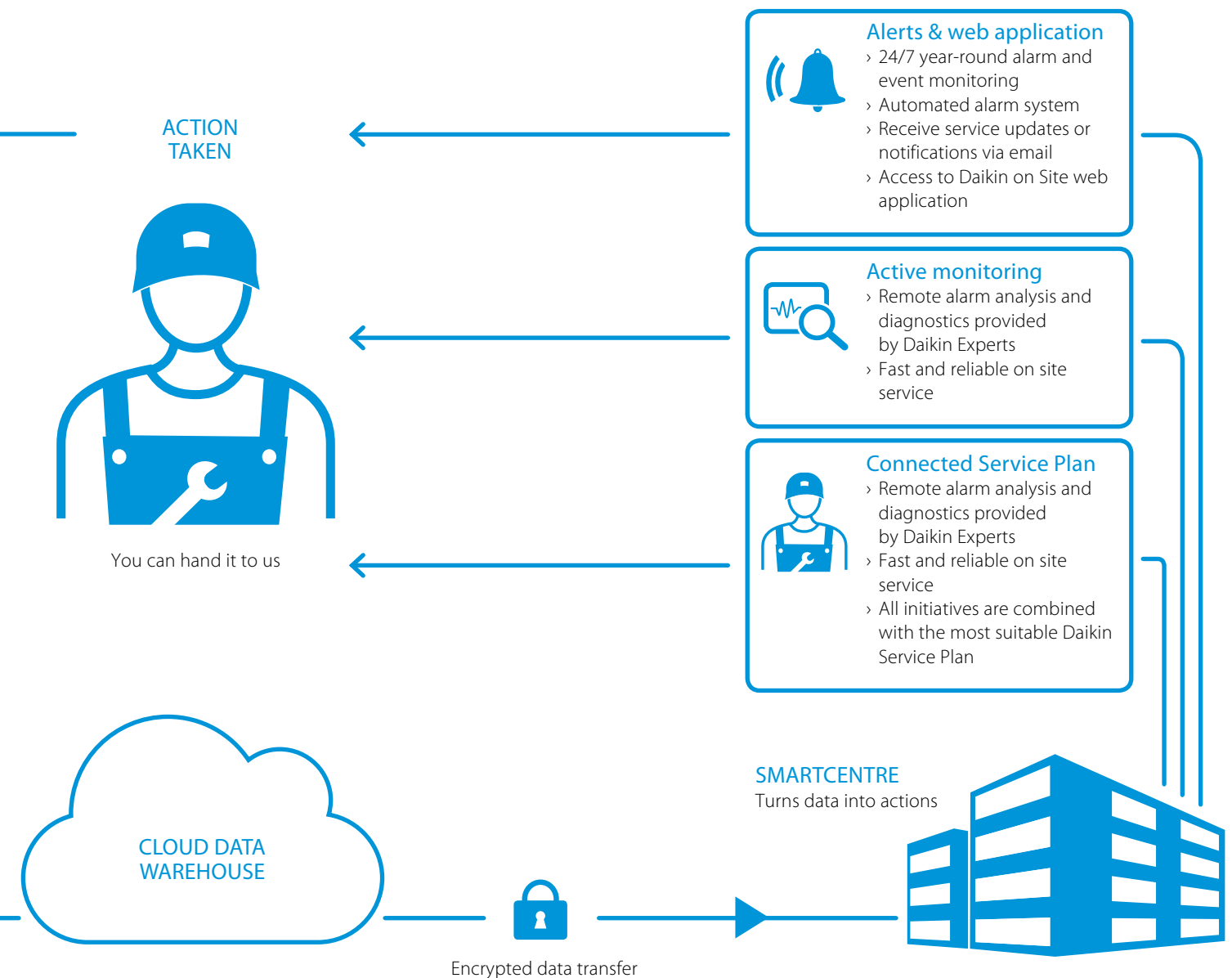
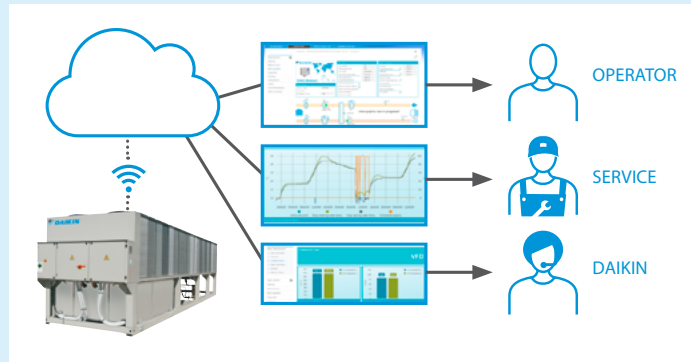
- › Increase uptime, reduce unscheduled interruptions
- › Optimise efficiency and reduce energy waste
- › Increase lifetime and avoid wear by misuse
- › Give insight into the optimum use of equipment, including advice from a Daikin expert

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.



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 + refrigeration (LCBKQ-AV1, JECCU/JEHSU and ICU): its functioning relies on fluorinated greenhouse gases.

Measuring conditions

Air conditioning

1) Nominal cooling capacities are based on:	
Indoor temperature	27°CDB/19°CWB
Outdoor temperature	35°CDB
Refrigerant piping length	7.5m - 8/5m VRV
Level difference	0m
2) Nominal heating capacities are based on:	
Indoor temperature	20°CDB
Outdoor temperature	7°CDB/6°CWB
Refrigerant piping length	7.5m - 8/5m VRV
Level difference	0m

Refrigeration

ZEAS	Chilling	Evaporating temp. -10°C; outdoor temp. 32°C; Suction SH10°C
	Freezing	Evaporating temp. -35°C; outdoor temp. 32°C; Suction SH10°C
Conveni-Pack	Cooling priority mode	Indoor temp. 27°CDB/19°CWB; outdoor temp. 32°CDB; piping length: 7.5m; level difference: 0m
		Evaporating temp. -10°C; outdoor temp. 32°CDB; Suction SH: 10°C
	Heating recovery 100% mode	Indoor temp. 20°C; outdoor temp. 7°CDB, 6°CWB; refrigeration load 18kW; piping length: 7.5m; level difference: 0m
	Saturated temperature equivalent to suction pressure (refrigeration side)	10°C (under chilled condition); connection capacity for indoor air conditioner: 10HP, when heat recovery is 100
Booster unit		Evaporating temp. -35°C; outdoor temp. 32°C; suction SH 10K; saturated temp. to discharge pressure of booster unit -10°C
CCU/SCU		Outside ambient temp. 32°C; Evaporating temp. = -10°C and 10K superheat (medium temperature application)
Zanotti	Medium temperature	When normally running : 0°C / 30°C
	Low temperature	When normally running : -20°C / +30°C
	High temperature	When normally running : +10°C / +30°C

Applied systems

Air cooled	Cooling only		Evaporator: 12°C/7°C	Ambient: 35°CDB
	Heat pump		Evaporator: 12°C/7°C Condenser: 40°C/45°C	Ambient: 35°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.



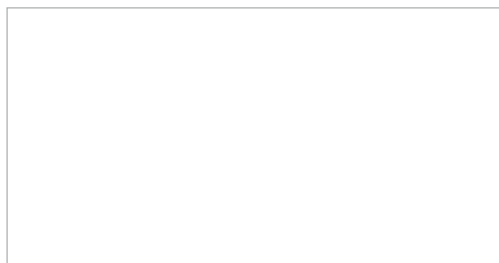
Notes

Notes

New Daikin chiller range with inverter screw compressor and new ecological HFO R-1234ze(E) refrigerant



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