Applied Systems

Product catalogue 2017

NEW **Webbased Chiller Selection Software**

High performance and reliability for comfort and process applications

Our promise...

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

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

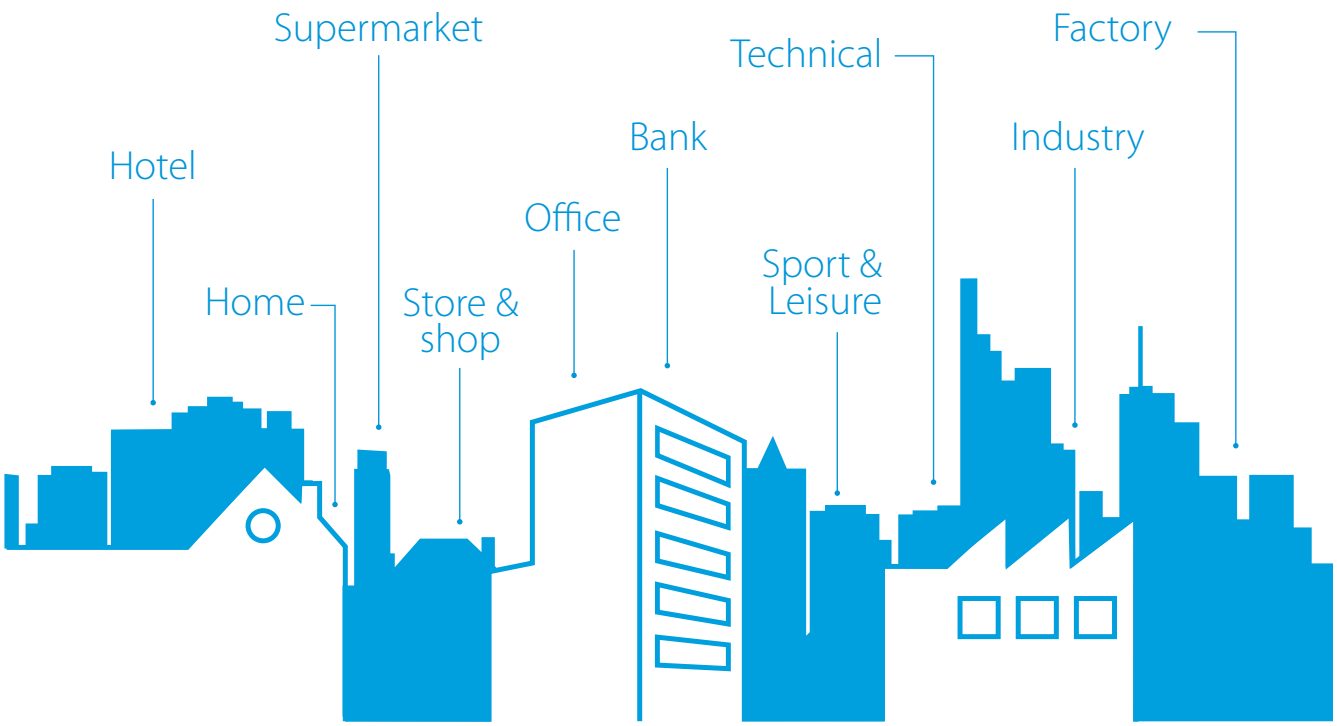
We will continue our global leadership in HVAC-R solutions as our specialist expertise in all market sectors combined with 90 years' experience enable us to deliver added value in long-lasting relationships based on trust, respect and credibility.

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

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

Table of content

Daikin world



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

A partner of choice

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

The comfort of reliability

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

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

Daikin quality

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

Staff who understands you

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

Daikin Applied Development Center

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

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.

NEW Web-based chiller selection software

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

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

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

Online support

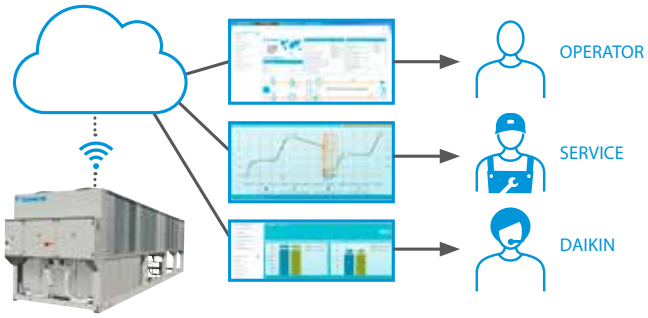
Business portal

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**

Service on site NEW

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.

BREEAM®

Daikin, the best partner for your green project

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

93% percent of developers & investors consider green certification important

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

Property developers are setting high standards

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

HVAC-R systems play an important role

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

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

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

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

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

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

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

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

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

Seasonal efficiency,

Smart use of energy

Challenging 20-20-20 environmental targets

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

European action plan 20-20-20

-20%

CO_2 emissions vs. 1990

20%

Share of renewable energy

-20%

Primary energy use vs. Business as usual

By the year 2020

Applied systems: products in scope

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

Our service

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

Chiller modernisation

Be smart – replace components, not systems

Our concept

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

Main benefits

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

Benefits for budget and risk management

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

Controller box upgrade

Fact: R-22 has been banned in Europe*

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

- Soft starter
- Inverter

Compressor upgrade

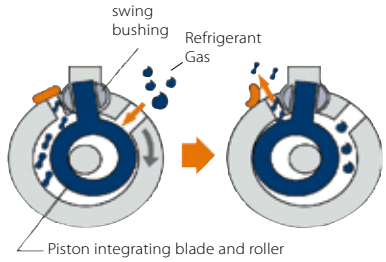
* EU directive: Regulation (EC) No.2037/2000

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



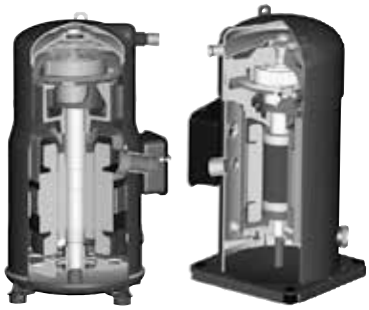
The mini chiller series EWAQ005-007ADVP & EWYQ005-007ADVP are equipped with a swing inverter compressor. This innovative design by Daikin has fewer moving parts allowing a smoother, more reliable operation with low vibration and low noise levels. The high-efficiency motor reduces energy consumption,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

Scroll compressor for controlled capacity

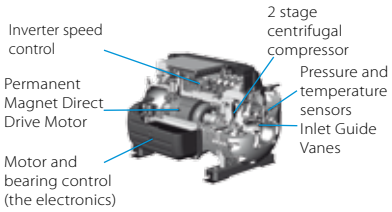
Being compact, the Daikin scroll compressor is used with R-407C and R-410A to provide constant reliability and high efficiency throughout its service life. Designed for small and medium capacities, the scroll compressors are used with air cooled and water cooled chillers.

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

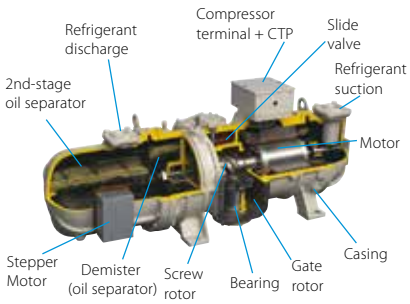


The innovative frictionless centrifugal compressor has an integrated VFD, as well as magnetic bearings, and delivers high levels of unit efficiency and reliability. The compressor's only moving part - the rotor shaft and impellers - are powered by the permanent magnetic direct-drive motor and kept levitated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

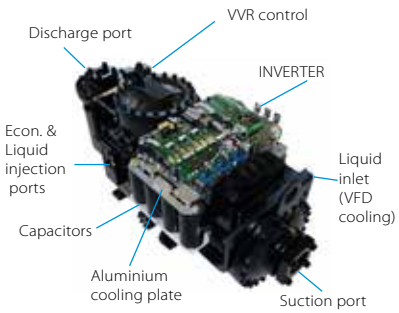
Characteristics:

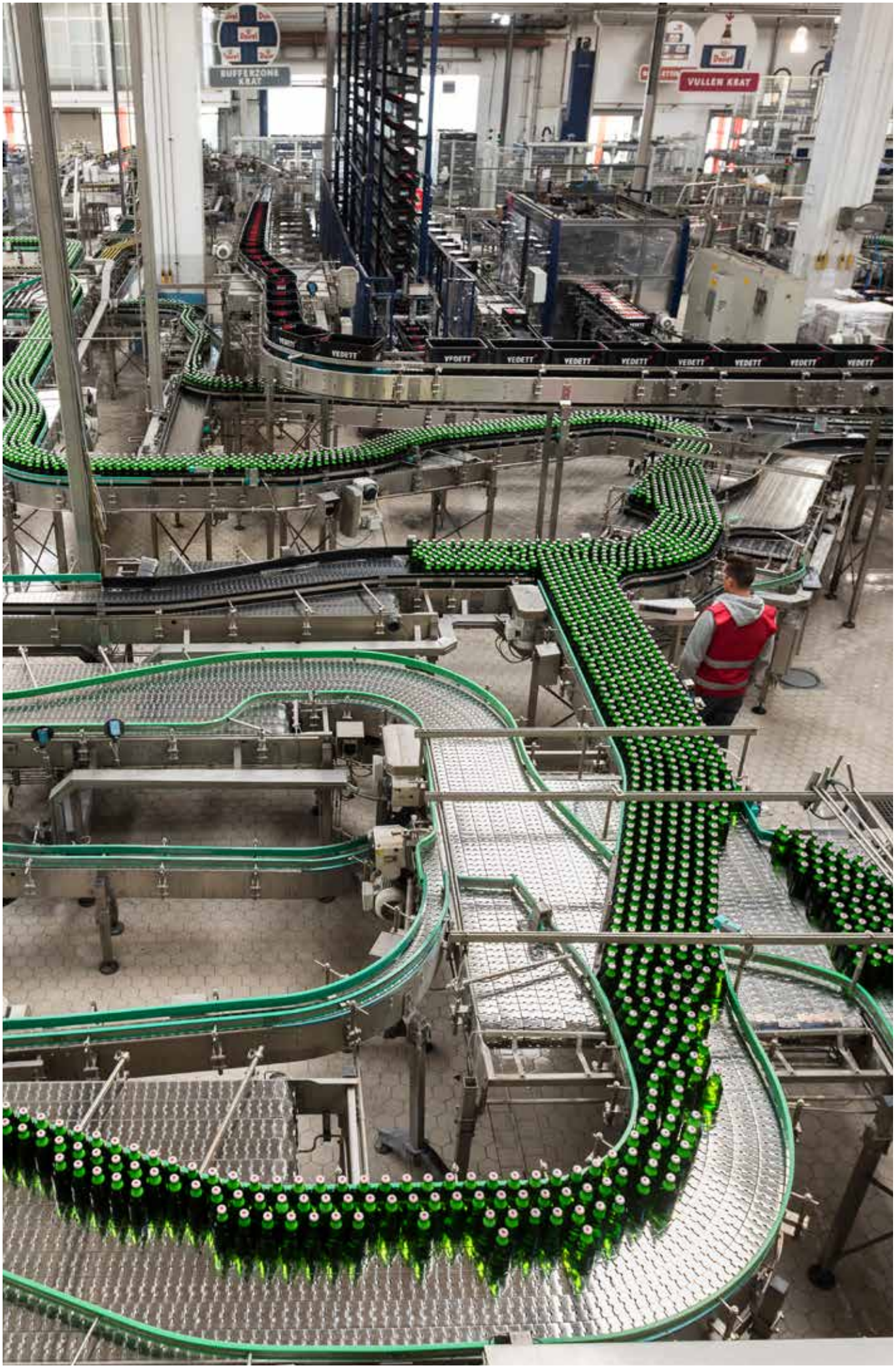
- Compressor and inverter fully designed by Daikin
- Inverter integral to the compressor body
- Inverter refrigerant cooled
- VVR = Variable Volume Ration for optimized efficiency
- Enlarged discharge port and suction side for reduced refrigerant pressure drop
- New optimized compressor motors

Main benefits:

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

NEW




BUFFERZONE KRAT
VULLEN KRAT
VEDETT

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...)

The highest efficiency for every installation

› The lowest total cost of ownership and fast payback time

Quality and reliability

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

Benefits for the installer

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

Benefits for the consultant

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

Benefits for the end user

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

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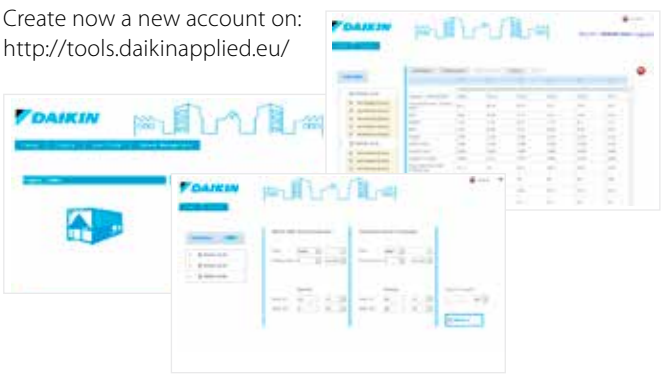


Lower your running costs

with our energy saving options

Inverter technology

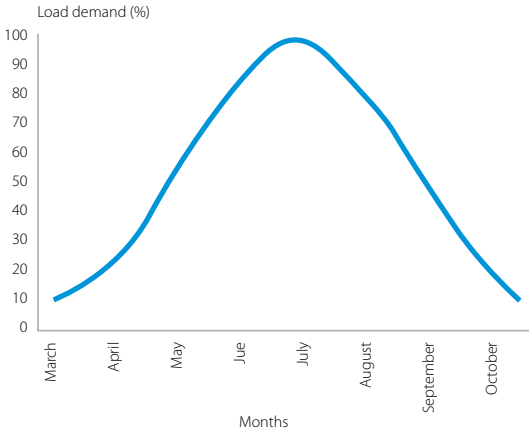
Traditional electric motors run at full load even when not needed (in chiller part load operations), resulting in energy waste.

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

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

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

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



What are your benefits when choosing an inverter chiller ?

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

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

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

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

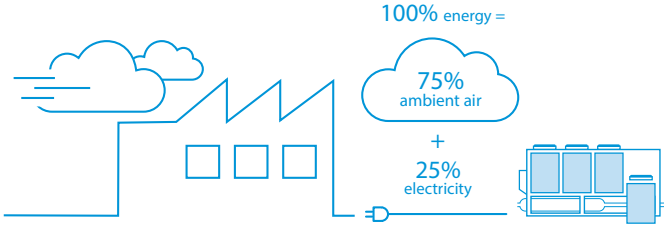
All these benefits will lead to a decrease in the overall running costs, resulting in a rapid return on investment.

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

Air-to-water heat pump technology

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

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



Heat recovery (option n°01-03)

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

Rapid restart (option n°110)

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

Free cooling (option n°113)

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

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

PRINTING COMPANY APPLICATION

AIR COOLED CHILLER INSTALLATION

AIR COOLED CHILLER INSTALLATION

ICE RINK APPLICATION

EWAQ-E-
INSTALLATION

DATA CENTER
APPLICATION

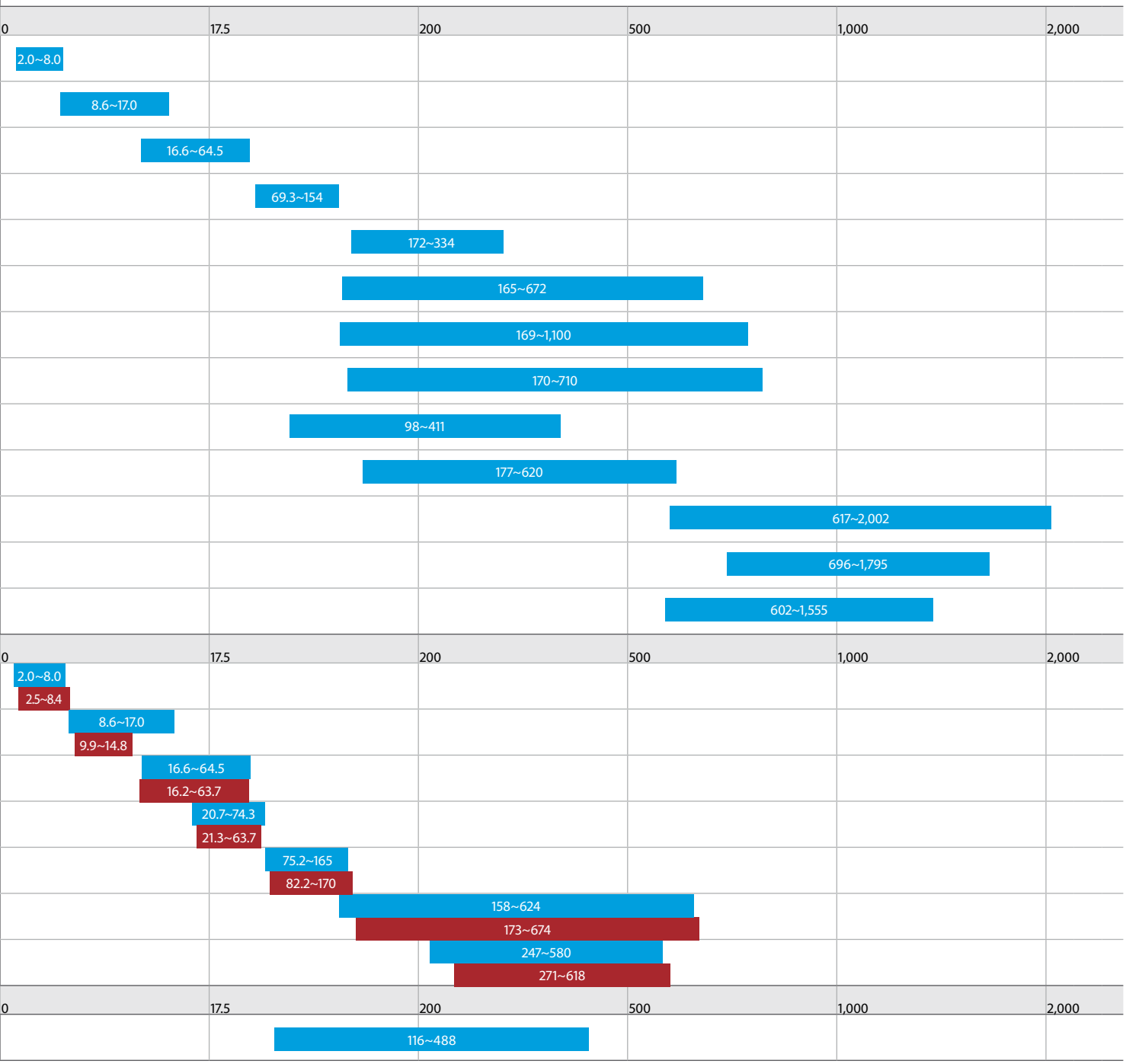
PROCESS COOLING
APPLICATION

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 -S	High -X	Premium -P	High ambient -H	Standard S	Low L	Reduced R	Extra low X
Air cooled chillers - Cooling only																		
EWAQ~BVP	NEW	R-410A	1	●		●			● BPHE		●				●			
EWAQ~ACV3/ACW1		R-410A	1	●			●		● BPHE		●				●			
EWAQ-CW*		R-410A	1-2	●			●		● BPHE		●				●			
EWAQ~G-		R-410A	1				●		● BPHE		●	●			●		●	
EWAQ~E-		R-410A	1				●		●			●			●	●	●	
EWAQ~F-		R-410A	2				●		●		●	●			●	●	●	
EWAD~TZ B	NEW	R-134a	1-2	●				●	●	●	●	●	●		●	●	●	
EWAD~TZ		R-134a	1-2	●				●	●	●	●	●			●		●	
EWAD~E-		R-134a	1					●	●		●				●	●		
EWAD~D-		R-134a	2					●	●	●	●	●		●	●	●	●	●
EWAD~C-		R-134a	2-3					●		●	●	●	●		●	●	●	
EWAD~CZ		R-134a	2-3	●				●		●		●			●	●	●	
EWAD~CF		R-134a	2		●			●		●		●			●	●	●	
Air cooled chillers - Heat pump																		
EWYQ~BVP	NEW	R-410A	1	●		●			● BPHE		●				●			
EWYQ~ACV3/ACW1		R-410A	1	●			●		● BPHE		●				●			
EWYQ-CW*		R-410A	1-2	●			●		● BPHE		●				●			
SEHVX-AAW SERHQ-AAW1		R-410A	1	●			●		● BPHE		●				●			
EWYQ~G-		R-410A	1				●		● BPHE			●			●		●	
EWYQ~F-		R-410A	1-2				●		●			●			●	●	●	
EWYD~BZ		R-134a	2-3	●				●		●	●				●	●		
Condensing unit																		
ERAD~E-		R-134a	1					●			●				●	●		

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

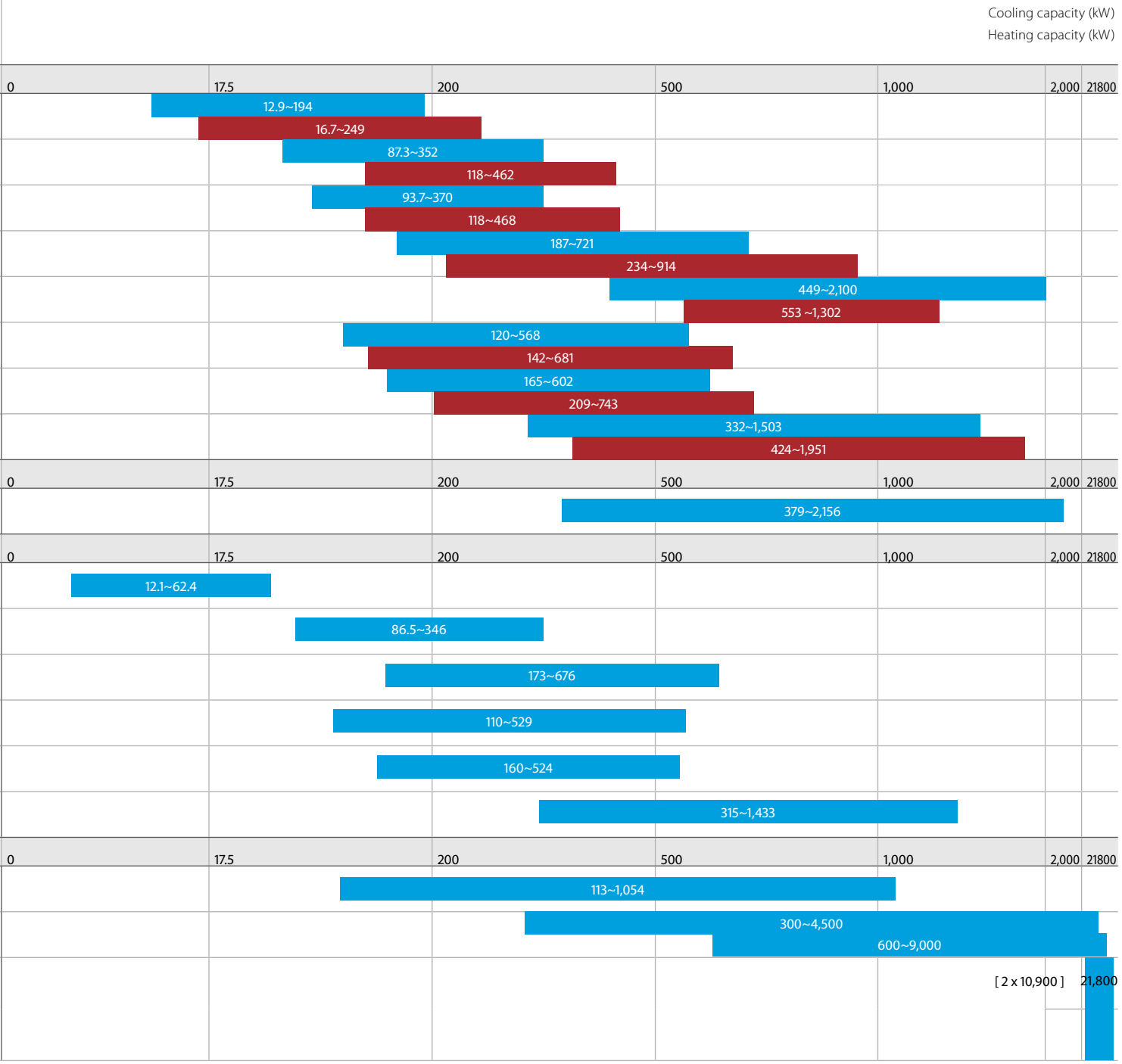
Cooling capacity (kW)
Heating capacity (kW)

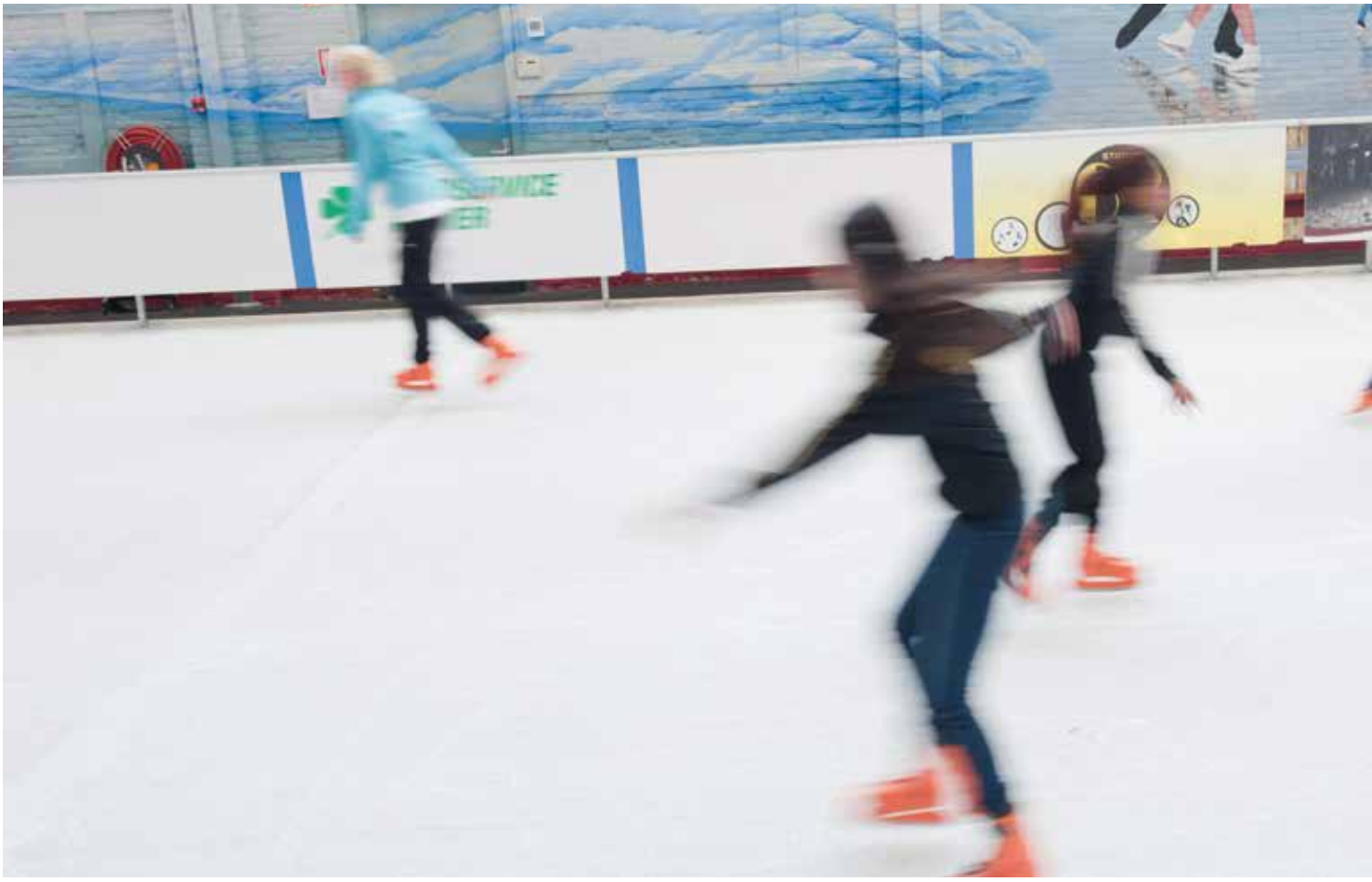


Products overview

		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)														
EWWP~KBW1N		R-407C	1-2-4-6		●						●			●
EWHQ~G-		R-410A	1		●			●						
EWWQ~G-		R-410A	1		●			●			●			●
EWWQ~L-		R-410A	2		●			●			●			●
EWWD-VZ		R-134a	1	●		●				● Flooded	●	●	●	●
EWWD~J-		R-134a	1-2			●		●			●			●
EWWD~G-		R-134a	1-2			●			●		●	●		●
EWWD~I-		R-134a	1-2-3			●			●		●	●		●
Water cooled chillers (Cooling only)														
EWWQ~B- NEW		R-410A	1-2			●			●		●	●		●
Condenserless chillers														
EWLP~KBW1N		R-407C	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			●		●
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: Brazed plate heat exchanger


Cooling capacity (kW)
Heating capacity (kW)
0
17.5
200
500
1,000
2,000
21800
12.9~194
16.7~249
87.3~352
118~462
93.7~370
118~468
187~721
234~914
449~2,100
553 ~1,302
120~568
142~681
165~602
209~743
332~1,503
424~1,951
379~2,156
12.1~62.4
86.5~346
173~676
110~529
160~524
315~1,433
113~1,054
300~4,500
600~9,000
[2 x 10,900]
21,800



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

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

Air cooled mini inverter chiller

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

EWAQ-BVP EKRUMCL1

Cooling only					EWAQ-BVP	004	005	006	008
Cooling capacity	Min./Nom.				kW	2.0 /4.00 / 4.01	2.0 /4.93 / 5.07	3.0 /5.88 / 6.07	3.0 /7.95 / 8.23
Power input	Cooling	Nom.			kW	1.27 / 0.840	1.61 / 1.12	1.87 / 1.13	2.57 / 1.65
Capacity control	Method					Variable (inverter)			
EER						3.14 / 4.80	3.06 / 4.51	3.15 / 5.35	3.10 / 4.99
ESEER						4.45	4.49	5.25	5.24
Dimensions	Unit	HeightxWidthxDepth			mm	735x1,090x350		997x1,160x380	
Weight	Unit				kg	83		106	
	Operation weight				kg	-			
Water heat exchanger	Type					Brazed plate			
	Water pressure drop	Cooling	Nom.		kPa	-			
	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			
Fans	Quantity					-			
Sound power level	Cooling	Nom.			dBA	63	64	69	
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					kg/TCO2Eq	2.10/4.4		2.70/5.6	
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 chiller

- Excellent part load efficiency
- 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/AW1

Digital controller

Cooling only				EWAQ-ACV3/ACW1	009	010	011	009	011	013
Cooling capacity	Nom.			kW	12.2 (1) / 8.6	13.6 (1) / 9.6	15.7 (1) / 11.1	12.9 (1) / 9.1	15.7 (1) / 11.1	17.0 (1) / 13.3
Power input	Cooling	Nom.		kW	2.85 (1) / 2.83	3.41 (1) / 3.28	4.13 (1) / 3.90	3.08 (1) / 3.05	4.13 (1) / 3.90	5.52 (1) / 5.18
Capacity control	Method				Inverter controlled					
EER					4.27 (1) / 3.05	4.00 (1) / 2.93	3.79 (1) / 2.85	4.19 (1) / 2.99	3.79 (1) / 2.85	3.08 (1) / 2.57
ESEER					4.31	4.30	4.33	4.43	4.44	4.36
Dimensions	Unit	Height		mm	1,435					
		Width		mm	1,418					
		Depth		mm	382					
Weight	Unit			kg	180					
Water heat exchanger	Type				Brazed plate					
	Water flow rate	Cooling	Nom.	l/min	24.7	27.6	31.9	26.1	31.9	38.2
	Water volume			l	1.01					
Air heat exchanger	Type				Hi-XSS					
Pump Standard	Nominal ESP unit	Cooling		kPa	58.0	54.6	49.1	56.4	49.1	40.9
Hydraulic components	Expansion vessel	Volume		l	10					
Compressor	Type				Hermetically sealed scroll compressor					
	Quantity				1					
Fan	Type				Propeller fan					
	Quantity				2					
	Air flow rate	Cooling	Nom.	m^3/min	96	100	97	-		
Fan motor	Speed	Cooling	Nom.	rpm	780					
		Steps			8					
Sound power level	Cooling	Nom.		dBA	64					66
Sound pressure level	Cooling	Nom.		dBA	51					52
	Night quiet mode	Cooling		dBA	45					46
Operation range	Air side	Cooling	Min.~Max.	°CDB	10~46					
	Water side	Cooling	Min.~Max.	°CDB	5~22					
Refrigerant	Type				R-410A					
	Circuits	Quantity			1					
	Control				Electronic expansion valve					
	GWP				2,087.5					
Refrigerant charge	Per circuit			kg	2.95					
				TCO_2eq	6.2					
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 chiller

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

EWAQ-CWN/CWP

BRC21A52

Cooling only				EWAQ-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.				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)
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	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				Brazed 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						
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				kg/TCO2Eq	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) 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

Cooling only				**EWAQ-G-SS**	**075**	**085**	**100**	**110**	**120**	**140**	**155**
Cooling capacity	Nom.			kW	74.7	84.2	96.7	107	117	139	154
Power input	Cooling	Nom.		kW	27.7	31.2	35.0	39.5	43.4	51.1	57.2
Capacity control	Method				Step						
	Minimum capacity			%	50	44	50	44	50	43	50
EER					2.70		2.76	2.70		2.73	2.70
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				Brazed plate						
	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
	Water volume			l	5.60	4.90		5.60		8.10	9.40
Air heat exchanger	Type				Microchannel						
Compressor	Type				Scroll compressor						
	Quantity				2						
Fan	Type				Direct propeller						
	Quantity				4		6			8	
	Air flow rate	Nom.		l/s	6,017	6,444	9,029			12,008	
	Speed			rpm	1,360						
Sound power level	Cooling	Nom.		dBA	83	85	87	89			
Sound pressure level	Cooling	Nom.		dBA	66	68	69	71			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~42						
	Water side	Cooling	Min.~Max.	°CDB	-10~15						
Refrigerant	Type / GWP				R-410A / 2,087.5						
	Circuits	Quantity			1						
Refrigerant charge	Per circuit			kg	8.5	10.4	10.7	11.5	12.9	14.1	13.4
				TCO_2eq	17.7	21.7	22.3	24.0	26.9	29.4	28.0
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2						
Unit	Starting current	Max		A	211	262	270	317	325	365	379
	Running current	Cooling	Nom.	A	54	58	62	70	79	89	102
		Max		A	68	74	81	89	97	114	129
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

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

EWAQ-G-SS/SR

MicroTech III

Cooling only				EWAQ-G-SR	075	085	100	110	120	140	155
Cooling capacity	Nom.			kW	69.3	78.9	91.0	99.7	109	130	143
Power input	Cooling	Nom.		kW	29.4	33.1	36.8	42.0	46.3	54.0	61.2
Capacity control	Method				Step						
	Minimum capacity			%	50	44	50	44	50	43	50
EER					2.36	2.38	2.47	2.38	2.35	2.42	2.34
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				Brazed plate						
	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
	Water volume			l	5.58	4.86		5.60		8.10	9.36
Air heat exchanger	Type				Microchannel						
Compressor	Type				Scroll compressor						
	Quantity				2						
Fan	Type				Direct propeller						
	Quantity				4		6			8	
	Air flow rate	Nom.		l/s	4,523	5,046	6,787			9,023	
	Speed			rpm	1,108						
Sound power level	Cooling	Nom.		dBA	79	82	84	86			
Sound pressure level	Cooling	Nom.		dBA	62	65	66	68			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~42						
	Water side	Cooling	Min.~Max.	°CDB	-10~15						
Refrigerant	Type / GWP				R-410A / 2,087.5						
	Circuits	Quantity			1						
Refrigerant charge	Per circuit			kg	8.5	10.4	10.7	11.5	12.9	14.1	13.4
				TCO_2eq	17.7	21.7	22.3	24.0	26.9	29.4	28.0
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2						
Unit	Starting current	Max		A	211	262	270	317	325	365	379
	Running current	Cooling	Nom.	A	57	61	65	74	84	93	109
		Max		A	68	74	81	89	97	114	129
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

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

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

Cooling only				**EWAQ-G-XS**	**080**	**090**	**105**	**115**	**130**	**150**
Cooling capacity	Nom.			kW	79.8	90.3	105	117	131	149
Power input	Cooling	Nom.		kW	25.8	29.0	33.8	37.7	42.3	48.1
Capacity control	Method				Step					
	Minimum capacity			%	50	44	50	44	50	43
EER					3.10	3.11	3.12		3.10	
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				Brazed plate					
	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
	Water volume			l	5.58	4.86		5.60		8.10
Air heat exchanger	Type				Microchannel					
Compressor	Type				Scroll compressor					
	Quantity				2					
Fan	Type				Direct propeller					
	Quantity				6		8		10	
	Air flow rate	Nom.		l/s	9,029	9,498	12,008		15,046	
	Speed			rpm	1,360					
Sound power level	Cooling	Nom.		dBA	84	85	87	89		71
Sound pressure level	Cooling	Nom.		dBA	66	68	69	71		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45					
	Water side	Cooling	Min.~Max.	°CDB	-10~15					
Refrigerant	Type / GWP				R-410A / 2,087.5					
	Circuits	Quantity			1					
Refrigerant charge	Per circuit			kg	9.1	12.7	13.1	13.2	16.1	15.0
				TCO_2eq	19.0	26.5	27.3	27.6	33.6	31.3
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2					
Unit	Starting current	Max		A	213	264	272	319	329	367
	Running current	Cooling	Nom.	A	52	56	61	69	76	87
		Max		A	70	75	83	91	101	116
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400					

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

EWAQ-G-XS/XR

MicroTech III

Cooling only				EWAQ-G-XR	080	090	105	115	130	150
Cooling capacity	Nom.			kW	76.0	86.0	100	110	125	141
Power input	Cooling	Nom.		kW	26.4	29.9	34.7	39.0	43.3	49.8
Capacity control	Method				Step					
	Minimum capacity			%	50	44	50	44	50	43
EER					2.88		2.89	2.83	2.88	2.83
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				Brazed plate					
	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
	Water volume			l	5.58	4.86		5.60		8.10
Air heat exchanger	Type				Microchannel					
Compressor	Type				Scroll compressor					
	Quantity				2					
Fan	Type				Direct propeller					
	Quantity				6		8		10	
	Air flow rate	Nom.		l/s	6,787	7,356	9,023		11,309	
	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					
	Water side	Cooling	Min.~Max.	°CDB	-10~15					
Refrigerant	Type / GWP				R-410A / 2,087.5					
	Circuits	Quantity			1					
Refrigerant charge	Per circuit			kg	9.1	12.7	13.1	13.2	16.1	15.0
				TCO_2eq	19.0	26.5	27.3	27.6	33.6	31.3
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2					
Unit	Starting current	Max		A	213	264	272	319	329	367
	Running current	Cooling	Nom.	A	54	58	63	71	78	90
		Max		A	70	75	83	91	101	116
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400					

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

› Reliable and efficient scroll compressors with high EER values
› A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced weight, clearances around the unit
› **Reduced footprint thanks to the V-shaped frame**
› Large operation range: ambient temperatures up to 52°C and down to -18°C
› Ideal solution for **a broad range of comfort and process applications**
› The unit can be equipped with a hydraulic module optimizing installation time, space and cost
› MicroTech III controller with superior control logic and easy interface

Cooling only				**EWAQ-E-XS/XL**	**180**	**200**	**230**	**260**	**320**	**340**
Cooling capacity	Nom.			kW	178	200	226	263	315	334
Power input	Cooling	Nom.		kW	58.0	65.4	73.8	86.2	103	110
Capacity control	Method				Step					
	Minimum capacity			%	50.0	43.0	50.0	33.0	27.0	33.0
EER					3.06				3.05	
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	
		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 flow rate	Cooling	Nom.	l/s	8.5	9.6	10.8	12.6	15.1	16.0
	Water pressure drop	Cooling	Nom.	kPa	27	34	35	47		54
	Water volume			l	12		14			
Air heat exchanger	Type				High efficiency fin and tube type					
Compressor	Type				Scroll compressor					
	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	94	96	95	96	97
Sound power level (XL)	Cooling	Nom.		dBA	91	92	93	92	93	94
Sound pressure level (XS)	Cooling	Nom.		dBA	75	76			77	
Sound pressure level (XL)	Cooling	Nom.		dBA	73				74	
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52					
	Water side	Cooling	Min.~Max.	°CDB	-13~18					
Refrigerant	Type / GWP				R-410A / 2,087.5					
	Circuits	Quantity			1					
Refrigerant charge (XS)	Per circuit			kg	24.0	31.0	27.0	40.0	43.0	53.0
				TCO_2eq	50.1	64.7	56.4	83.5	89.8	110.6
Refrigerant charge (XL)	Per circuit			kg	28	31	27	40	43	53
				TCO_2eq	58.5	64.7	56.4	83.5	89.8	110.6
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
		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

Cooling only				**EWAQ-E-XR**	**170**	**190**	**220**	**260**	**300**	**320**
Cooling capacity	Nom.			kW	172	186	219	254	302	303
Power input	Cooling	Nom.		kW	56.5	64.4	71.8	85.4	102	109
Capacity control	Method				Step					
	Minimum capacity			%	50.0	43.0	50.0	33.0	27.0	33.0
EER					3.05	2.98	3.05	2.97	2.96	2.78
ESEER					4.45	4.57	4.33	4.65	4.62	4.50
IPLV					5.09	5.00	4.90	5.04	5.07	5.20
Dimensions	Unit	Height		mm	2,271				2,447	
		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 flow rate	Cooling	Nom.	l/s	8.2	8.9	10.5	12.1	14.5	
	Water pressure drop	Cooling	Nom.	kPa	26	37	33	44	43	50
	Water volume			l	12		14			
Air heat exchanger	Type				High efficiency fin and tube type					
Compressor	Type				Scroll compressor					
	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.		dBA	85	86	87	86	88	89
Sound pressure level	Cooling	Nom.		dBA	66	67	68	67	68	69
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52					
	Water side	Cooling	Min.~Max.	°CDB	-13~18					
Refrigerant	Type / GWP				R-410A / 2,087.5					
	Circuits	Quantity			1					
Refrigerant charge	Per circuit			kg	24.0	31.0	27.0	40.0	43.0	53.0
				TCO_2eq	50.1	64.7	56.4	83.5	89.8	110.6
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
		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

- Reliable and efficient scroll compressors with high EER values
- A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced weight, clearances around the unit
- **2 truly independent refrigerant circuits**
- Reduced footprint thanks to the **V-shaped frame** (EWAQ210-350/400F-SS/SL & EWAQ200-330/370F-SR)
- Large operation range: ambient temperatures up to 52°C and down to -18°C
- The unit can be equipped with a hydraulic module optimizing installation time, space and cost
- Ideal solution for a broad range of comfort and process applications
- MicroTech III controller with superior control logic and easy interface

Cooling only				**EWAQ-F-SS/SL**	**210**	**230**	**250**	**280**	**320**	**350**	**360**	**400**	**410**	**480**	**550**	**610**
Cooling capacity	Nom.			kW	206	224	247	283	313	359		423	407	480	551	609
Power input	Cooling	Nom.		kW	73.3	84.9	93.6	109	122	141		154		187	207	229
Capacity control	Method				Step											
	Minimum capacity			%	25.0	22.0	25.0	23.0	25.0	21.0		25.0		17.0	14.0	17.0
EER					2.81	2.64		2.60	2.58	2.55		2.75	2.64	2.57	2.67	2.66
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		20.3	19.5	23.0	26.4	29.2
	Water pressure drop	Cooling	Nom.	kPa	37	43	53	56	69	30		27	32	35	46	56
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		6				8	10	
	Air flow rate	Nom.		l/s	21,845		21,148	27,306	26,435	32,767		36,265	32,513	43,690	54,612	52,870
	Speed			rpm	900							980		900		
Sound power level (SS)	Cooling	Nom.		dBA	93	94		95		97					99	
Sound power level (SL)	Cooling	Nom.		dBA	91	92		93		94				95	96	
Sound pressure level (SS)	Cooling	Nom.		dBA	75			76		77	78				79	
Sound pressure level (SL)	Cooling	Nom.		dBA	73					74	75	74	75		76	
Operation range	Water side	Cooling	Min.~Max.	°CDB	-13~18											
	Air side	Cooling	Min.~Max.	°CDB	-18~52											
Refrigerant	Type / GWP				R-410A / 2,087.5											
	Circuits	Quantity			2											
Refrigerant charge	Per circuit			kg	14.0		15.5	16.5	20.0	23.0		27.0		28.0	32.5	40.0
				TCO_2eq	29.2		32.4	34.4	41.8	48.0		56.4		58.5	67.8	83.5
Piping connections	Evaporator water inlet/outlet (OD)				3"											
Unit	Maximum starting current			A	349	404	419	476	505	621		649		634	768	810
	Nominal running current (RLA)	Cooling		A	130	147	161	187	208	242		259	262	322	356	391
	Maximum running current			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

Cooling only				EWAQ-F-SR	200	220	240	270	300	330	340	370	380	460	530	580
Cooling capacity	Nom.			kW	198	214	235	270	298	341		383		456	527	580
Power input	Cooling	Nom.		kW	73.4	86.0	95.6	110	125	144		159		191	208	233
Capacity control	Method				Step											
	Minimum capacity			%	25.0	22.0	25.0	23.0	25.0	21.0		25.0		17.0	14.0	17.0
EER					2.70	2.49	2.46	2.45	2.38	2.37		2.41		2.39	2.53	2.49
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	6,213	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
	Water pressure drop	Cooling	Nom.	kPa	34	40	48	51	63	27		29		31	42	51
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		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
	Speed			rpm	705											
Sound power level	Cooling	Nom.		dBA	85	86	87			89		90		89	91	92
Sound pressure level	Cooling	Nom.		dBA	66	67	68			69	70		71	70	71	72
Operation range	Water side	Cooling	Min.~Max.	°CDB	-13~18											
	Air side	Cooling	Min.~Max.	°CDB	-18~52											
Refrigerant	Type / GWP				R-410A / 2,087.5											
	Circuits	Quantity			2											
Refrigerant charge	Per circuit			kg	16.0		18.0	19.0	20.0	23.0		27.0		28.0	32.5	40.0
				TCO_2eq	33.4		37.6	39.7	41.8	48.0		56.4		58.5	67.8	83.5
Piping connections	Evaporator water inlet/outlet (OD)				3"											
Unit	Maximum starting current			A	344	398	414	469	498	613		641		623	754	796
	Nominal running current (RLA)		Cooling	A	129	149	164	189	214	247		270		328	359	398
	Maximum running current			A	155	170	186	218	247	277		305		372	419	460
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400											

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

› Reliable and efficient scroll compressors with **high EER values**
› A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced weight, clearances around the unit
› **2 truly independent refrigerant circuits**
› Reduced footprint thanks to the **V-shaped frame** (EWAQ170-310/350F-XS/XL & EWAQ170-300/330F-XR)
› Large operation range: ambient temperatures up to 52°C and down to -18°C
› The unit can be equipped with a hydraulic module optimizing installation time, space and cost
› Ideal solution for a broad range of comfort and process applications
› MicroTech III controller with superior control logic and easy interface

Cooling only				**EWAQ-F-XS/XL**	**170**	**200**	**220**	**250**	**310**	**320**	**350**	**360**	**400**	**430**	**450**	**520**	**610**	**680**
Cooling capacity	Nom.			kW	170	194	220	244	316		356		403	428	457	528	607	672
Power input	Cooling	Nom.		kW	54.8	62.2	70.6	78.3	102		115		130	137	146	170	198	219
Capacity control	Method				Step													
	Minimum capacity			%	25.0	21.0	25.0	22.0	23.0		25.0		21.0	20.0	25.0	17.0	14.0	17.0
EER					3.11	3.13	3.12		3.09				3.10	3.12		3.10	3.07	
ESEER					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
IPLV					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
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 (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	1,909	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	1,921	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	27	34	42	22		23		31	29	30	41	44	55
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		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	93	94	95	96				97	98			99	100
Sound power level (XL)	Cooling	Nom.		dBA	90	91	92		93				95				96	97
Sound pressure level (XS)	Cooling	Nom.		dBA	72	74	75	76		77	76	77	78		79	78	79	
Sound pressure level (XL)	Cooling	Nom.		dBA	71	73			74				75				76	
Operation range	Water side	Cooling	Min.~Max.	°CDB	-13~18													
	Air side	Cooling	Min.~Max.	°CDB	-18~52													
Refrigerant	Type / GWP				R-410A / 2,087.5													
	Circuits	Quantity			2													
Refrigerant charge	Per circuit			kg	14.0	15.5	16.5	20.0	26.0				31.0			37.0	36.0	41.5
				TCO_2eq	29.2	32.4	34.4	41.8	54.3				64.7			77.2	75.2	86.6
Piping connections	Evaporator water inlet/outlet (OD)				3"													
Unit	Maximum starting current			A	281	338	353	408	480		509		629	643	657	642	768	818
	Nominal running current (RLA)	Cooling		A	110	117	128	141	181		202		229	240	254	300	343	379
	Maximum running current			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

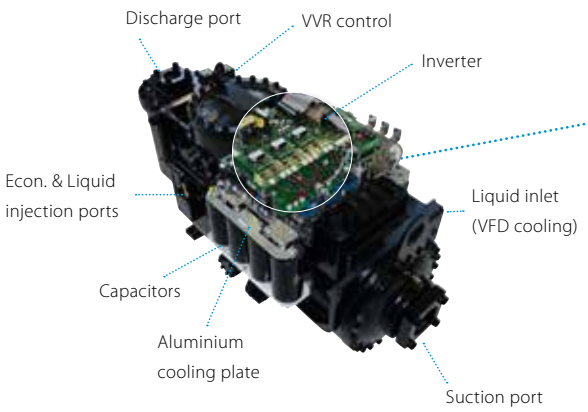
Cooling only				**EWAQ-F-XR**	**170**	**190**	**210**	**240**	**300**	**310**	**330**	**340**	**390**	**410**	**430**	**500**	**580**	**650**
Cooling capacity	Nom.			kW	165	188	211	236	304		340		385	407	433	502	579	645
Power input	Cooling	Nom.		kW	53.0	61.2	68.7	77.3	101		117		128	136	146	170	200	219
Capacity control	Method				Step													
	Minimum capacity			%	25.0	21.0	25.0	22.0	23.0		25.0		21.0	20.0	25.0	17.0	14.0	17.0
EER					3.12	3.07	3.08	3.05	3.00		2.92		3.01	2.99	2.96		2.90	2.95
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	24	25	31	39	21				28	26	27	38	40	51
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		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.		dBA	83	84	85	86	87				89		90	89	90	92
Sound pressure level	Cooling	Nom.		dBA	64	65	66	67		68	67	68	69	70		69	70	71
Operation range	Water side	Cooling	Min.~Max.	°CDB	-13~18													
	Air side	Cooling	Min.~Max.	°CDB	-18~52													
Refrigerant	Type / GWP				R-410A / 2,087.5													
	Circuits	Quantity			2													
Refrigerant charge	Per circuit			kg	14.0	15.5	16.5	20.0	24.0	26.0			31.0			35.0	36.0	41.5
				TCO_2eq	29.2	32.4	34.4	41.8	50.1	54.3			64.7			73.1	75.2	86.6
Piping connections	Evaporator water inlet/outlet (OD)				3"													
Unit	Maximum starting current			A	276	332	346	401	472		501		618	632	646	628	754	801
	Nominal running current (RLA)		Cooling	A	107	116	125	139	180		204		226	239	255	300	347	380
	Maximum running current			A	132	143	157	173	220		249		283	296	310	377	419	465
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

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 exisiting projects or simply do a quick selection.

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

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

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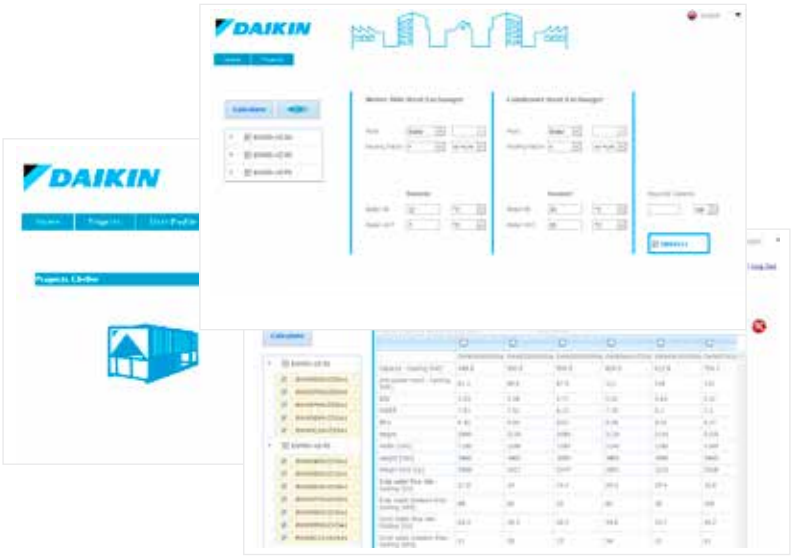

Why choose EWAD-TZB?

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

Unrivaled and proven reliability

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

Extensive option list

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

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

Cooling only				EWAD-TZSSB/SLB	160	190	240	270	300	360	380	450	495	570	610	660	700	820	900	990	C10	C11
Cooling capacity	Nom.			kW	169	201	235	269	306	351	395	456	500	570	612	661	701	816	890	987	1,045	1,104
Power input	Cooling	Nom.		kW	56.5	69.9	83.0	89.9	108	119	139	163	174	198	217	239	249	257.9	296.1	321.3	364.4	366.2
Capacity control	Method				Stepless																	
	Minimum capacity			%	37	31	34	29	25	24	16	17	16	14	13	12		10				
EER					2.99	2.87	2.83	2.99	2.82	2.95	2.83	2.78	2.86	2.88	2.81	2.76	2.81	3.164	3.005	3.072	3.017	3.015
ESEER					4.37	4.46	4.30	4.40	4.42	4.50	4.46	4.44	4.49	4.54	4.59	4.63	4.70	4.43		4.44		4.51
IPLV					5.30	5.27	5.04	5.19	5.37	5.53	5.34	5.30	5.46	5.64	5.62		5.70	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	6,249	6,147	6,542	6,897	7,207
	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	6,249	6,147	6,542	6,897	7,207
	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						Single pass shell & tube											
	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	25.0	19.3	15.4	32.6	25.2	25.9		32.4	44.0	55.7	38.8	32.3	36.0	52.6	36.9	42.2	46.6	37.3
	Water volume			l	20	26	37	26	37	50	158	164	158		270	255		283		485		453
Air heat exchanger	Type				Microchannel																	
Compressor	Type				Inverter driven single screw compressor																	
	Quantity				1						2											
Fan	Type				Direct propeller																	
	Quantity				4			6		8			10	12			14			16	18	20
	Air flow rate	Cooling	Nom.	l/s	15,109			22,664		30,219			37,774	45,328			52,883	69,177		79,060	88,942	98,825
	Speed			rpm	700													900				
Sound power level (SSB)	Cooling	Nom.		dBA	96			97	98	99				100	101	102	105	102			103	
Sound pressure level (SSB)	Cooling	Nom.		dBA	77			78		79				80		82	84	81				
Sound power level (SLB)	Cooling	Nom.		dBA	90	90.5		91.5	92.5	93.5			94	94.5	95.5	96.5	98.5	99.0			100.0	
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				R-134a																	
	Circuits	Quantity			1						2											
	GWP				1,430																	
Refrigerant charge	Per circuit			kg	27	29	33	38	41	52	29	29.5	34	37.5	38.5	41.5	45	45.5		52	58.5	65
				TCO_2eq	39	41	47	54	59	74	41	42	49	54	55.0	59	64	65.065		74.36	83.655	92.95
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm			114.3mm			139.7mm				168.3mm			6"	8"			
Unit	Starting current	Max		A	0													-				
	Running current	Cooling	Nom.	A	102	123	188	177	188	200	246	372	366	361	377	396	414	429	501	528	563	597
		Max		A	130	149	160	187	220	246	298	320	350	374	439	466	486	537	599	652	708	768
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Air cooled screw inverter chiller, standard efficiency, reduced sound

EWAD-TZSSB/SLB/SRB

MicroTech III

Cooling only				EWAD-TZSRB	160	190	240	270	300	360	380	450	495	570	610	660	700	820	900	990	C10	C11
Cooling capacity	Nom.			kW	169	201	235	269	306	351	394	455	499	569	610	659	700	800	895	956	1,013	1,067
Power input	Cooling	Nom.		kW	56.5	69.9	83	89.9	108	119	140	164	175	199	218	240	250	247.8	294.1	316	335.6	358.9
Capacity control	Method				Stepless																	
	Minimum capacity			%	37	31	34	29	25	24	16	17	16	14	13	12		10				
EER					2.99	2.87	2.83	2.99	2.82	2.95	2.81	2.76	2.85	2.86	2.80	2.74	2.80	3.229	3.043	3.016	3.018	2.973
ESEER					4.37	4.46	4.30	4.40	4.42	4.50	4.44	4.43	4.47	4.53	4.61	4.60	4.68	4.8		4.85	4.83	4.98
IPLV					5.30	5.27	5.04	5.19	5.37	5.53	5.30	5.26	5.43	5.60	5.61	5.60	5.67	5.92	5.74	5.77	5.75	5.86
Dimensions	Unit	Height		mm	2,483													2,482				
		Width		mm	2,258																	
		Depth		mm	2,283			3,183			4,083		4,983		5,883		6,783	7,783		8,820	9,591	10,461
Weight	Unit			kg	2,166	2,191	2,249	2,475	2,522	2,871	4,244	4,260	4,517	4,803	4,980	5,004	5,274	6,964	6,862	7,217	7,495	7,820
	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						Single pass shell & tube											
	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	25.0	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
	Water volume			l	20	26	37	26	37	50	158	164	158		270	255		283	485			453
Air heat exchanger	Type				Microchannel																	
Compressor	Type				Inverter driven single screw compressor																	
	Quantity				1						2											
Fan	Type				Direct propeller																	
	Quantity				4			6		8			10	12			14	16		18	20	22
	Air flow rate	Cooling	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	70	70					71		73				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~47													-18~45				
	Water side	Cooling	Min.~Max.	°CDB	-8~18													-15~20				
Refrigerant	Type				R-134a																	
	Circuits	Quantity			1						2											
	GWP				1,430																	
Refrigerant charge	Per circuit			kg	27	29	33	38	41	52	29	29.5	34	37.5	38.5	41.5	45	52		58.5	65	71.5
				TCO_2eq	39	41	47	54	59	74	41	42	49	54	55	59	64	74.36		83.655	92.95	102.245
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm			114.3mm			139.7mm				168.3mm			6"	8"			
Unit	Starting current	Max		A	0													-				
	Running current	Cooling	Nom.	A	102	123	188	177	188	200	247	374	368	363	378	398	416	422	496	530	561	599
		Max		A	130	149	160	187	220	246	298	320	350	374	439	466	486	523	585	635	688	745
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Air cooled screw inverter chiller, high efficiency, 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

Cooling only				**EWAD-TZXLB/XSB**	**190**	**220**	**240**	**290**	**320**	**360**	**420**	**450**	**540**	**570**	**610**	**660**	**680**	**770**	**850**	**910**	**C10**	**C11**
Cooling capacity	Nom.			kW	180	211	240	277	313	361	417	473	529	563	599	639	678	764	850	912	1,001	1,045
Power input	Cooling	Nom.		kW	52.1	63.2	72.5	83.9	100	109	132	144	163	181	191	202	219	226.5	266.1	275.8	303.4	320.1
Capacity control	Method				Stepless																	
	Minimum capacity			%	34	29	34	29	25	17	16	17	16	15	14	13		10				
EER					3.46	3.34	3.30		3.13	3.30	3.16	3.26	3.24	3.11	3.13	3.16	3.09	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	5.00	5.07		5.11	5.15		5.09		5.13	5.15	5.22
IPLV					6.26	6.15	6.19	6.17		6.40	6.30	6.22		6.29	6.31	6.25	6.21	6.26	6.08	6.19	6.29	6.24
Dimensions	Unit	Height		mm	2,483													2,482				
		Width		mm	2,258																	
		Depth		mm	3,183			4,083		4,983		5,883			6,783	7,683		7,783		8,820	9,591	10,461
Weight (XSB)	Unit			kg	2,377	2,424	2,436	2,785		4,322		4,632	4,830		5,102	5,455		6,626	6,542	6,897	7,175	7,500
	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
Weight (XLB)	Unit			kg	2,362	2,409	2,421	2,770		4,292		4,602	4,800		5,072	5,425		6,626	6,542	6,897	7,175	7,500
	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
Water heat exchanger	Type				Plate heat exchanger					Single pass shell & tube								Shell and tube				
	Water flow rate	Cooling	Nom.	l/s	8.6	10.1	11.5	13.2	15.0	17.3	20.0	22.6	25.3	27.0	28.7	30.6	32.4	36.6	40.7	43.6	47.9	50
	Water pressure drop	Cooling	Nom.	kPa	16.4	13.2	16.2	17.1	21.0	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
	Water volume			l	26	37		50		158			255					301	485			453
Air heat exchanger	Type				Microchannel																	
Compressor	Type				Inverter driven single screw compressor																	
	Quantity				1					2												
Fan	Type				Direct propeller																	
	Quantity				6			8		10		12			14	16			18	20	22	
	Air flow rate	Nom.		l/s	22,664			30,219		37,774		45,328			52,883	60,438			67,993	75,547	83,102	
	Speed			rpm	700																	
Sound power level (XSB)	Cooling	Nom.		dBA	91	91.5	91	91.5	92.5	93.5	94			94.5	95	95.5		97				
Sound pressure level (XSB)	Cooling	Nom.		dBA	72			73		74	73		74					75				
Sound power level (XLB)	Cooling	Nom.		dBA	96	97	96	97	98	99				100		101					102	
Sound pressure level (XLB)	Cooling	Nom.		dBA	77			78		79						80		79				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50																	
	Water side	Cooling	Min.~Max.	°CDB	-8~18													-15~20				
Refrigerant	Type				R-134a																	
	Circuits	Quantity			1					2												
	GWP				1,430																	
Refrigerant charge	Per circuit			kg	36.0	39	40	51		32		37	40		44.5	48		52		58.5	65	71.5
				TCO_2eq	51	56	57	73		46		53	57		64	69		74.36		83.655	92.95	102.245
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm		114.3mm			139.7mm			168.3mm					6"	8"			
Unit	Starting current	Max		A	0													-				
	Running current	Cooling	Nom.	A	110	113	186		192	225	231	371.0	383	392	390	387	395	394	451	469	500	537
		Max		A	130	149	166	198	225	256	292	333	358	385	417	450	478	508	562	590	640	694
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Air cooled screw inverter chiller, high efficiency, reduced sound

EWAD-TZXSB/XLB/XRB

MicroTech III

Cooling only				EWAD-TZXRB	190	220	240	290	320	360	420	450	540	570	610	660	680	770	850	910	C10	C11
Cooling capacity	Nom.			kW	180	211	240	277	313	360	417	472	528	562	599	639	677	764	850	912	1,001	1,045
Power input	Cooling	Nom.		kW	52.1	63.2	72.5	83.9	100	109	132	145	164	181	192	203	220	226.5	266.8	275.4	303.1	320.6
Capacity control	Method				Stepless																	
	Minimum capacity			%	34	29	34	29	25	17	16	17	16	15	14	13		10				
EER					3.46	3.34	3.30		3.13	3.29	3.16	3.24	3.22	3.09	3.11	3.15	3.07	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	6.30	6.20		6.26	6.27	6.24	6.18	6.26	6.08	6.19	6.29	6.24
Dimensions	Unit	Height		mm	2,483													2,482				
		Width		mm	2,258																	
		Depth		mm	3,183			4,083		4,983			5,883		6,783	7,683		7,783		8,820	9,591	10,461
Weight	Unit			kg	2,462	2,509	2,521	2,870		4,492		4,802	5,000		5,272	5,625		6,946	6,862	7,217	7,495	7,820
	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					Single pass shell & tube								Shell and tube				
	Water flow rate	Cooling	Nom.	l/s	8.6	10.1	11.5	13.2	15.0	17.2	20.0	22.6	25.3	26.9	28.6	30.5	32.4	36.6	40.7	43.6	47.9	50.0
	Water pressure drop	Cooling	Nom.	kPa	16.4	13.2	16.2	17.1	21.0	34.2	31.2	39.7	36.6	41.0	27.1	30.4	33.2	40.3	33.3	37.3	42.3	34.2
	Water volume			l	26	37		50		158			255					301		485		453
Air heat exchanger	Type				Microchannel																	
Compressor	Type				Inverter driven single screw compressor																	
	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	37,774	44,475			51,745	59,299				66,570	74,124	81,394
	Speed			rpm	700																	
Sound power level	Cooling	Nom.		dBA	88			89		90		91				92		94	94	95		
Sound pressure level	Cooling	Nom.		dBA	68			69		70						71		73				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~50																	
	Water side	Cooling	Min.~Max.	°CDB	-8~18													-15~20				
Refrigerant	Type				R-134a																	
	Circuits	Quantity			1					2												
	GWP				1,430													1,430.0		1,430		
Refrigerant charge	Per circuit			kg	36	39	40	51		32		37	40.0		44.5	48		52.00		58.5	65	71.5
				TCO_2eq	51	56	57	73		46		53	57		64	69		74.36		83.65	92.95	102.245
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm		114.3mm			139.7mm			168.3mm					6"	8"			
Unit	Starting current	Max		A	0													-				
	Running current	Cooling	Nom.	A	110	113	186		192	226	231	373.0	385	393	391	389	396	395	453	471	502	539
		Max		A	130	149	166	198	225	256	292	333	358	385	417	450	478	508	562	590	640	694
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Air cooled screw inverter chiller, premium efficiency, standard 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
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Cooling only				**EWAD-PLB/TZPSB**	**190**	**220**	**240**	**290**	**300**	**350**	**420**	**495**	**550**	**620**	**720**	**820**	**950**
Cooling capacity	Nom.			kW	184	216	244	282	323	379	437	501	543	620	717	833	950
Power input	Cooling	Nom.		kW	50.5	60.7	68.7	83.4	95.9	104	124	139	151.4	178.8	182.3	220.4	252.5
Capacity control	Method				Stepless												
	Minimum capacity			%	34	29	34	29	27	19	20	17	10				
EER					3.64	3.56	3.55	3.38	3.37	3.62	3.50	3.60	3.586	3.468	3.933	3.78	3.763
ESEER					5.54	5.51	5.42	5.40	5.35	5.48	5.49	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 (PLB)	Unit			kg	2,773		2,784	2,785	3,035	4,765	5,099	5,107	6,470	6,498	7,415	7,708	8,037
	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
Weight (PSB)	Unit			kg	2,758		2,769	2,770	3,020	4,735	5,069	5,077	6,470	6,498	7,415	7,708	8,037
	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
Water heat exchanger	Type				Plate heat exchanger					Single pass shell & tube							
	Water flow rate	Cooling	Nom.	l/s	8.8	10.3	11.7	13.5	15.5	18.1	20.9	24.0	26	29.6	34.3	39.8	45.4
	Water pressure drop	Cooling	Nom.	kPa	10.6	11.0	13.4	17.1	21.5	20.4	26.5	33.3	19.8	25	24.2	31.7	29
	Water volume			l	50					255			307		485		453
Air heat exchanger	Type				Microchannel												
Compressor	Type				Inverter driven single screw compressor												
	Quantity				1					2							
Fan	Type				Direct propeller												
	Quantity				8				10	12	14	16	18	20		22	24
	Air flow rate	Cooling	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 (PLB)	Cooling	Nom.		dBA	91	91.5	91	91.5	92	93.5		94	97				
Sound pressure level (PLB)	Cooling	Nom.		dBA	71	72	71	72		73	72	73	75				
Sound power level (PSB)	Cooling	Nom.		dBA	97				98	99		100	101				
Sound pressure level (PSB)	Cooling	Nom.		dBA	77					78	77	78	79				
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52										-18~55		
	Water side	Cooling	Min.~Max.	°CDB	-8~18										-15~20		
Refrigerant	Type				R-134a												
	Circuits	Quantity			1					2							
	GWP				1,430												
Refrigerant charge	Per circuit			kg	49		50	51	58	38.5	43	47	52.5	57	65	71.5	78
				TCO_2eq	70		72	73	83	55	61	67	75.075	81.51	92.95	102.245	111.54
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm		114.3mm			168.3mm			6"		8"		
Unit	Starting current	Max		A	0												
	Running current	Cooling	Nom.	A	101	104	172	177		208	211	346	258	298	316	375	424
		Max		A	126	144	162	188	218	246	285	324	352	436	437	512	577
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

Air cooled screw inverter chiller, premium efficiency, reduced sound

EWAD-TZPSB/PLB/PRB

MicroTech III

Cooling only				**EWAD-TZPRB**	**190**	**220**	**240**	**290**	**300**	**350**	**420**	**495**	**550**	**620**	**720**	**820**	**950**
Cooling capacity	Nom.			kW	187	218	247	279	317	382	437	505	543	620	717	833	950
Power input	Cooling	Nom.		kW	50.5	60.7	68.7	83.4	95.9	105	125	139	151.3	178.5	182.2	220.2	252.4
Capacity control	Method				Stepless												
	Minimum capacity			%	34	29	34	29	27	19	20	17	10				
EER					3.71	3.59		3.35	3.31	3.64	3.49	3.62	3.59	3.473	3.935	3.783	3.764
ESEER					5.55	5.52	5.27	5.16	5.20	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	6.30	6.27	6.47	6.53	6.47	6.73	6.60	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	6,620	6,648	7,735	8,028	8,357
	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					Single pass shell & tube							
	Water flow rate	Cooling	Nom.	l/s	9.0	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	11.0	13.4	17.1	21.5	20.4	26.4	33.2	19.8	24.9	24.2	31.7	28.9
	Water volume			l	50					255			307		485		453
Air heat exchanger	Type				Microchannel												
Compressor	Type				Inverter driven single screw compressor												
	Quantity				1					2							
Fan	Type				Direct propeller												
	Quantity				8				10	12	14	16	18	20		22	24
	Air flow rate	Cooling	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				R-134a												
	Circuits	Quantity			1					2							
	GWP				1,430												
Refrigerant charge	Per circuit			kg	49		50	51	58	38.5	43	47	52.5	57	65	71.5	78
				TCO_2eq	70		72	73	83	55	61	67	75.075	81.51	92.95	102.245	111.54
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm		114.3mm			168.3mm			6"		8"		
Unit	Starting current	Max		A	0												
	Running current	Cooling	Nom.	A	101	104	172	177		209	212	347	259	300	317	377	426
		Max		A	126	144	162	188	218	246	285	324	352	436	437	512	577
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

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

- **Optimized energy efficiency both at full and part load conditions**
- 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

Cooling only				**EWAD-TZSS/SR**	**170**	**205**	**235**	**270**	**320**	**365**	**370**	**415**	**465**	**500**	**540**	**590**	**640**	**710**
Cooling capacity	Nom.			kW	170	205	229	268	317	365	366	412	463	499	536	589	640	710
Power input	Cooling	Nom.		kW	62.2	72.5	79.1	96.0	116	133	134	145	164	178	190	217	235	267
Capacity control	Method				Stepless													
	Minimum capacity			%	33.3	28.6	33.3	28.6	25.0	22.2	15.4	14.3	16.7	15.4	14.3	13.3	12.5	11.1
EER					2.73	2.83	2.90	2.79		2.74		2.85	2.83	2.80	2.82	2.72	2.73	2.66
ESEER					4.62	4.61	4.75	4.80	4.82	4.93	4.65	4.81	4.71	4.84	4.83	4.85	4.76	4.92
IPLV					5.80	5.44	6.02	5.84	5.94	5.78	5.86	6.18	6.16	6.09	6.07	6.09	6.13	6.04
Dimensions	Unit	Height		mm	2,270						2,222							
		Width		mm	1,224					2,258								
		Depth		mm	3,461	4,361		5,261		3,218		4,117			5,015			5,917
Weight (SS)	Unit			kg	1,898	1,977	2,083	2,478	2,444	2,756	3,906	4,256	4,426	4,481	4,709	4,892	4,969	5,291
	Operation weight			kg	1,915	2,077	2,183	2,504	2,596	2,806	3,995	4,426	4,590	4,645	4,873	5,162	5,231	5,553
Weight (SR)	Unit			kg	1,996	2,075	2,181	2,576	2,541	2,854	4,101	4,452	4,621	4,676	4,904	5,087	5,164	5,486
	Operation weight			kg	2,013	2,174	2,280	2,602	2,693	2,903	4,190	4,622	4,785	4,840	5,068	5,357	5,426	5,748
Water heat exchanger	Type				Plate heat exchanger						Single pass shell & tube							
	Water flow rate	Cooling	Nom.	l/s	8.1	9.8	11.0	12.8	15.1	17.4	17.5	19.7	22.1	23.9	25.6	28.2	30.6	34.0
	Water pressure drop	Cooling	Total	kPa	25	24	29	33	26	27	36	50	33	37	43	36	47	57
	Water volume			l	17	24		26	39	50	89	170	164			270	262	
Air heat exchanger	Type				High efficiency fin and tube type													
Compressor	Type				Inverter driven single screw compressor													
	Quantity				1						2							
Fan	Type				Direct propeller													
	Quantity				3	4		5		6		8			10			12
	Air flow rate	Cooling	Nom.	l/s	12,399	16,532	16,015	20,665	20,019	24,023		33,064		32,030	41,330		40,038	48,046
	Speed			rpm	700													
Sound power level (SS)	Cooling	Nom.		dBA	96	97	96	97	98	101	99	100	99		100		101	104
Sound power level (SR)	Cooling	Nom.		dBA	89				90	92						93		95
Sound pressure level (SS)	Cooling	Nom.		dBA	77				78	82	80		79	80			81	84
Sound pressure level (SR)	Cooling	Nom.		dBA	70		69	70	71	73		72				73		74
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~47													
	Water side	Cooling	Min.~Max.	°CDB	-8~15													
Refrigerant	Type / GWP				R-134a / 1,430													
	Circuits	Quantity			1						2							
Refrigerant charge	Per circuit			kg	29.0	35.0	39.0	46.0	54.0	62.0	31.0	35.0	39.5	42.5	45.5	50.0	54.5	60.5
				TCO_2eq	41.5	50.1	55.8	65.8	77.2	88.7	44.3	50.1	56.5	60.8	65.1	71.5	77.9	86.5
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm						114.3mm	139.7mm				168.3mm		
Unit	Starting current	Max		A	3													
	Running current	Cooling	Nom.	A	105	121	132	159	191	218	223	241	273	294	314	359	385	434
		Max		A	120	142	156	185	215	246	259	284	313	339	370	402	430	491
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

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

EWAD-TZSS/SR/XS/XR

MicroTech III

Cooling only				**EWAD-TZXS/XR**	**180**	**220**	**265**	**290**	**330**	**360**	**380**	**410**	**440**	**490**	**540**	**580**	**630**	**690**
Cooling capacity	Nom.			kW	180	216	265	288	332	360	366	407	441	490	536	577	629	682
Power input	Cooling	Nom.		kW	56.1	68.4	84.6	89.8	106	113	116	128	139	156	169	185	201	216
Capacity control	Method				Stepless													
	Minimum capacity			%	33.3	28.6	30.8	28.6	25.0	23.5	16.7	15.4	14.3	16.7	15.4	14.3	13.3	12.5
EER					3.20	3.16	3.14	3.21	3.14	3.18	3.16	3.17		3.15	3.17	3.12		3.16
ESEER					5.02	5.09	5.10	5.15	5.22	5.23	4.96	5.10	5.01	4.96	5.18	5.09	5.12	5.07
IPLV					6.32	6.20	6.33	6.26	6.32	6.37	6.31	6.47	6.39	6.34	6.48	6.44	6.46	6.51
Dimensions	Unit	Height		mm	2,270			2,222										
		Width		mm	1,224			2,258										
		Depth		mm	4,361	5,261		3,218	4,117				5,015			5,917		6,817
Weight (XS)	Unit			kg	2,060	2,304	2,434	2,582	2,986	3,039	4,247	4,321	4,704	4,706	4,882	5,185	5,275	5,588
	Operation weight			kg	2,081	2,404	2,586	2,734	3,035	3,088	4,417	4,479	4,864		5,152	5,455	5,537	5,843
Weight (XR)	Unit			kg	2,158	2,402	2,532	2,679	3,084	3,136	4,442	4,516	4,901		5,077	5,381	5,471	5,783
	Operation weight			kg	2,178	2,502	2,684	2,831	3,133	3,186	4,612	4,674	5,059		5,347	5,651	5,733	6,038
Water heat exchanger	Type				Plate heat exchanger						Single pass shell & tube							
	Water flow rate	Cooling	Nom.	l/s	8.6	10.4	12.7	13.8	15.9	17.2	17.5	19.5	21.1	23.5	25.7	27.6	30.1	32.7
	Water pressure drop	Cooling	Total	kPa	24	25	19	22	23	26	40	41	48	56	30	34	44	57
	Water volume			l	20	24	39		50		170		158		270		262	255
Air heat exchanger	Type				High efficiency fin and tube type													
Compressor	Type				Inverter driven single screw compressor													
	Quantity				1						2							
Fan	Type				Direct propeller													
	Quantity				4	5		6	8				10			12		14
	Air flow rate	Nom.		l/s	16,015	20,665	20,019	24,023	33,064	32,030	33,064	32,030	41,330		40,038	49,597	48,046	56,053
	Speed			rpm	700													
Sound power level (XS)	Cooling	Nom.		dBA	96	97	96	97	98	99			100	99		100		101
Sound power level (XR)	Cooling	Nom.		dBA	89				91	92							93	94
Sound pressure level (XS)	Cooling	Nom.		dBA	77				78	80	79	80		79			80	
Sound pressure level (XR)	Cooling	Nom.		dBA	69	70	69	70	71	72								73
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~49													
	Water side	Cooling	Min.~Max.	°CDB	-8~15													
Refrigerant	Type / GWP				R-134a / 1,430													
	Circuits	Quantity			1						2							
Refrigerant charge	Per circuit			kg	31.0	37.0	45.0	49.0	57.0	61.0	31.0	34.5	37.5	42.0	45.5	49.0	53.5	58.0
				TCO_2eq	44.3	52.9	64.4	70.1	81.5	87.2	44.3	49.3	53.6	60.1	65.1	70.1	76.5	82.9
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm						139.7mm				168.3mm			
Unit	Starting current	Max		A	3													
	Running current	Cooling	Nom.	A	97	116	142	151	179	190	199	217	235	262	284	310	338	361
		Max		A	122	145	172	188	223	237	245	264	290	318	344	376	408	440
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

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

- **Premium energy efficiency both at full and part load conditions**
- Stepless single-screw compressor
- Optimised for use with R-134a
- 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

EWAD-TZPS/PR MicroTech III

Cooling only				EWAD-TZPS/PR	190	225	250	270	295	320	345	380	415	460	505	560	600	645
Cooling capacity	Nom.			kW	185	221	247	271	294	316	339	369	418	452	495	554	598	639
Power input	Cooling	Nom.		kW	52.7	64.9	69.2	77.4	85.1	94.4	102	110	123	134	146	168	183	200
Capacity control	Method				Stepless													
	Minimum capacity			%	33.3	28.6	33.3	30.8	28.6	26.7	18.2	16.7	15.4	14.3	16.7	15.4	14.3	13.3
EER					3.52	3.41	3.57	3.50	3.45	3.35	3.34	3.36	3.38	3.39	3.38	3.30	3.28	3.20
ESEER					5.49	5.45	5.73	5.66	5.65	5.62	5.46	5.40	5.59	5.54	5.67	5.66	5.55	5.47
IPLV					6.95	6.70	7.22	7.04	7.08	6.81	6.85	6.94	7.05	6.98	7.14	7.13	7.10	6.97
Dimensions	Unit	Height		mm	2,355													
		Width		mm	2,258													
		Depth		mm	3,218		4,117					5,015		5,917			6,817	
Weight (PS)	Unit			kg	2,436	2,565	2,810	2,815	3,026	3,031	4,290	4,517	4,764	5,007	5,241	5,269	5,489	5,591
	Operation weight			kg	2,536	2,591	2,962	2,967	3,076	3,080	4,460	4,687	5,034	5,277	5,511	5,524	5,744	5,838
Weight (PR)	Unit			kg	2,533	2,662	2,908	2,913	3,124	3,128	4,485	4,712	4,960	5,203	5,436	5,465	5,685	5,786
	Operation weight			kg	2,633	2,688	3,060	3,065	3,173	3,178	4,655	4,882	5,230	5,473	5,706	5,720	5,940	6,033
Water heat exchanger	Type				Plate heat exchanger						Single pass shell & tube							
	Water flow rate	Cooling	Nom.	l/s	8.9	10.6	11.8	13.0	14.0	15.1	16.2	17.7	20.0	21.6	23.7	26.5	28.7	30.6
	Water pressure drop	Cooling	Total	kPa	20	23	18	20	18	21	34	41	30	35	26	39	44	50
	Water volume			l	24	26	39		50		170		270			255		
Air heat exchanger	Type				High efficiency fin and tube type													
Compressor	Type				Inverter driven single screw compressor													
	Quantity				1						2							
Fan	Type				Direct propeller													
	Quantity				6		8				10			12			14	
	Air flow rate	Cooling	Nom.	l/s	20,172	19,284	26,896		25,712		33,621	32,140	40,345	38,568			47,069	44,996
	Speed			rpm	600													
Sound power level (PS)	Cooling	Nom.		dBA	96				97		99						100	
Sound power level (PR)	Cooling	Nom.		dBA	87					88	89		90					
Sound pressure level (PS)	Cooling	Nom.		dBA	77		76		77		79				78	79		
Sound pressure level (PR)	Cooling	Nom.		dBA	67	68	67		68		69							
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~51													
	Water side	Cooling	Min.~Max.	°CDB	-8~15													
Refrigerant	Type / GWP				R-134a / 1,430													
	Circuits	Quantity			1						2							
Refrigerant charge	Per circuit			kg	32.0	38.0	42.0	46.0	50.0	54.0	29.0	31.5	35.5	38.5	42.0	47.0	51.0	54.5
				TCO_2eq	45.8	54.3	60.1	65.8	71.5	77.2	41.5	45.0	50.8	55.1	60.1	67.2	72.9	77.9
Piping connections	Evaporator water inlet/outlet (OD)				88.9mm						139.7mm		168.3mm					
Unit	Starting current	Max		A	3													
	Running current	Cooling	Nom.	A	87	105	113	125	137	153	168	180	201	215	238	269	290	321
		Max		A	115	135	151	164	177	193	209	230	249	271	299	325	352	384
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

Air cooled screw chiller, standard efficiency, standard sound

› One refrigerant circuit with single screw compressor
› **Compact design** with brazed plate heat exchanger
› Large operation range (ambient temperature down to -18°C)
› Water supply down to -15°C

Cooling only				**EWAD-E-SS**	**100**	**120**	**140**	**160**	**180**	**210**	**260**	**310**	**360**	**410**
Cooling capacity	Nom.			kW	101	121	138	163	183	213	255	306	359	411
Power input	Cooling	Nom.		kW	39.1	47.5	53.9	60.9	69.0	72.4	87.8	112	134	147
Capacity control	Method				Stepless									
	Minimum capacity			%	25.0									
EER					2.58	2.54	2.55	2.67	2.64	2.95	2.90	2.73	2.67	2.80
ESEER					2.84	2.83	2.66	2.84	2.73	2.93	3.08	2.96	3.13	3.24
IPLV					3.36	3.25	2.98	3.13	3.25	3.48	3.68	3.56	3.61	3.65
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		1,861		2,086		2,919			
	Operation weight			kg	1,699		1,881		2,116		2,963			
Water heat exchanger	Type				Plate heat exchanger									
	Water volume			l	12	15	17	20	24	30	25	30	36	44
	Water flow rate	Cooling	Nom.	l/s	4.8	5.8	6.6	7.8	8.7	10.2	12.2	14.6	17.2	19.7
	Water pressure drop	Cooling	Nom.	kPa	24	25	23	24	22	21	47	48		45
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler									
Compressor	Type				Single screw compressor						Asymmetric single screw compressor			
	Quantity				1									
Fan	Type				Direct propeller									
	Quantity				2		3		4		6			
	Air flow rate	Nom.		l/s	10,924	10,576	16,386	15,865	21,848	21,153	32,772		31,729	
	Speed			rpm	900									
Sound power level	Cooling	Nom.		dBA	92				93		94			95
Sound pressure level	Cooling	Nom.		dBA	74						75			76
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15									
	Air side	Cooling	Min.~Max.	°CDB	-18~48									
Refrigerant	Type / GWP				R-134a / 1,430									
	Circuits	Quantity			1									
Refrigerant charge	Per circuit			kg	18.0	21.0	23.0	28.0	34.0	39.0	46.0		56.0	74.0
				TCO_2eq	25.7	30.0	32.9	40.0	48.6	55.8	65.8		80.1	105.8
Piping connections	Evaporator water inlet/outlet (OD)				3"									
Unit	Maximum starting current			A	151		195		288		330	410		
	Nominal running current (RLA)		Cooling	A	67	81	92	102	116	121	148	185	220	241
	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 chiller, standard efficiency, low sound

EWAD-E-SS/SL

MicroTech III

Cooling only				**EWAD-E-SL**	**100**	**120**	**130**	**160**	**180**	**210**	**250**	**300**	**350**	**400**
Cooling capacity	Nom.			kW	97.6	116	134	157	177	208	248	295	344	397
Power input	Cooling	Nom.		kW	39.2	48.3	53.4	60.8	68.3	72.8	85.4	111	135	152
Capacity control	Method				Stepless									
	Minimum capacity			%	25.0									
EER					2.49	2.39	2.50	2.57	2.59	2.86	2.90	2.65	2.55	2.62
ESEER					2.92	2.88	2.76	2.91	2.98	3.22	3.44	3.31	3.24	3.35
IPLV					3.32	3.21	3.30	3.46	3.28	3.48	3.86	3.75	3.63	3.76
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	1,784		1,961		2,186		3,029			
	Operation weight			kg	1,799		1,981		2,216		3,073			
Water heat exchanger	Type				Plate heat exchanger									
	Water volume			l	12	15	17	20	24	30	25	30	36	44
	Water flow rate	Cooling	Nom.	l/s	4.7	5.5	6.4	7.5	8.4	10.0	11.9	14.1	16.5	19.0
	Water pressure drop	Cooling	Nom.	kPa	23		22	23	21	20	45		44	42
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler									
Compressor	Type				Single screw compressor						Asymmetric single screw compressor			
	Quantity				1									
Fan	Type				Direct propeller									
	Quantity				2		3		4		6			
	Air flow rate	Nom.		l/s	8,373	8,144	12,560	12,216	16,747	16,288	25,120		24,432	
	Speed			rpm	700									
Sound power level	Cooling	Nom.		dBA	89		90			92				93
Sound pressure level	Cooling	Nom.		dBA	71					73				74
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15									
	Air side	Cooling	Min.~Max.	°CDB	-18~48									
Refrigerant	Type / GWP				R-134a / 1,430									
	Circuits	Quantity			1									
Refrigerant charge	Per circuit			kg	18.0	21.0	23.0	28.0	34.0	39.0	46.0		56.0	74.0
				TCO_2eq	25.7	30.0	32.9	40.0	48.6	55.8	65.8		80.1	105.8
Piping connections	Evaporator water inlet/outlet (OD)				3"									
Unit	Maximum starting current			A	151		195		288		330	410		
	Nominal running current (RLA)		Cooling	A	67	83	92	103	116	122	144	184	223	249
	Maximum running current			A	83	100	115	128	151	158	189	234	276	290
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400									

Air cooled screw chiller, standard efficiency, standard sound

› 2 truly independent refrigerant circuits
› Stepless single-screw compressor
› Optimised for use with R-134a
› Large operation range (ambient temperature down to -18°C)
› MicroTech III controller with superior control logic and easy interface

Cooling only				**EWAD-D-SS**	**390**	**440**	**470**	**510**	**530**	**560**	**580**
Cooling capacity	Nom.			kW	388	435	463	500	529	553	575
Power input	Cooling	Nom.		kW	154	165	169	186	196	207	199
Capacity control	Method				Stepless						
	Minimum capacity			%	12.5						
EER					2.52	2.63	2.74	2.70		2.67	2.89
ESEER					3.26	3.43	3.44	3.41		3.45	3.29
IPLV					3.75	3.86	3.89	3.96		4.11	3.96
Dimensions	Unit	Height		mm	2,223						
		Width		mm	2,234						
		Depth		mm	3,139	4,040					
Weight	Unit			kg	2,960	4,030	4,220	4,230			4,235
	Operation weight			kg	3,090	4,195	4,395				
Water heat exchanger	Type				Single pass shell & tube						
	Water volume			l	130	165	175	165			160
	Water flow rate	Cooling	Nom.	l/s	18.6	20.8	22.2	24.0	25.4	26.5	27.6
	Water pressure drop	Cooling	Nom.	kPa	46	38	67	47	52	57	51
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler						
Compressor	Type				Single screw compressor	Asymmetric single screw compressor					
	Quantity				2						
Fan	Type				Direct propeller						
	Quantity				6		8				
	Air flow rate	Nom.		l/s	32,772	31,729	43,696				42,306
	Speed			rpm	890						
Sound power level	Cooling	Nom.		dBA	96	97			98	99	
Sound pressure level	Cooling	Nom.		dBA	77				79		
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15						
	Air side	Cooling	Min.~Max.	°CDB	-18~48						
Refrigerant	Type / GWP				R-134a / 1,430						
	Circuits	Quantity			2						
Refrigerant charge	Per circuit			kg	28.0	33.0	36.0	38.0	40.0	43.0	47.0
				TCO_2eq	40.0	47.2	51.5	54.3	57.2	61.5	67.2
Piping connections	Evaporator water inlet/outlet (OD)				5.5"						
Unit	Maximum starting current			A	419	464	485			494	
	Nominal running current (RLA)		Cooling	A	254	274	281	306	321	336	324
	Maximum running current			A	312	330	359	380	391	402	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Air cooled screw chiller, standard efficiency, low sound

EWAD-D-SS/SL MicroTech III

Cooling only				EWAD-D-SL	180	200	230	250	260	280	300	320	370	400	440	480	510	530
Cooling capacity	Nom.			kW	183	197	224	244	260	274	297	320	368	402	438	475	503	531
Power input	Cooling	Nom.		kW	82.0	80.2	85.6	94.4	102	109	121	125	135	171	172	188	205	197
Capacity control	Method				Stepless													
	Minimum capacity			%	12.5													
EER					2.24	2.46	2.62	2.58	2.54	2.50	2.46	2.56	2.72	2.36	2.55	2.53	2.46	2.70
ESEER					2.91	3.03	3.21	3.11	3.16	3.13	3.10	3.14	3.31	3.54	3.56	3.46	3.56	3.66
IPLV					3.43	3.56	3.73	3.63	3.66	3.63	3.59	3.62	3.84	3.85	4.06	3.96	4.07	4.14
Dimensions	Unit	Height		mm	2,355									2,223				
		Width		mm	2,234													
		Depth		mm	2,239		3,139					4,040						
Weight	Unit			kg	2,475	2,470	2,860					3,187		4,030	4,220	4,230		4,235
	Operation weight			kg	2,500		2,960					3,300		4,195		4,395		
Water heat exchanger	Type				Plate heat exchanger		Single pass shell & tube											
	Water volume			l	25	30	100					130		165	170		165	160
	Water flow rate	Cooling	Nom.	l/s	8.8	9.4	10.7	11.7	12.5	13.1	14.2	15.3	17.7	19.3	21.0	22.8	24.1	25.4
	Water pressure drop	Cooling	Nom.	kPa	29	22	58	49	54	59	60	55	67	48	62	54	48	43
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler													
Compressor	Type				Single screw compressor									Asymmetric single screw compressor				
	Quantity				2													
Fan	Type				Direct propeller													
	Quantity				4		6					8		6	8			
	Air flow rate	Nom.		l/s	15,295	14,868	22,943		22,623	22,302		30,591		24,432	33,493			32,576
	Speed			rpm	900									705				
Sound power level	Cooling	Nom.		dBA	94							95	97	94			96	
Sound pressure level	Cooling	Nom.		dBA	75								78	75			76	77
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15													
	Air side	Cooling	Min.~Max.	°CDB	-18~48													
Refrigerant	Type / GWP				R-134a / 1,430													
	Circuits	Quantity			2													
Refrigerant charge	Per circuit			kg	18.0	21.0	23.0	26.0	28.0	29.0			35.0	36.0	34.0	40.0		43.0
				TCO_2eq	25.7	30.0	32.9	37.2	40.0	41.5			50.1	51.5	48.6	57.2		61.5
Piping connections	Evaporator water inlet/outlet (OD)				3"		4"					5"						
Unit	Maximum starting current			A	218		234		277	286	298	300	305	460	480		488	
	Nominal running current (RLA)	Cooling		A	135	133	141	155	166	176	192	200	214	281	285	308	334	323
	Maximum running current			A	165		186	202	213	224	238	258	269	322	348	368	379	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

Air cooled screw chiller, standard efficiency, reduced sound

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Cooling only				**EWAD-D-SR**	**180**	**190**	**220**	**240**	**250**	**270**	**280**	**310**	**370**	**400**	**440**	**480**	**510**	**530**
Cooling capacity	Nom.			kW	177	190	218	237	251	263	277	310	364	402	438	475	503	531
Power input	Cooling	Nom.		kW	84.5	83.1	86.2	95.6	104	112	123	127	140	171	172	188	205	197
Capacity control	Method				Stepless													
	Minimum capacity			%	12.5													
EER					2.09	2.28	2.53	2.48	2.41	2.34	2.25	2.45	2.60	2.36	2.55	2.53	2.46	2.70
ESEER					2.80	2.91	3.24	3.11	3.13	3.07	3.04	3.15	3.32	3.54	3.56	3.46	3.56	3.66
IPLV					3.29	3.42	3.74	3.59		3.56	3.53	3.70	3.88	3.90	4.06	3.96	4.07	4.14
Dimensions	Unit	Height		mm	2,355									2,223				
		Width		mm	2,234													
		Depth		mm	2,239		3,139					4,040						
Weight	Unit			kg	2,620		2,890					3,335		4,040	4,240			
	Operation weight			kg	2,650		3,100					3,450		4,342	4,542			
Water heat exchanger	Type				Plate heat exchanger		Single pass shell & tube											
	Water volume			l	25	30	100					130		165	170		165	160
	Water flow rate	Cooling	Nom.	l/s	8.5	9.1	10.4	11.3	12.0	12.6	13.3	14.9	17.4	19.3	21.0	22.8	24.1	25.4
	Water pressure drop	Cooling	Nom.	kPa	27	20	55	47	51	55		53	65	48	62	54	48	43
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler													
Compressor	Type				Single screw compressor									Asymmetric single screw compressor				
	Quantity				2													
Fan	Type				Direct propeller													
	Quantity				4		6					8		6	8			
	Air flow rate	Nom.		l/s	12,389	11,928	18,583		18,237	17,892		24,777		24,432	33,493			32,576
	Speed			rpm	680									705				
Sound power level	Cooling	Nom.		dBA	89							90	92	91			92	93
Sound pressure level	Cooling	Nom.		dBA	70								73	71			73	
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15													
	Air side	Cooling	Min.~Max.	°CDB	-18~48													
Refrigerant	Type / GWP				R-134a / 1,430													
	Circuits	Quantity			2													
Refrigerant charge	Per circuit			kg	18.0	21.0	24.0	25.0			29.0		33.0	35.0	40.0	39.0	40.0	43.0
				TCO_2eq	25.7	30.0	34.3	35.8			41.5		47.2	50.1	57.2	55.8	57.2	61.5
Piping connections	Evaporator water inlet/outlet (OD)				3"		4"					5"						
Unit	Maximum starting current			A	217		232		275	284	295	297	302	460	480		488	
	Nominal running current (RLA)	Cooling		A	140	138	143	157	169	181	199	203	219	281	285	308	334	323
	Maximum running current			A	162		182	198	209	219	234	252	263	322	348	368	379	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400													

Air cooled screw chiller. standard efficiency. extra low sound

EWAD-D-SR/SX MicroTech III

Cooling only				EWAD-D-SX	210	230	250	270	290	300	310	370	410	450	490
Cooling capacity	Nom.			kW	202	230	252	270	285	298	308	369	412	449	490
Power input	Cooling	Nom.		kW	80.8	86.0	94.4	105	115	127	137	150	171	175	189
Capacity control	Method				Stepless										
	Minimum capacity			%	12.5										
EER					2.50	2.68	2.67	2.56	2.47	2.35	2.25	2.46	2.41	2.56	2.60
ESEER					3.29	3.52	3.41	3.44	3.34	3.29	3.15	3.14	3.39	3.50	3.47
IPLV					3.82	4.08	3.99	4.01	3.92	3.84	3.69	4.03	3.90	3.98	3.90
Dimensions	Unit	Height		mm	2.420										
		Width		mm	2.234										
		Depth		mm	3.139	4.040								4.940	
Weight	Unit			kg	3.110	3.475		3.425	3.430			3.560	4.302	4.506	4.581
	Operation weight			kg	3.200	3.590						3.735	4.472	4.676	4.746
Water heat exchanger	Type				Single pass shell & tube										
	Water volume			l	90	115		165	160			175	170		165
	Water flow rate	Cooling	Nom.	l/s	9.7	11.0	12.1	12.9	13.7	14.3	14.7	17.7	19.7	21.5	23.5
	Water pressure drop	Cooling	Nom.	kPa	45	34	38		35	38	41	45	44	50	45
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler										
Compressor	Type				Single screw compressor								Asymmetric single screw compressor		
	Quantity				2										
Fan	Type				Direct propeller										
	Quantity				6	8								9	10
	Air flow rate	Nom.		l/s	12.876	17.892	17.169					26.496		28.982	33.120
	Speed			rpm	500										
Sound power level	Cooling	Nom.		dBA	84	85								86	
Sound pressure level	Cooling	Nom.		dBA	65									66	
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15										
	Air side	Cooling	Min.~Max.	°CDB	-18~48										
Refrigerant	Type / GWP				R-134a / 1,430										
	Circuits	Quantity			2										
Refrigerant charge	Per circuit			kg	21.0	24.0	26.0	32.0	33.0	34.0			35.0	38.0	40.0
				TCO_2eq	30.0	34.3	37.2	45.8	47.2	48.6			50.1	54.3	57.2
Piping connections	Evaporator water inlet/outlet (OD)				4"							5"			
Unit	Maximum starting current			A	218	232		276	284	296		406	457	475	
	Nominal running current (RLA)	Cooling		A	135	143	157	173	188	204	220	231	272	280	298
	Maximum running current			A	164	183	199	210	221	235	250	291	316	338	360
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

Air cooled screw chiller, high efficiency, standard sound

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Cooling only				**EWAD-D-XS**	**250**	**280**	**300**	**330**	**350**	**380**	**400**	**470**	**520**	**580**	**620**
Cooling capacity	Nom.			kW	246	274	300	326	350	374	399	467	522	573	620
Power input	Cooling	Nom.		kW	80.1	88.2	95.4	105	114	121	129	152	169	183	196
Capacity control	Method				Stepless										
	Minimum capacity			%	12.5										
EER					3.07	3.11	3.15	3.10	3.06	3.08	3.10	3.07	3.09	3.12	3.16
ESEER					3.45	3.49	3.51	3.73	3.56	3.47	3.48	3.72	3.88	3.89	3.75
IPLV					3.98	4.00		4.08	4.07	4.06	3.98	4.16	4.83		4.61
Dimensions	Unit	Height		mm	2,355							2,223			
		Width		mm	2,234										
		Depth		mm	3,138	4,040							4,940		
Weight	Unit			kg	2,905	3,285		3,235	3,240			3,510	4,670	4,685	
	Operation weight			kg	3,000	3,400						3,780	4,940		
Water heat exchanger	Type				Single pass shell & tube										
	Water volume			l	95	115		165	160			270		255	
	Water flow rate	Cooling	Nom.	l/s	11.8	13.1	14.4	15.6	16.7	17.9	19.1	22.4	25.0	27.4	29.7
	Water pressure drop	Cooling	Nom.	kPa	48	45	49	46	51	58	64	47	63	56	38
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler										
Compressor	Type				Single screw compressor								Asymmetric single screw compressor		
	Quantity				2										
Fan	Type				Direct propeller										
	Quantity				6	8							10		
	Air flow rate	Nom.		l/s	22,302	30,591	29,736			43,001	42,306	43,696	54,620		
	Speed			rpm	900					890					
Sound power level	Cooling	Nom.		dBA	97					99					
Sound pressure level	Cooling	Nom.		dBA	78					79					
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15										
	Air side	Cooling	Min.~Max.	°CDB	-18~48										
Refrigerant	Type / GWP				R-134a / 1,430										
	Circuits	Quantity			2										
Refrigerant charge	Per circuit			kg	29.0	33.0	35.0	38.0	35.0		39.0	42.0	45.0		50.0
				TCO_2eq	41.5	47.2	50.1	54.3	50.1		55.8	60.1	64.4		71.5
Piping connections	Evaporator water inlet/outlet (OD)				4"							6"			
Unit	Maximum starting current			A	224	240		283	292	312		423	480	498	
	Nominal running current (RLA)	Cooling		A	132	145	158	172	185	203	213	253	283	305	324
	Maximum running current			A	178	199	216	227	239	268	283	328	365	387	410
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

Air cooled screw chiller, high efficiency, reduced sound

EWAD-D-XS/XR MicroTech III

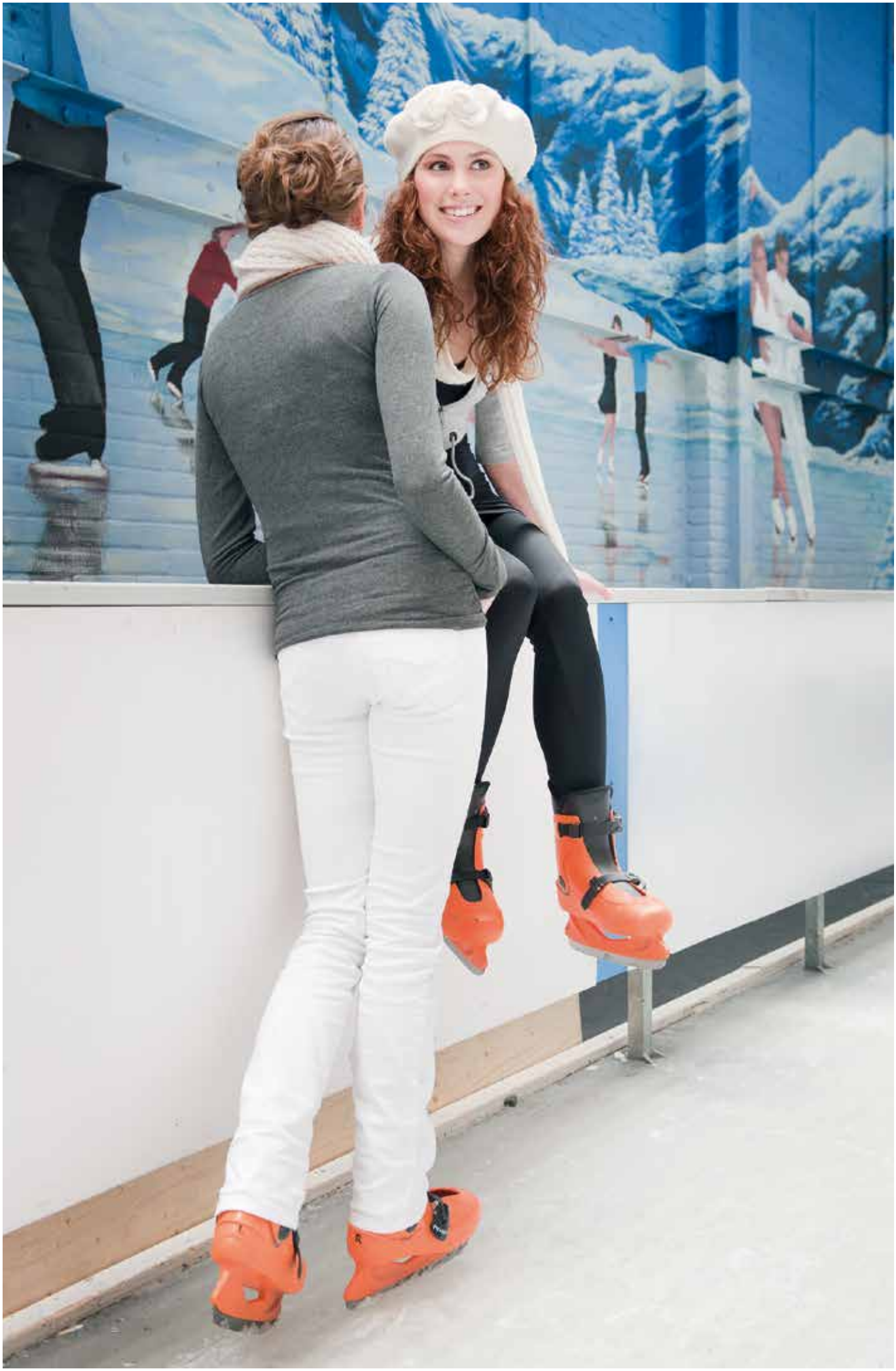
Cooling only				**EWAD-D-XR**	**240**	**270**	**300**	**320**	**350**	**370**	**390**	**460**	**510**	**560**	**600**
Cooling capacity	Nom.			kW	242	271	294	321	343	369	393	453	510	559	598
Power input	Cooling	Nom.		kW	81.6	88.0	96.3	107	117	121	129	154	169	185	200
Capacity control	Method				Stepless										
	Minimum capacity			%	12.5										
EER					2.96	3.07	3.06	3.00	2.94	3.06	3.05	2.95	3.01	3.02	2.99
ESEER					3.52	3.59	3.58	3.71	3.60	3.89	3.71	3.77	3.99		3.81
IPLV					4.03	4.11	4.12	4.17	4.13	4.28	4.25	4.36	4.79	4.78	4.47
Dimensions	Unit	Height		mm	2,355							2,223			
		Width		mm	2,234										
		Depth		mm	3,138	4,040							4,940		
Weight	Unit			kg	3,005	3,385		3,335	3,340			3,610	4,770	4,785	
	Operation weight			kg	3,100	3,500						3,880	5,040		
Water heat exchanger	Type				Single pass shell & tube										
	Water volume			l	95	115		165	160			270		255	
	Water flow rate	Cooling	Nom.	l/s	11.6	13.0	14.1	15.4	16.4	17.7	18.8	21.7	24.4	26.8	28.6
	Water pressure drop	Cooling	Nom.	kPa	47	44	48	45	49	56		45	60	54	36
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler										
Compressor	Type				Single screw compressor								Asymmetric single screw compressor		
	Quantity				2										
Fan	Type				Direct propeller										
	Quantity				6	8							10		
	Air flow rate	Nom.		l/s	17,892	24,777	23,856			33,035	32,576	33,493	41,867		
	Speed			rpm	680					705					
Sound power level	Cooling	Nom.		dBA	92					93			94		
Sound pressure level	Cooling	Nom.		dBA	73					74					
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15										
	Air side	Cooling	Min.~Max.	°CDB	-18~48										
Refrigerant	Type / GWP				R-134a / 1,430										
	Circuits	Quantity			2										
Refrigerant charge	Per circuit			kg	30.0	31.0	38.0	39.0	40.0	39.0		34.0	45.0	47.0	50.0
				TCO_2eq	42.9	44.3	54.3	55.8	57.2	55.8		48.6	64.4	67.2	71.5
Piping connections	Evaporator water inlet/outlet (OD)				4"							6"			
Unit	Maximum starting current			A	222	237		280	289	306		417	473	491	
	Nominal running current (RLA)		Cooling	A	134	144	160	175	188	200	213	256	283	308	330
	Maximum running current			A	173	193	210	222	233	257	272	317	351	373	396
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

Air cooled screw chiller, high ambient, standard sound

- **High ambient**
- Stepless single-screw compressor
- Optimised for use with R-134a
- Large operation range (ambient temperature down to -18°C)
- MicroTech III controller with superior control logic and easy interface

EWAD-D-HS MicroTech III

Cooling only				EWAD-D-HS	200	210	230	260	270	290	310	340	380	420	450	480	510	550	590
Cooling capacity	Nom.			kW	194	208	233	255	272	288	305	334	379	413	446	476	512	545	585
Power input	Cooling	Nom.		kW	77.9	76.0	83.9	92.1	98.9	105	114	122	129	143	152	164	177	185	194
Capacity control	Method				Stepless														
	Minimum capacity			%	12.5														
EER					2.49	2.73	2.77		2.75	2.73	2.68	2.75	2.93	2.90	2.93	2.90	2.89	2.95	3.02
ESEER					3.02	3.16	3.24	3.11	3.20	3.18	3.17	3.15	3.46	3.50	3.57		3.55	3.60	3.68
IPLV					3.56	3.74	3.77	3.66	3.74	3.73	3.72	3.64	3.99	4.00	4.05	3.99	4.10	4.18	4.50
Dimensions	Unit	Height		mm	2,223														
		Width		mm	2,234														
		Depth		mm	2,239		3,339					4,040				4,940			
Weight	Unit			kg	2,475	2,470	2,865		2,870			3,185		3,277	3,942	4,356	4,361		4,366
	Operation weight			kg	2,500		2,960					3,300		3,447	4,112		4,526		
Water heat exchanger	Type				Plate heat exchanger		Single pass shell & tube												
	Water volume			l	25	30	95		90			115		170			165		160
	Water flow rate	Cooling	Nom.	l/s	9.3	9.9	11.1	12.2	13.1	13.8	14.6	16.0	18.2	19.8	21.4	22.8	24.5	26.1	28.0
	Water pressure drop	Cooling	Nom.	kPa	32	24	46	52	54	59	64	58	70	46	53	58	51	56	53
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler														
Compressor	Type				Single screw compressor										Asymmetric single screw compressor				
	Quantity				2														
Fan	Type				Direct propeller														
	Quantity				4		6					8				10			
	Air flow rate	Nom.		l/s	21,848	21,153	32,772		32,251		31,729	43,696			42,306	54,620			
	Speed	Cooling	Nom.	rpm	890														
Sound power level	Cooling	Nom.		dBA	96							97	99	97	98		99	100	
Sound pressure level	Cooling	Nom.		dBA	77								79	77	78		79	80	
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15														
	Air side	Cooling	Min.~Max.	°CDB	-18~48														
Refrigerant	Type / GWP				R-134a / 1,430														
	Circuits	Quantity			2														
Refrigerant charge	Per circuit			kg	18.0	21.0	22.0	26.0	28.0	31.0	28.0		34.0	30.0	45.0	47.5	46.0		47.0
				TCO_2eq	25.7	30.0	31.5	37.2	40.0	44.3	40.0		48.6	42.9	64.4	67.9	65.8		67.2
Piping connections	Evaporator water inlet/outlet (OD)				3"		4"							5"					
Unit	Maximum starting current			A	222		239		283	291	303	307	312	423	468	489		498	
	Nominal running current (RLA)	Cooling		A	134	131	145	157	169	180	191	204	214	239	258	275	295	306	320
	Maximum running current			A	172		197	213	224	234	249	272	283	320	338	367	388	399	410
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400														



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

- Stepless single-screw compressor
- Large operation range (ambient temperature down to -18°C and up to 46°C)
- 2-3 truly independent refrigerant circuits
- DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
- Partial and total heat recovery option available
- Standard electronic expansion valve
- MicroTech III controller with superior control logic and easy interface

Cooling only				EWAD-C-SS/SL	650	740	830	910	970	C11	C12	C13	H14	C15	C16	C17	C18	C19	C20
Cooling capacity	Nom.			kW	645	741	829	908	962	1,059	1,146	1,315	1,412	1,532	1,615	1,706	1,797	1,870	1,917
Power input	Cooling	Nom.		kW	223	265	302	322	355	382	408	446	479	557	586	627	669	687	721
Capacity control	Method				Stepless														
	Minimum capacity			%	12.5									7.0					
EER					2.89	2.80	2.74	2.82	2.71	2.77	2.81	2.95		2.75		2.72	2.69	2.72	2.66
ESEER					3.79	3.69	3.72	3.65	3.60	3.69	3.63	3.88	3.86	3.73	3.68	3.59	3.71	3.68	
IPLV					4.32	4.17	4.18	4.25	4.16	4.17	4.21	4.42		4.28	4.18	4.15	4.24	4.19	4.21
Dimensions	Unit	Height		mm	2,540														
		Width		mm	2,285														
		Depth		mm	6,285					7,185	8,085	8,985		10,285	11,185			12,085	
Weight (SS)	Unit			kg	5,330	5,740	5,760	6,280	6,560	7,010	7,280	7,900		10,320	10,710	10,770	11,240	11,600	
	Operation weight			kg	5,610	5,990	6,010	6,530	6,810	7,250	7,520	8,280		10,730	11,110	11,260	12,110	12,480	
Weight (SL)	Unit			kg	5,920	6,030	6,050	6,570	6,850	7,300	7,570	8,190		10,770	11,150	11,210	11,680	12,040	
	Operation weight			kg	6,200	6,280	6,300	6,820	7,100	7,540	7,810	8,570		11,170	11,550	11,700	12,560	12,920	
Water heat exchanger	Type				Single pass shell & tube														
	Water flow rate	Cooling	Nom.	l/s	30.9	35.5	39.7	43.5	46.1	50.8	55.0	62.9	67.6	73.4	77.4	81.8	86.0	89.5	91.7
	Water pressure drop	Cooling	Nom.	kPa	73	54	53	62	69	64	74	54	58	62	68	75	36	39	40
	Water volume			l	266		251			243		386		408		474	850		
Air heat exchanger	Type				High efficiency fin and tube type														
Compressor	Type				Asymmetric single screw compressor														
	Quantity				2									3					
Fan	Type				Direct propeller														
	Quantity				10			12		14	16	18		20	22			24	
	Air flow rate	Nom.		l/s	53,442			64,131		74,819	85,508	96,196		106,885	117,573			128,262	
	Speed			rpm	900														
Sound power level (SS)	Cooling	Nom.		dBA	102	100		101		102				103			104		
Sound power level (SL)	Cooling	Nom.		dBA	96			98	97	98				99	100			101	
Sound pressure level (SS)	Cooling	Nom.		dBA	81	80				81							82		
Sound pressure level (SL)	Cooling	Nom.		dBA	76			77									78		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~46														
	Water side	Cooling	Min.~Max.	°CDB	-8~15														
Refrigerant	Type / GWP				R-134a / 1,430														
	Circuits	Quantity			2									3					
Refrigerant charge	Per circuit			kg	64.0			76.5	80.0	91.0	94.0	110.0	130.0	73.3	86.7			91.7	101.7
				TCO_2eq	91.5			109.4	114.4	130.1	134.4	157.3	185.9	104.9	123.9			131.1	145.4
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm							219.1mm					273mm		
Unit	Starting current	Max		A	604	649		915	962	1,017	1,021	1,068	1,081	1,312	1,363	1,367	1,410	1,456	1,470
	Running current	Cooling	Nom.	A	366	432	492	524	577	624	667	726	773	909	959.0	1,023	1,092	1,116	1,164
		Max		A	476	545	589	656	715	787	859	921	974	1,144	1,217	1,281	1,334	1,395	1,449
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400														

Air cooled screw chiller, standard efficiency, reduced sound

EWAD-C-SS/SL/SR

MicroTech III

Cooling only				EWAD-C-SR	620	720	790	880	920	C10	C11	C12	H14	C13	C14	C15	C16	C17	C18	C19
Cooling capacity	Nom.			kW	616	712	786	872	918	1,016	1,107	1,266	1,316	1,363	1,465	1,550	1,616	1,710	1,790	1,828
Power input	Cooling	Nom.		kW	226	276	317	334	373	398	422	461	499	522	582	609	654	706	722	762
Capacity control	Method				Stepless															
	Minimum capacity			%	12.5									7.0						
EER					2.74	2.59	2.48	2.61	2.46	2.55	2.63	2.75	2.63	2.61	2.52	2.54	2.47	2.42	2.48	2.40
ESEER					3.91	3.78	3.81	3.79	3.98	3.76	3.95	3.92	3.81	3.78	3.70	3.72	3.66	3.70	3.71	3.66
IPLV					4.39	4.41	4.19	4.29	4.21		4.33	4.52	4.35	4.29	4.27	4.28	4.23	4.24	4.27	4.21
Dimensions	Unit	Height		mm	2,540															
		Width		mm	2,285															
		Depth		mm	6,285					7,185	8,085	8,985		10,285		11,185			12,085	
Weight	Unit			kg	5,920	6,030	6,050	6,570	6,850	7,300	7,570	8,190		10,750	10,770	11,150	11,210	11,680	12,040	
	Operation weight			kg	6,200	6,280	6,300	6,820	7,100	7,540	7,810	8,570		11,170		11,550	11,700	12,560	12,920	
Water heat exchanger	Type				Single pass shell & tube															
	Water flow rate	Cooling	Nom.	l/s	29.5	34.1	37.6	41.8	44.0	48.7	53.1	60.6	63.0	65.2	70.2	74.2	77.3	81.8	85.6	87.5
	Water pressure drop	Cooling	Nom.	kPa	43	50	48	58	63	60	69	50	54	45	57	63	46	33	36	37
	Water volume			l	266		251			243		386		421		408	474	850		
Air heat exchanger	Type				High efficiency fin and tube type															
Compressor	Type				Asymmetric single screw compressor															
	Quantity				2									3						
Fan	Type				Direct propeller															
	Quantity				10			12		14	16	18		20		22			24	
	Air flow rate	Nom.		l/s	41,007			49,208		57,410	65,611	73,812		82,014		90,215			98,417	
	Speed			rpm	700															
Sound power level	Cooling	Nom.		dBA	92			93		94				95				96		
Sound pressure level	Cooling	Nom.		dBA	71	72			73									74		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~46															
	Water side	Cooling	Min.~Max.	°CDB	-8~15															
Refrigerant	Type / GWP				R-134a / 1,430															
	Circuits	Quantity			2									3						
Refrigerant charge	Per circuit			kg	64.0			76.5	80.0	91.0	94.0	110.0		86.7				91.7	101.7	
				TCO_2eq	91.5			109.4	114.4	130.1	134.4	157.3		123.9				131.1	145.4	
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm							219.1mm						273mm		
Unit	Starting current	Max		A	597	642		906	953	1,007	1,010	1,055	1,068	1,241	1,292	1,344	1,346	1,389	1,434	1,447
	Running current	Cooling	Nom.	A	371	450	518	548	609	654	694	755	811	857	954	1,002	1,075	1,158	1,179	1,238
		Max		A	462	531	575	639	698	767	837	895	949	1,052	1,116	1,186	1,250	1,303	1,362	1,415
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

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

- Stepless single-screw compressor
- Large operation range (ambient temperature down to -18°C and up to 50°C)
- 2-3 truly independent refrigerant circuits
- DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
- Partial and total heat recovery option available
- Standard electronic expansion valve
- MicroTech III controller with superior control logic and easy interface

Cooling only				EWAD-C-XS/XL	760	830	890	990	C10	C11	C12	C13	H14	H15	C16	C17	C18	C19	C20	C21	C22
Cooling capacity	Nom.			kW	752	827	885	997	1,069	1,192	1,276	1,343	1,408	1,517	1,590	1,678	1,760	1,849	1,896	1,947	2,002
Power input	Cooling	Nom.		kW	237	256	282	311	343	367	404	416	450	483	510	541	569	598	619	648	678
Capacity control	Method				Stepless																
	Minimum capacity			%	12.5										7.0						
EER					3.17	3.22	3.14	3.20	3.12	3.25	3.15	3.23	3.13	3.14	3.12	3.10	3.09		3.06	3.00	2.95
ESEER					3.77	3.92	3.81	3.91	3.84	3.99	3.86	4.05	4.04	4.06	4.00	3.96	3.94	3.93	4.02	3.91	3.89
IPLV					4.48		4.52	4.50	4.44	4.50	4.47	4.60	4.71	4.81	4.58	4.59	4.51	4.53	4.57	4.42	4.47
Dimensions	Unit	Height		mm	2,540																
		Width		mm	2,285																
		Depth		mm	6,285	7,185		8,085		9,885					12,085	12,985	13,885	14,785			
Weight (XS)	Unit			kg	5,990	6,340	6,360	7,190	7,470	8,220	8,240	8,900			11,570	11,900	12,260	12,600			
	Operation weight			kg	6,240	6,580	6,600	7,600	7,870	8,610	8,630	9,890			12,430	12,760	13,140	13,470			
Weight (XL)	Unit			kg	6,280	6,630	6,650	7,480	7,760	8,510	8,530	9,190			12,010	12,350	12,700	13,040			
	Operation weight			kg	6,520	6,870	6,890	7,880	8,160	8,900	8,920	10,180			12,870	13,200	13,580	13,910			
Water heat exchanger	Type				Single pass shell & tube																
	Water flow rate	Cooling	Nom.	l/s	36.1	39.6	42.4	47.8	51.2	57.1	61.1	64.4	67.5	72.8	76.1	80.4	84.4	88.6	90.7	93.2	95.8
	Water pressure drop	Cooling	Nom.	kPa	81	57	64	61	69	45	51	68	77	84	62	68		74	39	41	43
	Water volume			l	251	243		403		386		979			850		871	850			
Air heat exchanger	Type				High efficiency fin and tube type																
Compressor	Type				Asymmetric single screw compressor																
	Quantity				2										3						
Fan	Type				Direct propeller																
	Quantity				12	14		16		20					24	26	28	30			
	Air flow rate	Nom.		l/s	64,131	74,819		85,508		106,885					128,262	138,950	149,639	160,327			
	Speed			rpm	900																
Sound power level (XS)	Cooling	Nom.		dBA	100	101			102		103					104					
Sound power level (XL)	Cooling	Nom.		dBA	97			98		99					100						
Sound pressure level (XS)	Cooling	Nom.		dBA	80				81	80					81						
Sound pressure level (XL)	Cooling	Nom.		dBA	76	77											78				
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																
	Circuits	Quantity			2										3						
Refrigerant charge	Per circuit			kg	75.0	81.0		91.0	100.0	115.0	117.5	125.0	145.5	125.0	99.0	82.7	103.3	109.0	113.3	120.0	
				TCO_2eq	107.3	115.8		130.1	143.0	164.5	168.0	178.8	208.1	178.8	141.6	118.2	147.8	155.9	162.1	171.6	
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm			219.1mm				273mm									
Unit	Starting current	Max		A	618	657		923	970	1,029			1,072	1,085	1,268	1,328	1,387		1,430	1,472	1,486
	Running current	Cooling	Nom.	A	387	423	463	511	559	607	667	686	731	778	835	885	934.0	984	1,018	1,059	1,100
		Max		A	510	561	605	672	731	811	875		929	982	1,096	1,168	1,241	1,313	1,366	1,419	1,473
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																

Air cooled screw chiller, high efficiency, reduced sound

EWAD-C-XS/XL/XR

MicroTech III

Cooling only				EWAD-C-XR	740	810	870	970	C10	C11	C12	C13	H14	H15	C16	C17	C18	C19	C20	C21	C22
Cooling capacity	Nom.			kW	732	808	862	970	1,036	1,164	1,243	1,297	1,360	1,460	1,544	1,632	1,715	1,805	1,849	1,897	1,947
Power input	Cooling	Nom.		kW	238	257	285	313	348	369	409	420	460	498	518	548	574	604	629	662	696
Capacity control	Method				Stepless																
	Minimum capacity			%	12.5										7.0						
EER					3.07	3.15	3.03	3.10	2.98	3.16	3.04	3.09	2.96	2.93	2.98		2.99		2.94	2.87	2.80
ESEER					4.01	4.16	4.01	4.12	4.01	4.21	4.07	4.10		4.12	4.08	4.00	4.05	4.00	4.09	3.96	3.94
IPLV					4.56	4.62	4.51	4.63	4.59	4.65	4.61	4.63	4.74	4.83	4.67	4.65		4.63	4.69	4.54	4.53
Dimensions	Unit	Height		mm	2,540																
		Width		mm	2,285																
		Depth		mm	6,285	7,185		8,085		9,885					12,085	12,985	13,885	14,785			
Weight	Unit			kg	6,280	6,630	6,650	7,480	7,760	8,510	8,530	9,190			12,010	12,350	12,700	13,040			
	Operation weight			kg	6,520	6,870	6,890	7,880	8,160	8,900	8,920	10,180			12,870	13,200	13,580	13,910			
Water heat exchanger	Type				Single pass shell & tube																
	Water flow rate	Cooling	Nom.	l/s	35.1	38.7	41.3	46.5	49.7	55.7	59.5	62.1	65.2	70.0	74.0	78.2	82.2	86.5	88.5	90.7	93.1
	Water pressure drop	Cooling	Nom.	kPa	77	54	61	58	65	43	49	64	73	79	59	65		71	37	39	41
	Water volume			l	251	243		403		386		979			850		871	850			
Air heat exchanger	Type				High efficiency fin and tube type																
Compressor	Type				Asymmetric single screw compressor																
	Quantity				2										3						
Fan	Type				Direct propeller																
	Quantity				12	14		16		20					24	26	28	30			
	Air flow rate	Nom.		l/s	49,208	57,410		65,611		82,014					98,417	106,618	114,819	123,021			
	Speed			rpm	700																
Sound power level	Cooling	Nom.		dBA	92			94			95					96				97	
Sound pressure level	Cooling	Nom.		dBA	72			73		72			73							74	
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																
	Circuits	Quantity			2										3						
	GWP				1,430																
Refrigerant charge	Per circuit			kg	75.0	81.0		91.0	100.0	115.0	117.5	125.0		124.0	103.3	109.0	113.3	120.0			125.0
				TCO_2eq	107.3	115.8		130.1	143.0	164.5	168.0	178.8		177.3	147.8	155.9	162.1	171.6			178.8
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm			219.1mm				273mm									
Unit	Starting current	Max		A	610	647		911	959	1,015			1,058	1,071	1,246	1,303	1,359		1,402	1,444	1,458
	Running current	Cooling	Nom.	A	392	426	470	518	572	613	679	699	753	807	854	903	951	1,000	1,040	1,087	1,136
		Max		A	493	542	585	649	708	783	847		901	954	1,063	1,132	1,201	1,271	1,324	1,377	1,431
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																

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

- Stepless single-screw compressor
- Excellent part load efficiency
- Large operation range (ambient temperature down to -18°C and up to 52°C)
- 2 truly independent refrigerant circuits
- DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
- Partial and total heat recovery option available
- Standard electronic expansion valve
- MicroTech III controller with superior control logic and easy interface

Cooling only				EWAD-C-PS/PL	820	890	980	C11	C12	C13	C14	C15	C16
Cooling capacity	Nom.			kW	818	886	973	1,070	1,153	1,274	1,384	1,467	1,554
Power input	Cooling	Nom.		kW	229	253	276	306	335	368	402	432	461
Capacity control	Method				Stepless								
	Minimum capacity			%	12.5								
EER					3.57	3.51	3.52	3.49	3.44	3.46	3.44	3.40	3.37
ESEER					4.22	4.25	4.30	4.29	4.14	4.23	4.07	4.06	4.03
IPLV					4.78	4.67	4.79	4.69	4.73	4.68	4.73		4.71
Dimensions	Unit	Height		mm	2,540								
		Width		mm	2,285								
		Depth		mm	8,985			9,885		11,185	12,085		
Weight (PS)	Unit			kg	7,530		7,660	8,290	8,550	9,390	9,730		
	Operation weight			kg	8,130		8,700	9,330	9,590	10,380	10,720		
Weight (PL)	Unit			kg	7,820		7,950	8,580	8,840	10,380	10,720		
	Operation weight			kg	8,420		8,990	9,620	9,880	10,670	11,010		
Water heat exchanger	Type				Single pass shell & tube								
	Water flow rate	Cooling	Nom.	l/s	39.2	42.5	46.5	51.2	55.2	61.0	66.3	70.3	74.5
	Water pressure drop	Cooling	Nom.	kPa	58	67	31	61	70	60	70	81	88
	Water volume			l	599		1,043	1,027		995	979		
Air heat exchanger	Type				High efficiency fin and tube type								
Compressor	Type				Asymmetric single screw compressor								
	Quantity				2								
Fan	Type				Direct propeller								
	Quantity				18			20		22	24		
	Air flow rate	Nom.		l/s	96,196			106,885		117,573	128,262		
	Speed			rpm	900								
Sound power level (PS)	Cooling	Nom.		dBA	101			102			103		104
Sound power level (PL)	Cooling	Nom.		dBA	98			99	100	99	100		
Sound pressure level (PS)	Cooling	Nom.		dBA	80				81	80	81		
Sound pressure level (PL)	Cooling	Nom.		dBA	77							78	
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52								
	Water side	Cooling	Min.~Max.	°CDB	-8~15								
Refrigerant	Type / GWP				R-134a / 1,430								
	Circuits	Quantity			2								
Refrigerant charge	Per circuit			kg	102.0			115.0	120.0	137.5	140.0		
				TCO_2eq	145.9			164.5	171.6	196.6	200.2		
Piping connections	Evaporator water inlet/outlet (OD)				219.1mm			273mm					
Unit	Starting current	Max		A	630	665		702	978	1,037		1,080	1,093
	Running current	Cooling	Nom.	A	386	424	465	511	555	614	671	711	752
		Max		A	534	577	621	670	747	819	891	945	998
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400								

Air cooled screw chiller, premium efficiency, reduced sound

EWAD-C-PS/PL/PR

MicroTech III

Cooling only				EWAD-C-PR	810	880	960	C10	C11	C13	C14	C15	C16
Cooling capacity	Nom.			kW	806	871	954	1,049	1,127	1,246	1,353	1,432	1,513
Power input	Cooling	Nom.		kW	222	248	275	303	335	369	402	432	465
Capacity control	Method				Stepless								
	Minimum capacity			%	12.5								
EER					3.63	3.51	3.47	3.46	3.36	3.38	3.36	3.32	3.25
ESEER					4.39	4.33	4.40	4.35	4.25	4.33	4.26	4.23	4.15
IPLV					5.07	4.89		4.92	4.82	4.81	4.85		4.79
Dimensions	Unit	Height		mm	2,540								
		Width		mm	2,285								
		Depth		mm	8,985			9,885		11,185	12,085		
Weight	Unit			kg	7,820		7,950	8,580	8,840	10,380	10,720		
	Operation weight			kg	8,420		8,990	9,620	9,880	10,670	11,010		
Water heat exchanger	Type				Single pass shell & tube								
	Water flow rate	Cooling	Nom.	l/s	38.6	41.7	45.6	50.2	54.0	59.7	64.8	68.7	72.6
	Water pressure drop	Cooling	Nom.	kPa	56	65	30	59	67	58	67	77	84
	Water volume			l	599		1,043	1,027		995	979		
Air heat exchanger	Type				High efficiency fin and tube type								
Compressor	Type				Asymmetric single screw compressor								
	Quantity				2								
Fan	Type				Direct propeller								
	Quantity				18			20		22	24		
	Air flow rate	Nom.		l/s	73,812			82,014		90,215	98,417		
	Speed			rpm	700								
Sound power level	Cooling	Nom.		dBA	93				94			95	
Sound pressure level	Cooling	Nom.		dBA	71			72					73
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~52								
	Water side	Cooling	Min.~Max.	°CDB	-8~15								
Refrigerant	Type / GWP				R-134a / 1,430								
	Circuits	Quantity			2								
Refrigerant charge	Per circuit			kg	102.0			115.0	120.0	137.5	140.0		
				TCO_2eq	145.9			164.5	171.6	196.6	200.2		
Piping connections	Evaporator water inlet/outlet (OD)				219.1mm		273mm						
Unit	Starting current	Max		A	618	653		917	964	1,020		1,063	1,076
	Running current	Cooling	Nom.	A	375	416	461	506	555	614	671	717	764
		Max		A	509	552	596	660	719	788	858	911	964
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

Cooling only				EWAD-CZXS/XL	740	830	900	C10	C11	C12	C13	C14	C15	C16	C17	C18
Cooling capacity	Nom.			kW	734	828	898	1,033	1,090	1,232	1,303	1,444	1,538	1,616	1,701	1,795
Power input	Cooling	Nom.		kW	239	269	309	343	380	404	447	494	538	564	596	619
Capacity control	Method				Stepless											
	Minimum capacity			%	20.0										13.0	
EER					3.07		2.90	3.01	2.87	3.05	2.92	2.93	2.86		2.85	2.90
ESEER					4.72	4.89	4.88	4.91	4.70		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	6,725	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				Single pass shell & tube											
	Water flow rate	Cooling	Nom.	l/s	35.2	39.7	43.0	49.5	52.3	59.0	62.4	69.2	73.7	77.4	81.5	86.0
	Water pressure drop	Cooling	Nom.	kPa	83	58	65	63	70	47	52	62	72	63	69	65
	Water volume			l	248	241		441		383		374		850		871
Air heat exchanger	Type				High efficiency fin and tube type											
Compressor	Type				Asymmetric single screw compressor											
	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											
	Circuits	Quantity			2									3		
Refrigerant charge	Per circuit			kg	73.0	81.0		100.0		125.0			140.0	106.7	113.3	116.7
				TCO_2eq	104.4	115.8		143.0		178.8			200.2	152.5	162.1	166.8
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm			219.1mm						273mm		
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
		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

EWAD-CZXS/XL/XR

MicroTech III

Cooling only				EWAD-CZXR	700	790	850	980	C10	C11	C12	C13	C14	C15	C16	C17
Cooling capacity	Nom.			kW	696	786	849	972	1,027	1,166	1,231	1,327	1,437	1,539	1,624	1,706
Power input	Cooling	Nom.		kW	246	274	318	351	393	412	459	493	523	585	617	638
Capacity control	Method				Stepless											
	Minimum capacity			%	20.0									13.0		
EER					2.83	2.86	2.67	2.77	2.61	2.83	2.68	2.69	2.75	2.63		2.67
ESEER					5.23	5.39	5.36	5.41	5.11	5.15	4.80	5.12	5.22	5.10	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	6,725	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				Single pass shell & tube											
	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	54	59	58	64	43	48	57	66	57	63	60
	Water volume			l	248	241		441		383		374		850		871
Air heat exchanger	Type				High efficiency fin and tube type											
Compressor	Type				Asymmetric single screw compressor											
	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											
	Circuits	Quantity			2									3		
Refrigerant charge	Per circuit			kg	73.0	81.0		100.0		125.0			140.0	106.7	113.3	116.7
				TCO_2eq	104.4	115.8		143.0		178.8			200.2	152.5	162.1	166.8
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm			219.1mm						273mm		
Unit	Starting current	Max		A	369	410	442	490	528	576	612	693	756	825	873	921
	Running current	Cooling	Nom.	A	416	449	498	549	610	647	715	789	859	912	960	998
		Max		A	512	565	612	675	732	796	849	949	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

Cooling only				EWAD-CFXS/XL	640	770	850	900	C10	C11	C12	C13	C14	C15	C16
Cooling capacity	Nom.			kW	640 (1)	772 (1)	852 (1)	902 (1)	1,027 (1)	1,089 (1)	1,269 (1)	1,349 (1))	1,435 (1)	1,493 (1)	1,555 (1)
Free cooling capacity	Nom.			kW	415 (2)	510 (2)	583 (2)	612 (2)	701 (2)	734 (2)	902 (2)	957 (2)	963 (2)	1,013 (2)	1,039 (2)
Mechanical capacity				kW	225 (2)	262 (2)	269 (2)	290 (2)	325 (2)	355 (2)	366 (2)	392 (2)	472 (2)	480 (2)	517 (2)
Air temperature for free cooling 100%				°C	-0.8	-0.1	1.2	0.4	0.9	0.1	2.9	2.1	1.3	0.7	0.1
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	Height		mm	2,565										
		Width		mm	2,480										
		Depth		mm	6,300	7,200	8,100		9,000		10,800				
Weight (XS)	Unit			kg	7,760	8,340	8,900		10,160	10,420	11,900		12,540	12,620	12,670
	Operation weight			kg	8,515	9,100	9,705		11,169	11,429	13,276		14,516	14,596	14,646
Weight (XL)	Unit			kg	8,050	8,620	9,190		10,450	10,710	12,190		12,830	12,910	12,960
	Operation weight			kg	8,795	9,390	9,995		11,459	11,719	13,566		14,806	14,886	14,936
Water heat exchanger	Type				Single pass shell & tube										
	Water flow rate	Cooling	Nom.	l/s	27.8 (1) / 27.8 (2)	33.5 (1) / 33.5 (2)	37.0 (1) / 37.0 (2)	39.2 (1) / 39.2 (2)	44.6 (1) / 44.6 (2)	47.3 (1) / 47.3 (2)	55.1 (1) / 55.1 (2)	58.6 (1) / 58.6 (2)	62.4 (1) / 62.4 (2)	64.9 (1) / 64.9 (2)	67.6 (1) / 67.6 (2)
	Water pressure drop	Cooling	Nom.	kPa	85 (1) / 128 (2)	105 (1) / 172 (2)	90 (1) / 178 (2)	101 (1) / 198 (2)	111 (1) / 245 (2)	124 (1) / 272 (2)	98 (1) / 232 (2)	110 (1) / 259 (2)	139 (1) / 305 (2)	150 (1) / 328 (2)	162 (1) / 354 (2)
	Water volume			l	741	771	808		1,012		1,372		1,965		
Air heat exchanger	Type				High efficiency fin and tube type										
Compressor	Type				Asymm single screw										
	Quantity				2										
Fan	Type				Direct propeller										
	Quantity				10	12	14		16		20				
	Air flow rate	Nom.		l/s	50,368	60,441	70,515		80,588		95,253				
	Speed			rpm	920										
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	Per circuit			kg	64.0	73.0	81.0		91.0		107.0		112.5	124.0	
				TCO_2eq	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	605	619	658		924	971	1,030			1,073	1,086
	Running current	Cooling	Nom.	A	404	430	467	515	568	628	636	701	720	773	825
		Max		A	476	510	561	605	672	731	811	875		929	982
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

(1) Cooling: evaporator 16/10°C, ambient 35°C, unit at full load operation; standard: ISO 3744 (2) Data is calculated at ambient air temperature 5°C, inlet water temperature 16°C.

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

EWAD-CFXS/XL/XR

MicroTech III

Cooling only				EWAD-CFXR	600	740	820	870	980	C10	C11	C12	C13	C14	C15
Cooling capacity	Nom.			kW	602 (1)	739 (1)	821 (1)	866 (1)	981 (1)	1,034 (1)	1,229 (1)	1,302 (1)	1,374 (1)	1,424 (1)	1,476 (1)
Free cooling capacity	Nom.			kW	374 (2)	468 (2)	539 (2)	562 (2)	644 (2)	670 (2)	825 (2)	866 (2)	889 (2)	909 (2)	929 (2)
Mechanical capacity				kW	228 (2)	271 (2)	282 (2)	304 (2)	337 (2)	364 (2)	404 (2)	435 (2)	486 (2)	515 (2)	547 (2)
Air temperature for free cooling 100%				°C	-2.3	-1.9	-0.6	-1.5	-0.9	-1.7	0.7	-0.2	-1.1	-1.6	-2.3
Power input	Cooling	Nom.		kW	263 (1) / 46.6 (2)	278 (1) / 56.2 (2)	299 (1) / 58.5 (2)	334 (1) / 63.1 (2)	368 (1) / 68.5 (2)	412 (1) / 74.4 (2)	403 (1) / 80.0 (2)	450 (1) / 87.5 (2)	466 (1) / 93.4 (2)	511 (1) / 103 (2)	556 (1) / 109 (2)
Capacity control	Method				Stepless										
	Minimum capacity			%	12.5										
EER					2.29 (1) / 12.91 (2)	2.66 (1) / 13.17 (2)	2.75 (1) / 14.04 (2)	2.59 (1) / 13.71 (2)	2.67 (1) / 14.33 (2)	2.51 (1) / 13.89 (2)	3.05 (1) / 15.36 (2)	2.90 (1) / 14.87 (2)	2.95 (1) / 14.7 (2)	2.79 (1) / 13.85 (2)	2.66 (1) / 13.56 (2)
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	Height		mm	2,565										
		Width		mm	2,480										
		Depth		mm	6,300	7,200	8,100		9,000		10,800				
Weight	Unit			kg	8,050	8,620	9,190		10,450	10,710	12,190		12,830	12,910	12,960
	Operation weight			kg	8,795	9,390	9,995		11,459	11,719	13,566		14,806	14,886	14,936
Water heat exchanger	Type				Single pass shell & tube										
	Water flow rate	Cooling	Nom.	l/s	26.2 (1) / 26.2 (2)	32.1 (1) / 32.1 (2)	35.7 (1) / 35.7 (2)	37.6 (1) / 37.6 (2)	42.6 (1) / 42.6 (2)	44.9 (1) / 44.9 (2)	53.4 (1) / 53.4 (2)	56.6 (1) / 56.6 (2)	59.7 (1) / 59.7 (2)	61.9 (1) / 61.9 (2)	64.1 (1) / 64.1 (2)
	Water pressure drop	Cooling	Nom.	kPa	76 (1) / 115 (2)	97 (1) / 159 (2)	84 (1) / 167 (2)	93 (1) / 184 (2)	102 (1) / 225 (2)	113 (1) / 248 (2)	92 (1) / 219 (2)	103 (1) / 243 (2)	128 (1) / 282 (2)	137 (1) / 301 (2)	146 (1) / 321 (2)
	Water volume			l	741	771	808		1,012		1,372		1,965		
Air heat exchanger	Type				High efficiency fin and tube type										
Compressor	Type				Asymm single screw										
	Quantity				2										
Fan	Type				Direct propeller										
	Quantity				10	12	14		16		20				
	Air flow rate	Nom.		l/s	38,935	46,722	54,508		62,295		73,011				
	Speed			rpm	715										
Sound power level	Cooling	Nom.		dBA	92				94		95				
Sound pressure level	Cooling	Nom.		dBA	71	72			73		72		73		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-20~45										
	Water side	Cooling	Min.~Max.	°CDB	-8~15										
Refrigerant	Type / GWP				R-134a / 1,430										
	Circuits	Quantity			2										
Refrigerant charge	Per circuit			kg	64.0	73.0	81.0		91.0		107.0		112.5	124.0	
				TCO_2eq	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	526	580	647	645	717	738	800	862
		Max		A	462	493	542	585	649	708	783	847		901	954
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400										

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

Air cooled mini inverter heat pump

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

EWYQ-BVP EKRUMCL1

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					Brazed plate			
	Water flow rate	Cooling	Nom.	l/min		11.5 / 11.5	14.1 / 14.5	16.9 / 17.4	22.8 / 23.6
		Heating	Nom.	l/min		11.8 / 11.4	14.3 / 14.3	17.6 / 17.5	23.2 / 24.2
	Water volume			l		1		2	
Air heat exchanger	Type					Cross fin coil/Hi-X tubes and chromate coated waffle louvre fins		Cross fin coil/Hi-X tubes and PE coated waffle louvre fins	
Compressor	Type					Hermetically sealed swing compressor			
	Quantity					1			
Fan	Type					Propeller fan			
	Quantity					1			
	Air flow rate	Cooling	Nom.	m^3/min		53		72	
		Heating	Nom.	m^3/min		47.0		46.6	49.3
Sound power level	Cooling	Nom.		dBA		63	64	69	
	Heating	Nom.		dBA		65			
Sound pressure level	Cooling	Nom.		dBA		48	49	52	53
	Heating	Nom.		dBA		49		47	
Operation range	Air side	Cooling	Min.~Max.	°CDB		10~43		10~46	
		Heating	Min.~Max.	°CDB		-20~25		-15~25	
	Water side	Cooling	Min.~Max.	°CDB		5~22			
		Heating	Min.~Max.	°CDB		15 ~55			
Refrigerant	Type/GWP					R-410A/2,088		R-410A/2,087.5	
	Control					Electronic expansion valve			
	Circuits	Quantity				1			
Refrigerant charge	Per circuit			kg		2.10		2.70	
	Per circuit			TCO2Eq		4.4		5.6	
Water circuit	Piping connections diameter			inch		1" MBSP			
Unit	Starting current	Max		A		15.7		19.9	
	Running current	Max		A		15.7		19.9	
Power supply	Phase/Frequency/Voltage			Hz/V		1N~/50/230			

Air cooled mini inverter heat pump

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

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
			Seasonal space heating eff. class		A+					
Dimensions	Unit	Height		mm	1,435					
		Width		mm	1,420					
		Depth		mm	382					
Weight	Unit			kg	180					
Water heat exchanger	Type				Brazed plate					
	Water flow rate	Heating	Nom.	l/min	28.3	32.6	36.9	31.2	35.5	39.8
	Water volume			l	1.01					
Air heat exchanger	Type				Hi-XSS					
Pump Standard	Nominal ESP unit	Cooling		kPa	60.5	57.8	53.2	59.2	53.2	40.9 / 45.6
		Heating		kPa	57.1	52.5	47.3	54.1	49.1	36.6 / 43.5
Hydraulic components	Expansion vessel	Volume		l	10					
Compressor	Type				Hermetically sealed scroll compressor					
	Quantity				1					
Fan	Type				Propeller fan					
	Quantity				2					
	Air flow rate	Cooling	Nom.	m^3/min	96.0	100	97.0	-		
		Heating	Nom.	m^3/min	90.0			-		
Fan motor	Speed	Cooling	Nom.	rpm	780					
		Heating	Nom.	rpm	760					
		Steps			8					
Sound power level	Cooling	Nom.		dBA	64.0					66.0
	Heating	Nom.		dBA	60	64	60			
Sound pressure level	Cooling	Nom.		dBA	50					
	Heating	Nom.		dBA	50					
	Night quiet mode	Cooling		dBA	45					46
		Heating		dBA	42					43
Operation range	Air side	Cooling	Min.~Max.	°CDB	10~46					
		Heating	Min.~Max.	°CDB	-15~35					
	Water side	Cooling	Min.~Max.	°CDB	5~20					
		Heating	Min.~Max.	°CDB	30~50					
Refrigerant	Type				R-410A					
	Circuits	Quantity			1					
	Control				Electronic expansion valve					
	GWP				2,087.5					
Refrigerant charge	Per circuit			kg	2.95					
				TCO_2eq	6.16					
Water circuit	Piping			inch	5/4"					
	Piping connections diameter			inch	G 5/4" (female)					
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230			3N~/50/400		

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

Air cooled scroll inverter heat pump

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

EWYQ-CWN/CWP BRC21A52

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°C	General	ηs (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				Brazed 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.	m^3/min	171	185		233	370		466
		Heating	Nom.	m^3/min	171	185		233	370		466
Sound power level	Cooling	Nom.		dBA	78			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/TCO2Eq	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-AAW+SERHQ-AAW1 BRC21A53/54

Heating & Cooling					SEHVX20AAW/ SERHQ020AAW1	SEHVX32AAW/ SERHQ032AAW1	SEHVX40AAW/ SERHQ020AAW1+SERHQ020AAW1	SEHVX64AAW/ SERHQ032AAW1+SERHQ032AAW1
Cooling capacity	Nom.			kW	20.7	30.9	41.5	62.3
Heating capacity	Nom.			kW	21.3 (1)/ 21.3 (2)	32.1 (1)/ 32.1 (2)	42.5 (1)/ 42.5 (2)	63.7 (1)/ 63.7(2)
Power input	Cooling	Nom.		kW	7.59	13.5	15.4	27.4
	Heating	Nom.		kW	6.12 (1)/ 7.44 (2)	8.72 (1)/ 11.1 (2)	12.0 (1)/ 14.7 (2)	16.9 (1)/ 21.7 (2)
EER					2.73	2.29	2.69	2.27
COP					3.48 (1)/2.86 (2)	3.68 (1)/ 2.89 (2)	3.54 (1)/ 2.89 (2)	3.77 (1)/ 2.94 (2)
Space heating	Average climate water outlet 35°C	General	SCOP		3.22	3.06	3.22	3.05
			ηs (Seasonal space heating efficiency)	%	126	119	126	120
			Seasonal space heating eff. class		A+	A	A+	A

Unit for indoor installation				SEHVX-AAW	SEHVX20AAW	SEHVX32AAW	SEHVX40AAW	SEHVX64AAW
Dimensions	Unit	Height		mm	1,573			
		Width		mm	766			
		Depth		mm	396			
Weight	Unit			kg	60	62	64	66
	Packed unit			kg	70	72	74	76
Sound power level	Nom.			dBA	63		66	
Operation range	Heating	Ambient	Min.~Max.	°C~°CDB	-15~35			
		Water side	Min.~Max.	°C	25~50			
	Indoor installation	Ambient	Min.	°CDB	5			
			Max.	°CDB	35			
	Cooling	Ambient	Min.~Max.	°CDB	-5~43			
		Water side	Min.~Max.	°C	5~20			
Refrigerant	Type / GWP				R-410A / 2,087.5			
	Circuits	Quantity			1			
	Control				Electronic expansion valve			
Water circuit	Piping connections diameter			inch	G 1"1/4 (female)		G 2" (female)	
	Piping			inch	1-1/4"		1-1/2"	
	Water pressure drop	Cooling	Nom.	kPa	176	151	231	141
		Heating	Nom.	kPa	174	149	229	139
	Total water volume			l	3.2	4.2	5.8	7.7
Water side Heat exchanger	Type				Brazed plate			
	Water volume			l	1.9	2.9	3.8	5.7
	Water flow rate	Heating	Nom.	l/min	61	92	122	183
		Cooling	Nom.	l/min	59	89	119	179
Current	Maximum running current	Cooling		A	5.54	5.64	7.24	
		Heating		A	5.54	5.64	7.24	
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400			

Outdoor Unit				SERHQ-AAW1	SERHQ020AAW1	SERHQ032AAW1
Dimensions	Unit	Height		mm	1,680	
		Width		mm	930	1,240
		Depth		mm	765	
Weight	Unit			kg	240.00	316.00
	Packed unit			kg	273.00	355.95
Compressor	Quantity				2	3
	Type				Hermetically sealed scroll compressor	
Fan	Type				Propeller fan	
	Quantity				1	2
	Air flow rate	Cooling	Nom.	m^3/min	185	233
		Heating	Nom.	m^3/min	185	233

(1) Heating Ta DB/WB 7/6°C - LWC 35°C (DT=5°C) (2) Heating Ta DB/WB 7/6°C - LWC 45°C

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

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)	%	131	129	142	140	142	138	140
			SCOP		3.35	3.31	3.62	3.58	3.63	3.53	3.58
Dimensions	Unit	Height		mm	1,800						
		Width		mm	1,195						
		Depth		mm	2,826			3,426		4,026	
Weight	Unit			kg	850	912	1,077	1,183	1,213	1,333	1,394
	Operation weight			kg	858	921	1,088	1,194	1,224	1,344	1,411
Water heat exchanger	Type				Brazed plate						
	Water flow rate	Cooling	Nom.	l/s	3.7	4.2	4.8	5.6	6.1	7.0	7.9
		Heating	Nom.	l/s	4.0	4.4	5.3	6.1	6.7	7.5	8.2
	Water pressure drop	Cooling	Nom.	kPa	8.40	8.30	8.70	11.6	13.7	18.2	19.9
		Heating	Nom.	kPa	9.50	9.10	11.20	14.40	17.20	21.70	22.50
	Water volume			l	8.10	9.40	10.8				16.7
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler						
Compressor	Type				Scroll compressor						
	Quantity				2						
Fan	Type				Direct propeller						
	Quantity				6			8		10	
	Air flow rate	Nom.		l/s	10,042		9,861	13,148		16,435	
	Speed			rpm	1,360						
Sound power level	Cooling	Nom.		dBA	84	85	87	89			
Sound pressure level	Cooling	Nom.		dBA	66	68	70	71			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45						
		Heating	Min.~Max.	°CDB	-10~45						
	Water side	Cooling	Min.~Max.	°CDB	-10~15						
		Heating	Min.~Max.	°CDB	-10~15						
Refrigerant	Type / GWP				R-410A / 2,087.5						
	Circuits	Quantity			1						
Refrigerant charge	Per circuit			kg	15.0		18.0	23.0		30.0	
				TCO_2eq	31.3		37.6	48.0		62.6	
Piping connections	Evaporator water inlet/outlet (OD)				2" 1/2						
Unit	Starting current	Max		A	210	261	267	316	323	363	377
	Running current	Cooling	Nom.	A	52	56	60	69	76	88	95
		Max		A	66	72	78	87	95	111	125
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

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

EWYQ-G-XS/XR

MicroTech III

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

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

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

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)	%	128	134	129		143	147	-					
			SCOP		3.28	3.42	3.31	3.30	3.64	3.75	-					
Dimensions	Unit	Height		mm	2,270				2,220							
		Width		mm	1,200				2,258							
		Depth		mm	4,370		5,270		4,125			5,025		5,925		6,825
Weight (XS)	Unit			kg	1,430	1,850	2,300	2,350	2,900	2,910	2,920	3,730	3,750	4,250	4,280	4,670
	Operation weight			kg	1,470	1,890	2,340	2,390	2,980	2,990	3,000	3,840	3,850	4,370	4,400	4,780
Weight (XL)	Unit			kg	1,520	1,940	2,400	2,440	3,060	3,070	3,080	3,890	3,900	4,400	4,440	4,820
	Operation weight			kg	1,570	1,980	2,440	2,480	3,130	3,150	3,160	3,990	4,010	4,520	4,550	4,940
Water heat exchanger	Type				Plate heat exchanger											
	Water flow rate	Cooling	Nom.	l/s	7.8	8.8	9.8	11.1	14.6	16.0	18.0	19.2	20.4	24.0	27.1	29.9
		Heating	Nom.	l/s	8.3	9.5	10.9	12.2	15.9	17.5	19.5	20.7	22.3	25.8	29.3	32.5
	Water pressure drop	Cooling	Nom.	kPa	22	28	36	40	21	27	30	29	34	37	42	56
		Heating	Nom.	kPa	25	32	43	50	25	31	37	33	40	43	50	66
	Water volume			l	18				44			60		70		
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler											
Compressor	Type				Scroll compressor											
	Quantity				4									6		
Fan	Type				Direct propeller											
	Quantity				4		5		8			10		12		14
	Air flow rate	Nom.		l/s	22,577	21,593	26,992		43,187			55,213	53,983	64,780		75,577
	Speed			rpm	900											
Sound power level (XS)	Cooling	Nom.		dBA	92	94	95		97		98	99			100	
Sound power level (XL)	Cooling	Nom.		dBA	89	92	93		95			96		97		98
Sound pressure level (XS)	Cooling	Nom.		dBA	72	74	75	76	77		78		79			80
Sound pressure level (XL)	Cooling	Nom.		dBA	70	73		74	75			76		77		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~46											
		Heating	Min.~Max.	°CDB	-17~20											
	Water side	Cooling	Min.~Max.	°CDB	-13~15											
		Heating	Min.~Max.	°CDB	25~50											
Refrigerant	Type / GWP				R-410A / 2,087.5											
	Circuits	Quantity			2											
Refrigerant charge	Per circuit			kg	16.0	20.0		24.0	35.0	36.0	35.0	46.0		55.0	52.5	68.0
				TCO_2eq	33.4	41.8		50.1	73.1	75.2	73.1	96.0		114.8	109.6	142.0
Piping connections	Evaporator water inlet/outlet (OD)				2.5"				3"							
Unit	Starting current	Max		A	282	536	353	560	600	516	637	659	666	648	787	827
	Running current	Cooling	Nom.	A	115	140	128	162	193	205	235	251	257	307	353	384
		Max		A	138	165	164	196	246	264	295	316	330	396	442	491
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400											

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

EWYQ-F-XS/XL/XR

MicroTech III

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

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

- Ideal solution for **commercial comfort cooling and/or heating applications**
- 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

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	ηs (Seasonal space heating efficiency)	%	125							-					
			SCOP		3.21		3.20		3.21			-					
Dimensions	Unit	Height		mm	2,335									2,280			
		Width		mm	2,254												
		Depth		mm	3,547			4,428				5,329		6,659			
Weight	Unit			kg	3,410	3,455	3,500	3,870		3,940	4,010	4,390		5,015	5,495	5,735	
	Operation weight			kg	3,550	3,595	3,640	4,010		4,068	4,138	4,518		5,255	5,724	5,964	5,953
Water heat exchanger	Type				Single pass shell & tube												
	Water flow rate	Cooling	Nom.	l/s	12.1	13.0	13.9	15.5	16.2	17.4	18.2	19.7	20.8	21.8	24.1	24.9	27.8
		Heating	Nom.	l/s	13.1	14.4	15.7	16.1	16.9	18.3	19.8	21.4	22.4	23.0	25.6	27.0	29.7
	Water pressure drop	Cooling	Nom.	kPa	40	46	44	50	55	60	65	74	80	47	85	91	61
		Heating	Nom.	kPa	30	35	52	37	40	45	51	59	64	42	63	69	59
	Water volume			l	138			133		128				240	229		218
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler												
Compressor	Type				Single screw compressor												
	Quantity				2									3			
Fan	Type				Direct propeller												
	Quantity				6			8				10		12			
	Air flow rate	Nom.		l/s	31,729	31,422	31,115	42,306		42,337	41,487	52,882		63,458	62,640	61,652	62,231
	Speed			rpm	900												
Sound power level	Cooling	Nom.		dBA	101							102		104			
Sound pressure level	Cooling	Nom.		dBA	82							83		84			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45												
		Heating	Min.~Max.	°CDB	-10~20												
	Water side	Cooling	Min.~Max.	°CDB	-8~15												
		Heating	Min.~Max.	°CDB	35~55												
Refrigerant	Type / GWP				R-134a / 1,430												
	Circuits	Quantity			2									3			
Refrigerant charge	Per circuit			kg	43.0	44.0	43.0	46.0		46.5	47.0	50.0		47.0			49.0
				TCO_2eq	61.5	62.9	61.5	65.8		66.5	67.2	71.5		67.2			70.1
Piping connections	Evaporator water inlet/outlet (OD)				139.7mm									219.1mm			
Unit	Starting current	Max		A		150		181		204		224	238	245	300	323	
	Running current	Cooling	Nom.	A	137	150	164	176	188	202	214	229	244	246	270	281	322
		Max		A	211		212	254		288		316	336	329	398	432	
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

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

EWYD-BZSS/SL MicroTech II

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)	%	125						-						
			SCOP		3.21		3.20		3.21		-						
Dimensions	Unit	Height		mm	2,335									2,280			
		Width		mm	2,254												
		Depth		mm	3,547			4,428				5,329		6,659			
Weight	Unit			kg	3,750	3,795	3,840	4,210		4,280	4,350	4,730		5,525	6,005	6,245	
	Operation weight			kg	3,888	3,933	3,978	4,343		4,408	4,478	4,858		5,765	6,234	6,474	6,463
Water heat exchanger	Type				Single pass shell & tube												
	Water flow rate	Cooling	Nom.	l/s	11.8	12.7	13.9	15.1	15.8	16.9	17.7	19.2	20.3	21.4	23.5	24.3	27.1
		Heating	Nom.	l/s	13.1	14.4	15.7	16.1	16.9	18.3	19.8	21.4	22.4	23.0	25.6	27.0	29.7
	Water pressure drop	Cooling	Nom.	kPa	38	44	42	48	53	57	62	71	77	45	82	87	58
		Heating	Nom.	kPa	30	35	52	37	40	45	51	59	64	42	63	69	59
	Water volume			l	138			133		128				240	229		218
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler												
Compressor	Type				Single screw compressor												
	Quantity				2									3			
Fan	Type				Direct propeller												
	Quantity				6			8				10		12			
	Air flow rate	Cooling	Nom.	l/s	24,432	24,264	24,095	32,576		32,628	32,127	40,720		48,863	48,415	47,732	48,191
	Speed			rpm	700												
Sound power level	Cooling	Nom.		dBA	94			95						97			
Sound pressure level	Cooling	Nom.		dBA	76									77			
Operation range	Air side	Cooling	Min.~Max.	°CDB	-10~45												
		Heating	Min.~Max.	°CDB	-10~20												
	Water side	Cooling	Min.~Max.	°CDB	-8~15												
		Heating	Min.~Max.	°CDB	35~55												
Refrigerant	Type / GWP				R-134a / 1,430												
	Circuits	Quantity			2									3			
Refrigerant charge	Per circuit			kg	43.0	44.0	43.0	46.0		46.5	47.0	50.0		47.0			49.0
				TCO_2eq	61.5	62.9	61.5	65.8		66.5	67.2	71.5		67.2			70.1
Piping connections	Evaporator water inlet/outlet (OD)				139.7mm									219.1mm			
Unit	Starting current	Max		A	145		146	176		199		217	231	234	288	311	305
	Running current	Cooling	Nom.	A	134	148	163	171	184	199	212	224	240	238	263	275	319
		Max		A	202		203	243		277		302	322	313	381	415	406
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400												

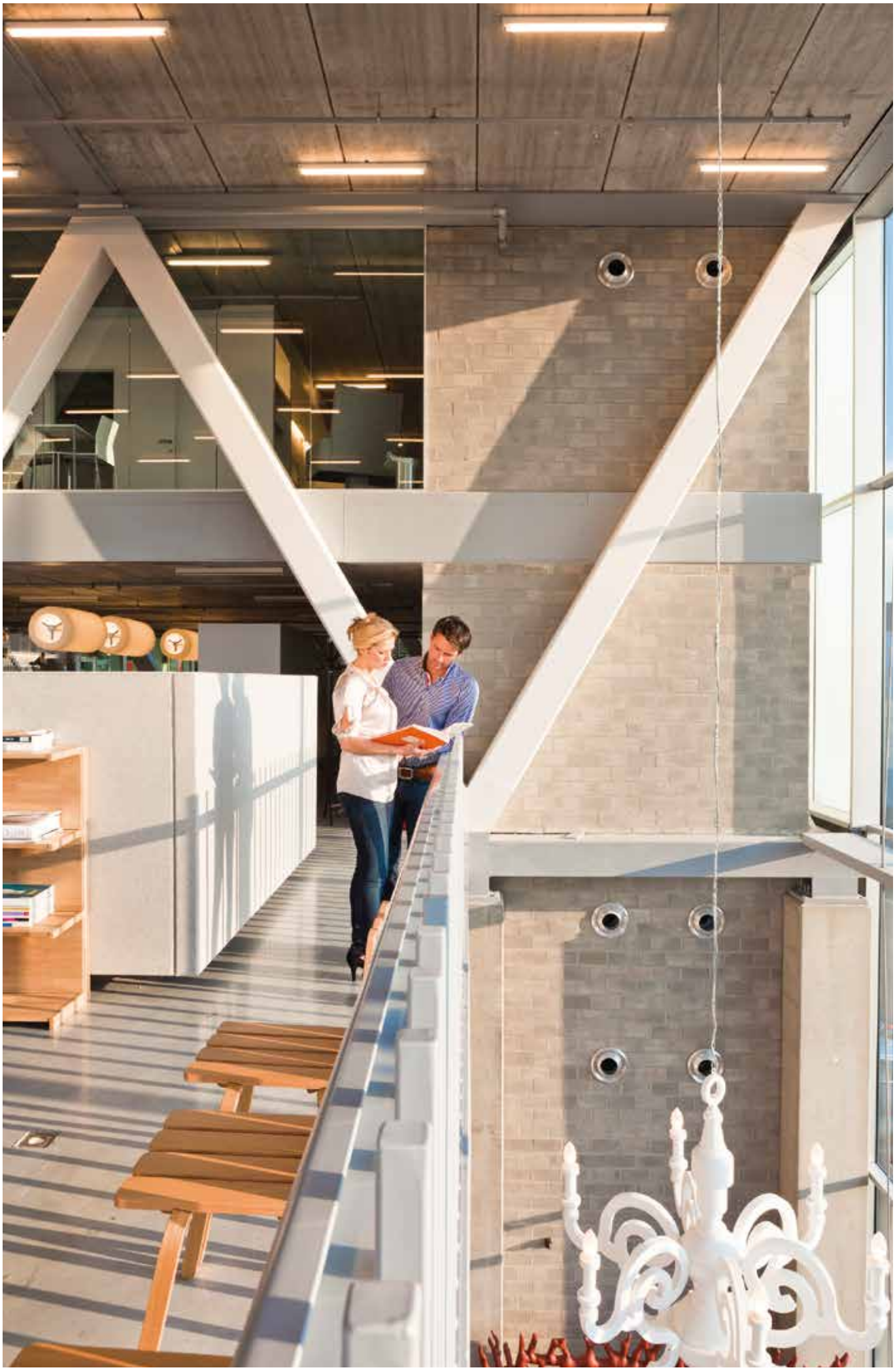


Table of content
Condensing Unit

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

Air cooled screw condensing unit, standard efficiency, standard sound

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

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

Air cooled screw condensing unit, standard efficiency, low sound

ERAD-E-SS/SL

MicroTech III

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

(1) Impossible option combination: OPZH+OPZL

Options - Air cooled chillers

Description	Code	EWAQ~BAW EWYQ~BAW	EWAQ-G-	EWYQ-G-	EWAQ-F-SS/XS	EWAQ-E-XS	EWAQ-F-SL/SR/XL/XR	EWAQ-E-XL/XR	EWYQ-F-XS EWYQ-F-XL	EWYQ-F-XR	EWAD-E-
Total heat recovery	01		Option								Option
Total heat recovery (1 circuit)	02										
Partial heat recovery	03a		Option	Option	Option	Option	Option	Option	CF	CF	Option
Evaporator 1 Pass	03b										
Direct on line starter (DOL)	04		STD	STD	STD	STD	STD	STD	STD	STD	
WyeDelta compressor starter (YD)	05										STD
Soft starter	06		Option	Option	Option	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	Option	Option	Option
Double setpoint	10		STD	STD	STD	STD	STD	STD	STD	STD	STD
Compressor thermal overload relays	11				Option	Option	Option	Option	Option	Option	Option
Fans thermal relays	12										
Phase monitor	13				Option	Option	Option	Option			STD
Inverter compressor starter	14										
Under / Over voltage control	15		Option	Option	Option	Option	Option	Option	Option	Option	Option
Energy meter	16				Option	Option	Option	Option	Option	Option	Option
Energy meter (including current limit)	16a										
Capacitors for power factor correction	17		Option	Option	Option	Option	Option	Option	Option	Option	Option
Current limit	19										Option
Evaporator victaulic kit	20		STD	STD	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	STD	STD	Option
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			Option
Speedtrol (fan speed control device ON/OFF down to 10°C in cooling)	42a								Option		
Condenser coil guards	43				Option	Option	Option	Option	Option	Option	Option
Evaporator area guards	44				Option	Option	Option	Option	Option	Option	
CuCu condenser coil	45				Option	Option	Option	Option	Option	Option	Option
CuCuSn condenser coil	46				Option	Option	Option	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	STD	STD	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	STD	STD	STD
Evaporator flow switch	58		Option	Option	STD	STD	STD	STD	STD	STD	Option
Condenser flow switch	59										
Electronic expansion valve	60		STD	STD	STD	STD	STD	STD	STD	STD	STD
Discharge line shutoff valve	61				Option	Option	Option	Option	Option	Option	STD
Suction line shutoff valve	62				Option	Option	Option	Option	Option	Option	STD

(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: EWWDC12I-SS - EWWDC18I-SS (10) Forklift loading-unloading operations are not allowed when option 01 is selected for model sizes as follows: EWWDC12I-SS - EWWDC18I-SS - (11) Special Transport is required (flat rack truck and open top) for model sizes as follows: EWLDC10I-SS - EWLDC17I-SS or EWWQC11B-SS - EWWQC20B-SS or EWWQC10B-XS, EWWQC12B-XS - EWWQC21B-XS - (12) Forklift loading-unloading operations are not allowed for model sizes as follows: EWLDC10I-SS - EWLDC17I-SS or EWWQC11B-SS - EWWQC20B-SS or EWWQC10B-XS, EWWQC12B-XS - EWWQC21B-XS - (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

Options - Air cooled chillers

EWAD-D-SS	EWAD-D-SL	EWAD-D-SR	EWAD-D-SX	EWAD-D-XS	EWAD-D-XR	EWAD-D-HS	EWAD-C-	EWAD-CZ	EWAD-TZ	EWAD-TZ B	EWAD-CF	EWYD-BZSS	EWYD-BZSL	ERAD-E-
Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option				Option
Option	Option	Option	Option	Option	Option	Option								
Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option		Option	Option	Option
STD	STD	STD	STD	STD	STD	STD	STD				STD			STD
Option	Option	Option	Option	Option	Option	Option	Option				Option			Option
Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option
STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Option	Option	Option	Option	Option	Option	Option	Option	STD	STD	STD	Option			Option
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Option	Option	Option	Option	Option	Option	Option	Option	Option	STD	STD	Option	Option	Option	Option
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Option	Option	Option	Option	Option	Option	Option	Option				Option			Option
Option	Option	Option	Option	Option	Option	Option	Option	Option			Option	Option	Option	Option
STD			STD	STD	STD		STD	STD	STD	STD		STD	STD	
Option			Option	Option	Option		Option	Option	Option	Option	STD			
STD	STD	STD	STD	STD	STD	STD								
Option	STD	STD	Option	Option	Option	STD	STD	STD	STD	STD	STD	Option	Option	
CF	CF	CF	CF	CF	CF	CF								
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
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	STD	STD				STD								
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Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	
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STD	STD	STD	STD	STD	STD	STD	Option	STD	STD	STD	Option	STD	STD	STD

Options - Air cooled chillers

Description	Code	EWAQ~BAW EWYQ~BAW	EWAQ-G-	EWYQ-G-	EWAQ-F-SS/XS	EWAQ-E-XS	EWAQ-F-SL/ XR/XL/XR	EWAQ-E-XL/XR	EWYQ-F-XS EWYQ-F-XL	EWYQ-F-XR	EWAD-E-
High pressure side manometers	63				Option	Option	Option	Option	Option	Option	Option
Low pressure side manometers	64				Option	Option	Option	Option	Option	Option	Option
Ambient outside temperature sensor and setpoint reset	67		STD	STD	STD	STD	STD	STD	STD	STD	STD
Hour run meter	68		STD	STD	STD	STD	STD	STD	STD	STD	STD
General fault contactor	69		STD	STD	STD	STD	STD	STD	STD	STD	STD
Container Kit	71		Option	Option	Option	Option	Option	Option	Option	Option	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										
Sound proof system (compressor)	76-b										
Spring anti vibration mounts	77		Option	Option	Option	Option	Option	Option	Option	Option	Option
One centrifugal pump (low lift)	78	Option	Option	Option							Option
One centrifugal pump --- SPK1	78-a				Option	Option	Option	Option	Option	Option	
One centrifugal pump --- SPK2	78-b				Option	Option	Option	Option	Option	Option	
One centrifugal pump --- SPK3	78-c				Option	Option	Option	Option	Option	Option	
One centrifugal pump --- SPK4	78-d				Option	Option	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								Option	Option	
One centrifugal pump --- SPK1b	78-m								Option	Option	
One centrifugal pump --- SPK1c	78-n								Option	Option	
One centrifugal pump (high lift)	79	Option	Option	Option							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	Option	Option	Option
External tank without cabinet (1000 L)	84 (3)		Option	Option	Option	Option	Option	Option	Option	Option	Option
External tank with cabinet (500 L)	87 (3)		Option	Option	Option	Option	Option	Option	Option	Option	Option
External tank with cabinet (1000 L)	88 (3)		Option	Option	Option	Option	Option	Option	Option	Option	Option
Acoustic test	89										
Setpoint reset, Demand limit and Alarm from external device	90				Option	Option	Option	Option	Option	Option	STD
Double pressure relief valve with diverter	91		Option	Option	Option	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	Option	Option	Option
Fans circuit breakers	96		Option	Option	Option	Option	Option	Option	Option		STD
Main switch interlock door	97		STD	STD	STD	STD	STD	STD	STD	STD	STD
Emergency stop	98										
Fans speed regulation (+ fan silent mode)	99 (2)				Option	Option	Option	Option			Option
Fans speed regulation (inverter)	99a (2)								Option	STD	
Refrigerant recovery unit	100										
Evaporator right water connections	101										
Ground fault relay	102				Option	Option	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	Option		Option
Optimized free cooling (VFD fans regulation)	113-a										
Optimized free cooling (On/Off fans)	113-b										
Nordic kit	114			Option					Option	Option	
Water filter	115		Option	Option	STD	STD	STD	STD	STD	STD	
Condenser coil protection panels	116				Option	Option	Option	Option	Option	Option	Option
Blygold coil treatment	117			Option	Option	Option	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	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) d	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			Option							
200 PA ESP fans	161										
Cu-Ni Evaporator tubes	164										
Marine version	167										
120 Pa ESP fans	168								Option		

EWAD-D-SS	EWAD-D-SL	EWAD-D-SR	EWAD-D-SX	EWAD-D-XS	EWAD-D-XR	EWAD-D-HS	EWAD-C-	EWAD-CZ	EWAD-TZ	EWAD-TZ B	EWAD-CF	EWYD-BZSS	EWYD-BZSL	ERAD-E-
Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option
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									Option	Option				
							CF	CF						
SO	SO	SO	SO	SO	SO	SO	SO	SO	Option	Option	SO	Option	SO	
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Accessories - Air cooled chillers

DWSC & DWDC EWWD~FZ	Air-cooled chillers										
Panels	**EWAQ~BVP EWYQ~BVP**	**EWAQ~AC EWYQ~AC**	**EWAQ~BA EWYQ~BA**	**EWAQ~CA EWYQ~CA**	**EWYQ-F-**	**EWYD~BZ**	**EWAD~TZ (&B)**	**EWAD~T- (B)**	**EWAD~E-**	**ERAD~E-**	**EWAD~D-**
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	●										

	Air-cooled chillers										
Serial Cards & Communication Modules	**EWAQ~BVP EWYQ~BVP**	**EWAQ~AC EWYQ~AC**	**EWAQ~BA EWYQ~BA**	**EWAQ~CA EWYQ~CA**	**EWYQ-F-**	**EWYD~BZ**	**EWAD~TZ (&B)**	**EWAD~T- (B)**	**EWAD~E-**	**ERAD~E-**	**EWAD~D-**
EKAC200J Serial Card RS485/Modbus						●					
EKACBAC Ethernet Card BACnet						●					
EKACLONP Serial Card LON FTT10						●					
EKACRS232 Serial Card RS232 Modem Interface (single unit only)						●					
EKACWEB Web Server Card						●					
EKACBACMSTP Serial Card BACnet MSTP						●					
EKACBACCERT Serial Card BACnet pre-loaded (centrifugal chillers)											
EKACMSTPCERT Serial Card BACnet pre-loaded MSTP (centrifugal chillers)											
EKCM200J ModBus RTU communication module					●		●	●	●	●	●
EKCMLON LON communication module					●		●	●	●	●	●
EKCMBACMSTP BACnet/MSTP communication module					●		●	●	●	●	●
EKCMBACIP BACnet/IP communication module					●		●	●	●	●	●
EKACPG Communication cards											

	Air-cooled chillers										
Other Systems & Accessories	**EWAQ~BVP EWYQ~BVP**	**EWAQ~AC EWYQ~AC**	**EWAQ~BA EWYQ~BA**	**EWAQ~CA EWYQ~CA**	**EWYQ-F-**	**EWYD~BZ**	**EWAD~TZ (&B)**	**EWAD~T- (B)**	**EWAD~E-**	**ERAD~E-**	**EWAD~D-**
EKCON Converter RS485 to RS232						●					
EKCONUSB Converter RS485 to USB						●					
EKMODEM Fixed modem						●					
EKGSMOD GSM modem						●					
EKRUPCJ Remote display kit						●					
EKRUPCS Local/remote display HMI					●		●	●	●	●	●
EKPWPROEXT PlantWatchPro I/O extension module for hardwiring and retrofit						●					
EKGWWEB Gateway web (Ethernet LAN SNMP)						●					
EKGWMODEM Gateway for modem						●					
EKRUPG Remote user interface											
EKGN210 European Kit Grouved Nipple (for sizes 080-210)											
EKGN260 European Kit Grouved Nipple (for sizes 230-260)											
EKSS Soft Starter kit 5/8/10/12 Hp-units											
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											
EKRP1HB (f) Digital input/output PCB (remote alarm and ON/OFF signalisation											
EKRP1AHT Digital input/output PCB			●	●							
EKRUAHTB Remote user interface			●	●							
DTA104A62 External control adapter			●	●							
BHGP26A1 Digital pressure gauge kit			●	●							
EKQDP2M016 (h) Differential Pressure Sensor 4-20 mA 0-160 kPa							●	●	●		●
EKQDP2M020 (h) Differential Pressure Sensor 4-20 mA 0-250 kPa							●	●	●		●
EKQDP2M040 (h) Differential Pressure Sensor 4-20 mA 0-400 kPa							●	●	●		●
EKQDP2M060 (h) Differential Pressure Sensor 4-20 mA 0-600 kPa							●	●	●		●

Notes:
(a) Price does not include commissioning of panel; if commissioning is required please refer to RN17-041
(b) iCM panels work in cooling mode only; heat pump versions and total heat recovery options on A/C and W/C chillers are not compatible
(c) in case you are ordering iCM panels please contact factory
(d) For 45/55/65 Hp-units 2 pieces are needed
(e) Only available for modulare units (EWWP~KAW1M)
((f) For 009/010/011/013 units (price available in SAP system)
(g) Price available in SAP system
(h) Differential pressure sensor are specific for iCM panels in variable primary flow management

EWAQ~G-	EWYQ~G-	EWAQ~E (single)	EWAQ~F (dual)	EWAD~C-	EWAD~CZ	EWAD~CF (c)
•		•	•	•	•	•
•		•	•	•	•	•
•		•	•	•	•	•
•	•	•	•			

EWAQ~G-	EWYQ~G-	EWAQ~E (single)	EWAQ~F (dual)	EWAD~C-	EWAD~CZ	EWAD~CF
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•

EWAQ~G-	EWYQ~G-	EWAQ~E (single)	EWAQ~F (dual)	EWAD~C-	EWAD~CZ	EWAD~CF
•	•	•	•	•	•	•
•		•	•	•	•	•
•		•	•	•	•	•
•		•	•	•	•	•
•		•	•	•	•	•

Why choose for a water cooled chiller?

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

Water cooled scroll chillers

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

Water cooled screw chillers

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

Water cooled centrifugal chillers

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

Large product line-up

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

Application versatility

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

Outstanding durability

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

Installation flexibility

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

Table of content
Water cooled

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

Water cooled screw chiller, standard efficiency, standard sound

- All models are PED pressure vessel approved
- 1 or 2 stepless single-screw compressors
- One or two truly independent refrigerant circuits for outstanding reliability
- Shell and tube heat exchanger
- Optimised for use with **R-410A**
- Standard electronic expansion valve
- Compact design
- Partial heat recovery available
- MicroTech III controller with superior control logic and easy interface

Cooling only				**EWWQ-B-SS**	**380**	**460**	**560**	**640**	**730**	**800**	**860**	**870**	**960**	**C10**	**C11**	**C12**	**C13**	**C14**	**C15**	**C16**	**C17**	**C19**	**C20**
Cooling capacity	Nom.			kW	379	462	560	635	724	793	859	868	956	1,003	1,050	1,181	1,251	1,320	1,452	1,595	1,754	1,896	2,055
Power input	Cooling	Nom.		kW	89.2	109	133	150	170	179	207	199	218	247	243	268	285	303	337	373	407	441	477
Capacity control	Method				Stepless																		
	Minimum capacity			%	12.5					25.0	12.5	25.0		12.5	25.0								
EER					4.24		4.21	4.22	4.25	4.42	4.15	4.36	4.38	4.07	4.32	4.41	4.38	4.35	4.31	4.28	4.31	4.30	4.31
ESEER					4.64	4.69	4.70		4.46	5.08	4.35	5.07	5.03	4.28	5.04	5.05	5.06	5.00	4.66	4.76	4.61	4.63	4.54
IPLV					5.57	5.62		5.63	5.32	5.58	5.15	5.75	5.92	5.08	5.90	5.93		5.85	5.46	5.44	5.34	5.38	5.32
Dimensions	Unit	Height		mm	1,849		2,001		1,848	2,158	1,848	2,158		1,851	2,378	2,455			2,495				
		Width		mm	1,140		1,276		1,314	1,350	1,327	1,350		1,314	1,350								
		Depth		mm	3,373		3,454		3,535	5,020	3,535	5,020		3,535	4,894	5,070			4,892			4,865	
Weight	Unit			kg	1,933	1,967	2,283	2,332	2,407	3,921	2,427	3,949	3,988	2,457	4,344	4,529	4,536	4,607	4,988	4,999	5,053	5,204	5,289
	Operation weight			kg	2,135	2,169	2,543	2,628	2,777	4,422	2,795	4,463	4,496	2,812	4,780	5,186	5,200	5,280	5,602	5,615	5,670	5,881	5,970
Water heat exchanger - evaporator	Type				Single pass shell and tube																		
	Water volume			l	124	118	176	170	274	344	266	344	325	251	325	538			505		495	539	527
	Water flow rate	Nom.		l/s	18.1	22.1	26.8	30.4	34.7	38.0	41.1	41.6	45.8	48.0	50.3	56.5	59.9	63.2	69.5	76.5	84.1	91.0	98.7
	Water pressure drop	Cooling	Nom.	kPa	48	63	44	47	54	53	49	62	58	56	69	45	49	54	59	69	88	97	120
Water heat exchanger - condenser	Type				Single pass shell and tube																		
	Water flow rate	Nom.		l/s	22.4	27.4	33.2	37.7	43.1	23.3	51.3	23.3	28.2	60.1	28.2	34.7	34.8	38.9	43.0	43.4	52.0	52.3	60.9
	Water flow rate 2	Nom.		l/s	-					23.3	-	27.9	28.2	-	33.8	34.7	38.9		43.0	51.3	52.0	60.1	60.9
	Water pressure drop	Cooling	Nom.	kPa	59	63	67	65	16	64	20	64	67	26	67	73		69	16		17		15
	Water pressure drop 2	Cooling	Nom.	kPa	-					64	-	66	67	-	69	73	69		16	19	17	14	15
Compressor	Type				Single screw compressor																		
	Quantity				1					2	1	2		1	2								
Sound power level	Cooling	Nom.		dBA	100	101	102			105	102	105		103	105	107			106		107		108
Sound pressure level	Cooling	Nom.		dBA	82	83	84		83	84	85			86	87				86	87		88	
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-4~10																		
	Condenser	Cooling	Min.~Max.	°CDB	25~45																		
Refrigerant	Type / GWP				R-410A / 2,087.5																		
	Circuits	Quantity			1					2	1	2		1	2								
Refrigerant charge	Per circuit			kg	120.0	100.0	175.0	90.0	80.0	85.0	90.0	45.0	85.0	100.0	160.0	100.0	150.0		130.0		150.0	160.0	130.0
				TCO_2eq	250.5	208.8	365.3	187.9	167.0	177.4	187.9	93.9	177.4	208.8	334.0	208.8	313.1		271.4		313.1	334.0	271.4
Piping connections	Evaporator water inlet/outlet			mm	152.4		203.2								254								
	Condenser water inlet/outlet			inch	5		6		5						6				5				
Unit	Maximum starting current			A	455				656	599	656	626		656	663		690		902		954		988
	Nominal running current (RLA)	Cooling		A	149	175	211	237	269	299	329	325	352	391	387	423	449	476	539	596	650	702	755
	Maximum running current			A	179	214	259	294	308	358	372	393	427	434	473	519	553	587	615	679	744	771	830
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																		

Water cooled screw chiller, high efficiency, standard sound

EWWQ-B-SS/XS MicroTech III

Cooling only				EWWQ-B-XS	420	520	640	730	800	970	C10	C11	C12	C13	C14	C15	C16	C17	C19	C20	C21
Cooling capacity	Nom.			kW	420	513	636	722	798	969	1,033	1,111	1,153	1,265	1,363	1,442	1,580	1,740	1,870	2,025	2,156
Power input	Cooling	Nom.		kW	88.7	107	131	149	166	201	213	239	238	262	281	299	324	361	397	436	474
Capacity control	Method				Stepless																
	Minimum capacity			%	12.5						25.0	12.5	25.0								
EER					4.74	4.79	4.84	4.83	4.81		4.86	4.64	4.85	4.83	4.85	4.83	4.88	4.81	4.71	4.64	4.55
ESEER					5.27	5.29	5.37	5.36	5.30	5.09	5.56	4.99	5.52		5.65	5.61	5.26	5.18	4.98	4.91	4.75
IPLV					6.36		6.45	6.42	6.35	6.06	6.11	5.92	6.06	6.07	6.23	6.19	5.82	5.92	6.03	5.81	5.93
Dimensions	Unit	Height		mm	2,001				2,003	2,001	2,454	2,003	2,454				2,495				
		Width		mm	1,276		1,268	1,314	1,446		1,350	1,446	1,350								
		Depth		mm	3,863			3,878		3,920	5,219	3,919	5,219				4,829			4,865	
Weight	Unit			kg	2,322	2,403	2,464	2,738	2,407	2,427	4,775	2,457	4,831	4,873	4,919	4,969	5,117		5,388	5,408	5,414
	Operation weight			kg	2,594	2,685	2,745	3,158	2,815	3,056	5,431	3,086	5,479	5,512	5,546	5,606	5,794	5,843	6,110	6,118	6,124
Water heat exchanger - evaporator	Type				Single pass shell and tube																
	Water volume			l	220	213	200	334	325	538	587	538	575	563	551		495	484	535	527	
	Water flow rate	Nom.		l/s	20.1	24.6	30.5	34.6	38.2	46.4	49.5	53.2	55.2	60.6	65.3	69.1	75.7	83.5	89.7	97.2	103.6
	Water pressure drop	Cooling	Nom.	kPa	55	68	71	64	57	53		68	64	55	67	74	69	88	90	111	124
Water heat exchanger - condenser	Type				Single pass shell and tube																
	Water flow rate	Nom.		l/s	24.4	29.8	36.8	41.8	46.3	56.2	29.9	64.7	30.2	36.7	37.2	41.8	45.7	46.2	54.4	55.1	63.1
	Water flow rate 2	Nom.		l/s	-						29.9	-	36.6	36.7	41.8		45.7	54.7	54.4	63.0	63.1
	Water pressure drop	Cooling	Nom.	kPa	50	39	42	47	59	64	40	82	36	48	49	46	44	45	60	61	78
	Water pressure drop 2	Cooling	Nom.	kPa	-						40	-	47	48	46		44	60		78	
Compressor	Type				Single screw compressor																
	Quantity				1						2	1	2								
Sound power level	Cooling	Nom.		dBA	101	102	103		102	103	105	104	106		107		106		107		108
Sound pressure level	Cooling	Nom.		dBA	82	83	84		83	84	86	85	86	87			86	87		88	
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-4~10																
	Condenser	Cooling	Min.~Max.	°CDB	25~45																
Refrigerant	Type / GWP				R-410A / 2,087.5																
	Circuits	Quantity			1						2	1	2								
Refrigerant charge	Per circuit			kg	120.0	130.0	95.0	135.0	110.0	150.0	120.0	130.0	120.0	150.0	120.0	150.0	130.0		150.0		
				TCO_2eq	250.5	271.4	198.3	281.8	229.6	313.1	250.5	271.4	250.5	313.1	250.5	313.1	271.4		313.1		
Piping connections	Evaporator water inlet/outlet			mm	152.4			203.2		254	203.2	254	203.2			254					
	Condenser water inlet/outlet			inch	8			6			5	6	5		6		8				
Unit	Maximum starting current			A	455				656		626	656	663		690		902	954		988	998
	Nominal running current (RLA)	Cooling		A	149	173	208	235	258	313	346	370	381	417	443	469	511	567	621	678	734
	Maximum running current			A	179	214	259	294	308	372	427	434	473	519	553	587	615	679	744	771	830
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																

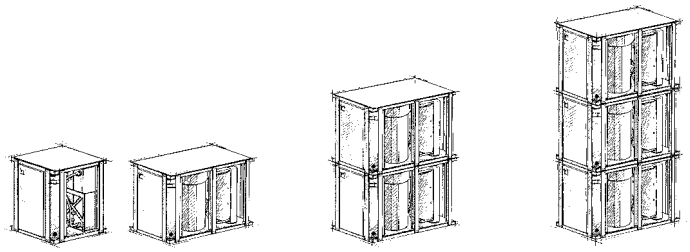
Water cooled scroll heat pump

- 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 195kW
- Easy installation and maintenance
- Remote cooling or heating selection
- Water/water heat pump, with water reversibility
- Compatible with hydraulic module EHMC (see next page)
- Advanced µC²SE controller for direct connection to a Modbus based BMS or to a remote user interface
- Standard integrated: main switch, water filter, flow switch, air purge, pressure ports

EWWP-KBW1N µC²SE

Heating only & Cooling only				EWWP-KBW1N	014	022	028	035	045	055	065	090	100	110	120	130	145	155	165	175	185	195
Cooling capacity	Nom.			kW	12.9	21.4	27.8	32.3	42.8	55.7	64.7	85.7	98.6	112.0	121.0	130.0	141.0	154.0	167.0	176.0	185.0	194.0
Heating capacity	Nom.			kW	16.7	27.5	35.6	41.5	55.0	71.7	83.0	110.0	127.0	143.0	155.0	166.0	182.0	198.0	215.0	226.0	237.0	249.0
Power input	Cooling	Nom.		kW	3.8	6.1	7.8	9.1	12.2	16.0	18.2	24.2	28.0	31.9	34.0	36.2	40.2	43.9	47.7	49.8	52.0	54.1
	Heating	Nom.		kW	3.8	6.1	7.8	9.1	12.2	16.0	18.2	24.2	28.0	31.9	34.0	36.2	40.2	43.9	47.7	49.8	52.0	54.1
EER					3.44	3.49	3.54		3.51	3.48	3.55	3.54	3.52	3.51	3.56	3.59	3.51		3.50	3.53	3.56	3.59
COP					4.45	4.49	4.54	4.55	4.51	4.48	4.56	4.55	4.54	4.48	4.56	4.59	4.53	4.51		4.54	4.56	4.60
Space heating	Average climate water outlet 55°C	General	ηs (Seasonal space heating efficiency)	%	107	106	115	116	102	109	113	-										
			SCOP		2.88	2.86	3.08	3.11	2.75	2.91	3.03	-										
			Seasonal space heating eff. class		A+							-										
	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	132	134	138	143	136	139	142	-										
			SCOP		3.49	3.55	3.66	3.78	3.59	3.66	3.74	-										
			Seasonal space heating eff. class		A+							-										
Dimensions	Unit	Height		mm	600							1,200					1,800					
		Width		mm	600																	
		Depth		mm	600				1,200													
Weight	Unit			kg	118	155	165	172	300	320	334	600	620	640	654	668	920	940	960	974	988	1,000
Water heat exchanger - evaporator	Type				Brazed plate																	
	Minimum water volume in the system			l	62	103	134	155	205	268	311	205	268		311		205		268			311
	Water flow rate	Min.		l/min	31.0	53.0	65.0	76.0	101	131	152	202	232	262	283	304	333	363	393	414	435	456
		Nom.		l/min	37.0	61.0	80.0	93.0	123	160	185	246	283	321	347	373	404	441	479	505	530	556
		Max.		l/min	74.0	123	159	185	245	319	371	491	565	642	694	745	808	883	957	1,010	1,060	1,110
Water heat exchanger - condenser	Type				Brazed plate																	
	Water flow rate	Min.		l/min	24	39	51	59	79	100	120	160	180	210	220	240	260	280	310	320	340	360
		Nom.		l/min	48	78	100	120	160	210	240	310	360	410	440	470	520	570	610	650	680	710
		Max.		l/min	95	160	200	240	310	410	470	630	720	820	880	950	1,000	1,100	1,200	1,300	1,400	
Compressor	Type				Hermetically sealed scroll compressor																	
	Quantity				1				2			4	2	4	2		4		6	4		6
Compressor 2	Quantity				-								2	-	2	-	2		-	2		-
Sound power level	Cooling	Nom.		dBA	64.0			71.0	67.0		74.0	71.0			75.0	77.0	73.0			76.0	78.0	79.0
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~20																	
	Condenser	Cooling	Min.~Max.	°CDB	20~55																	
Refrigerant	Type / GWP				R-407C / 1,773.9																	
	Control				Thermostatic expansion valve																	
	Circuits	Quantity			1				2			4					6					
Refrigerant charge	Per circuit			kg	1.20	2.00	2.50	3.10	4.60		5.60	9.20			10.2	11.2	13.8			14.8	15.8	16.8
				TCO_2eq	2.13	3.55	4.43	5.50	8.16		9.93	16.3			18.1	19.9	24.5			26.3	28.0	29.8
Piping connections	Evaporator water inlet/outlet (OD)				FBSP 25mm				FBSP 40mm			2 x 2 x FBSP 38mm					3 x 2 x FBSP 38mm					
	Evaporator water drain				Field installation																	
	Condenser water inlet/outlet (OD)				FBSP 25mm				FBSP 40mm			2 x 2 x FBSP 38mm					3 x 2 x FBSP 38mm					
Unit	Starting current	Max		A	-							121	155	163	185	189	183	191	199	221	225	229
	Running current	Cooling	Nom.	A	6.6	10.4	13.1	15.0	20.8	26.2	30.0	41.6	47.0	52.4	56.2	60.0	67.8	73.2	78.6	82.4	86.2	90.0
		Max		A	9.00	14.5	18.5	22.0	28.0	36.0	40.0	56.0	64.0	72.0	76.0	80.0	92.0	100	108	112	116	120
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400																	

Water cooled scroll chiller



Combination table

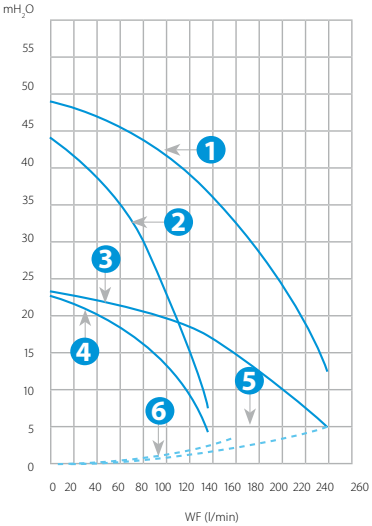
Selection table		1 Module (KB-series)							2 Modules (KB-series)					3 Modules (KB-series)					
Capacity index		**014**	**022**	**028**	**035**	**045**	**055**	**065**	**090**	**100**	**110**	**120**	**130**	**145**	**155**	**165**	**175**	**185**	**195**
Cooling capacity (kW)		**12.9**	**21.4**	**27.8**	**32.3**	**42.8**	**55.7**	**64.7**	**85.7**	**98.6**	**112**	**121**	**130**	**141**	**154**	**167**	**176**	**185**	**194**
Heating capacity (kW)		**16.7**	**27.5**	**35.6**	**41.5**	**55.0**	**71.7**	**83.0**	**110**	**127**	**143**	**155**	**166**	**182**	**198**	**215**	**226**	**237**	**249**
Unit + Control (Factory mounted)	EWWP014KBW1N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EWWP022KBW1N	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EWWP028KBW1N	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EWWP035KBW1N	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EWWP045KBW1N	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	EWWP055KBW1N	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
	EWWP065KBW1N	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Modular units (Controller available as accessory)	EWWP045KAW1M	-	-	-	-	-	-	-	2	1	-	-	-	2	1	-	-	-	-
	EWWP055KAW1M	-	-	-	-	-	-	-	-	1	2	1	-	1	2	3	2	1	-
	EWWP065KAW1M	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	1	2	3
Control (Kit)	ECB2MUAW	-	-	-	-	-	-	-	1	1	1	1	1	-	-	-	-	-	-
	ECB3MUAW	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1

For example: for a 121 kW HP system, select : EWWP055KBW1N + EWWP065KBW1N

EHMC

Hydraulic Module

- Accessory for EWWP-KBW1N chillers
- 3 models available
- 100 l tank for all sizes
- Freeze up protection
- High static pump (option)
- Standard drain kit (for indoor use)
- Standard dual pressure ports (before & behind the pump)



Legends

Pump characteristics

1. EHMC30AV1080
2. EHMC10AV1080 & EHMC15AV1080
3. EHMC30AV1010
4. EHMC10AV1010 & EHMC15AV1010

Hydraulic module + filter pressures losses

5. EHMC15/30AV1010 & EHMC15/30AV1080
6. EHMC10AV1010 & EHMC10AV1080

EHMC-AV

EHMC-AV			10		15		30	
			1010	1080	1010	1080	1010	1080
Nominal flow		l/min	62		88		187	
Nominal ESP		mH_2O	17	34	15	27	10	27
Nominal input		W	630	1,050	650	1,070	1,070	2,090
Dimensions (HxWxD)		mm	1,284x635x688		1,284x635x688		1,284x635x688	
Machine weight		kg	99	101	102	104	105	111
Sound power		dBA	63		63		63	
Sound pressure		dBA	52		52		52	
Power supply		V1	1~/230V/50Hz					
Operation range	Water side	°C	-10°C ~ 55°C					
	Air side	°CDB	-10°C ~ 43°C					
Piping connections	Water inlet/outlet		1" BSPF		2" BSPF		2-1/2" BSPF	
	Drain connection		1/2"					

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

Heating only & Cooling only				**EWWD-G-SS**	**170**	**210**	**260**	**300**	**320**	**380**	**420**	**460**	**500**	**600**
Cooling capacity	Nom.			kW	165	200	252	279	332	370	401	446	492	554
Heating capacity	Nom.			kW	209	253	319	357	420	467	506	566	626	710
Power input	Cooling	Nom.		kW	43.8	52.6	67.4	78.5	87.5	96.4	105	119	134	157
	Heating	Nom.		kW	43.8	52.6	67.4	78.5	87.5	96.4	105	119	134	157
Capacity control	Method				Stepless									
	Minimum capacity			%	25.0				12.5					
EER					3.77	3.80	3.74	3.55	3.80	3.84	3.80	3.74	3.68	3.53
COP					4.77	4.80	4.74	4.55	4.80	4.84	4.80	4.74	4.68	4.53
ESEER					4.50	4.54	4.46	4.25	4.75	4.80	4.76	4.67	4.59	4.44
IPLV					5.36	5.35	5.30	5.04	5.52	5.55		5.60	5.31	5.16
Space heating	Average climate water outlet 35°C	General	η_s (Seasonal space heating efficiency)	%	160	159		154	-					
			SCOP		4.20	4.17	4.18	4.06	-					
Dimensions	Unit	Height		mm	1,860				1,880					
		Width		mm	920				860					
		Depth		mm	3,435				4,305					
Weight	Unit			kg	1,393	1,410	1,503		2,687	2,697	2,702	2,757	2,762	
	Operation weight			kg	1,470	1,480	1,650		2,840	2,850	2,860	2,970		
Water heat exchanger - evaporator	Type				Single pass shell and tube									
	Water volume			l	60	56	123		118	113		173	168	
	Water pressure drop	Cooling	Total	kPa	45	61	41	49	58	57	66	50		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.	°CDB	-8									
			Max.	°CDB	15									
	Condenser	Cooling	Min.	°CDB	20									
			Max.	°CDB	55									
Refrigerant	Type				R-134a									
	GWP				1,430									
	Circuits	Quantity			1				2					
Refrigerant charge	Per circuit			kg	60.0				55.0					
				TCO_2eq	85.8				78.7					
Piping connections	Evaporator water inlet/outlet (OD)				88.9		114.3					139.7mm		
	Condenser water inlet/outlet (OD)				5"									
Unit	Starting current	Max		A	288				380	397		420		438
	Running current	Cooling	Nom.	A	75	85	105	122	149	160	171	190	209	242
		Max		A	114	136	165	186	229	250	272	301	330	373
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400									

Water cooled screw chiller, high efficiency, standard sound

EWWD-G-SS/XS

MicroTech III

Heating only & Cooling only				EWWD-G-XS	190	230	280	320	380	400	460	500	550	650
Cooling capacity	Nom.			kW	185	222	276	306	365	407	443	495	539	602
Heating capacity	Nom.			kW	226	272	337	379	446	496	540	602	657	743
Power input	Heating	Nom.		kW	40.6	49.4	61.0	73.4	81.1	89.0	97.0	107	117	141
Capacity control	Method				Stepless									
	Minimum capacity			%	25.0				12.5					
EER					4.57	4.50	4.53	4.17	4.50	4.58	4.57	4.61	4.59	4.26
COP					5.57	5.50	5.53	5.17	5.50	5.58	5.6	5.61	5.59	5.26
ESEER					5.37	5.31	5.33	4.91	5.54	5.62	5.61	5.68	5.67	5.27
IPLV					6.45	6.36	6.35	5.80	6.47	6.57	6.55	6.65	6.64	6.17
Space heating	Average climate water outlet 35°C	General	η_s (Seasonal space heating efficiency)	%	182	179	180	170	-					
			SCOP		4.75	4.68	4.69	4.44	-					
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				Single pass shell and tube									
	Water volume			l	125	120	110		170	285		280		
	Water pressure drop	Cooling	Total	kPa	23	31	30	37	28	21	24	33	39	47
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.	°CDB	-8									
			Max.	°CDB	15									
	Condenser	Cooling	Min.	°CDB	20									
			Max.	°CDB	55									
Refrigerant	Type				R-134a									
	GWP				1,430									
	Circuits	Quantity			1				2					
Refrigerant charge	Per circuit			kg	60.0			65.0		60.0	65.0	60.0		
				TCO_2eq	85.8			93.0		85.8	93.0	85.8		
Piping connections	Evaporator water inlet/outlet (OD)				114.3				139.7	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	109	142	152	161	174	186	210
		Max		A	114	136	165	186	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

Heating only & Cooling only					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
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
Capacity control	Method					Step										
	Minimum capacity			%		50.0	43.0	50.0	44.0	50.0	45.0	50.0	43.0	50.0	40.0	50.0
EER						3.90	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
Space heating	Average climate water outlet 35°C	General	η_s (Seasonal space heating efficiency)	%		155	160	163	167	166			172	171	163	-
			SCOP			4.08		4.14	4.24	4.23		4.22	4.37	4.35	4.16	-
Dimensions	Unit	Height		mm		1,066									1,186	
		Width		mm		928										
		Depth		mm		2,432		2,264			2,432					
Weight	Unit			kg		519	608	728	770	808	838	880	930	941	1,090	1,203
	Operation weight			kg		558	654	782	830	873	908	995	1,019	1,031	1,202	1,334
Water heat exchanger - evaporator	Type					Plate heat exchanger										
	Water volume			l		6	8		10	12	13	15	17		27	34
	Water 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
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.	°CDB		-8										
			Max.	°CDB		15										
	Condenser	Cooling	Min.	°CDB		25										
			Max.	°CDB		55										
Refrigerant	Type					R-410A										
	GWP					2,087.5										
	Circuits	Quantity				1										
Refrigerant charge	Per circuit			kg		9.0		10.0		13.0	11.0	13.0	15.0		19.0	
				TCO_2eq		18.8		20.9		27.1	23.0	27.1	31.3		39.7	
Piping connections	Evaporator water inlet/outlet (OD)					1" 1/2		2" 1/2							3"	
	Condenser water inlet/outlet (OD)					1" 1/2		2" 1/2							3"	
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
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/400										

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
- 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

EWWQ-G-SS

MicroTech III

Cooling only					EWWQ-G-SS	090	100	120	130	150	170	190	210	240	300	360
Cooling capacity	Nom.				kW	93.7	106	119	136	150	172	194	221	246	314	370
Heating capacity	Nom.				kW	118	133	150	169	187	215	244	276	310.00	396	468
Power input	Cooling	Nom.			kW	21.3	24.0	26.9	30.5	33.9	38.9	43.8	50.7	56.1	70.2	84.0
	Heating	Nom.			kW	25.7	29.2	32.9	37.2	41.4	47.6	53.7	61.3	68.3	85.6	103
Capacity control	Method					Step										
	Minimum capacity				%	50.0	43.0	50.0	44.0	50.0	45.0	50.0	43.0	50.0	40.0	50.0
EER						4.40		4.42	4.46		4.42		4.35	4.39	4.48	4.41
COP						4.58	4.56	4.55		4.53	4.52	4.54	4.50	4.54	4.62	4.56
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	6.30	6.31	6.10	6.28	6.16
Space heating	Average climate water outlet 35°C	General	η_s (Seasonal space heating efficiency)		%	163		165		168		167	164	162	166	-
			SCOP			4.28		4.33	4.40	4.39	4.40	4.38	4.29	4.25	4.34	-
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	555	652	782	821	859	901	946	1,010	1,023	1,195	1,311
Water heat exchanger - evaporator	Type					Plate heat exchanger										
	Water volume				l	6	8		10	12	13	15	17		27	34
	Water pressure drop	Cooling	Nom.		kPa	49		39	33		35	37	34	42	47	
		Heating	Nom.		kPa	47		38	31		33	35	32	41	46	
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.		°CDB	-10										
			Max.		°CDB	15										
	Condenser	Cooling	Min.		°CDB	25										
			Max.		°CDB	55										
Refrigerant	Type					R-410A										
	GWP					2,087.5										
	Circuits	Quantity				1										
Refrigerant charge	Per circuit				kg	10.0		11.0		12.0		15.0	16.0	17.0	19.0	20.0
					TCO_2eq	20.9		23.0		25.1		31.3	33.4	35.5	39.7	41.8
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
- Heat pump version available
- Compact design to allow easy indoor installation or retrofit operations
- High efficiency and reliable scroll compressor
- Stainless steel plate heat exchanger
- High flexibility for a wide variety of applications
- Allows sequencing control (up to 4 units) without any external device
- Pump (low 100 kPa and high 200 kPa lift) available for evaporator and condenser
- MicroTech III controller with superior control logic and easy interface

EWWQ-L-SS MicroTech III

Heating only & Cooling only					EWWQ-L-SS	180	205	230	260	290	330	380	430	480	540	600	660	720
Cooling capacity	Nom.				kW	187	215	244	273	303	345	387	430	476	549	611	663	721
Heating capacity	Nom.				kW	234	269	305	339	377	430	486	537	601	692	773	843	917
Power input	Cooling	Nom.			kW	41.7	47.3	53.1	60.2	67.1	77.1	87.0	97.9	110	124	140	154	167
	Heating	Nom.			kW	50.5	57.5	65.0	73.6	82.0	94.4	107	118	133	150	171	188	204
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						4.49	4.55	4.60	4.53	4.52	4.47	4.45	4.39	4.34	4.44	4.37	4.31	4.32
COP						4.64	4.67	4.68	4.60		4.56	4.55	4.54	4.51	4.60	4.53	4.48	4.49
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	6.20	6.18
Space heating	Average climate water outlet 35°C	General	η_s (Seasonal space heating efficiency)		%	172	171	173	170		-							
			SCOP			4.08		4.14	4.24	4.23	-							
Dimensions	Unit	Height			mm	1,970									2,090	2,210		
		Width			mm	928												
		Depth			mm	2,801												
Weight	Unit				kg	877	1,062	1,285	1,347	1,439	1,498	1,559	1,673	1,722	1,842	1,926	2,105	2,229
	Operation weight				kg	957	1,156	1,401	1,469	1,575	1,641	1,723	1,851	1,918	2,044	2,145	2,346	2,405
Water heat exchanger - evaporator	Type					Plate heat exchanger												
	Water volume				l	35	41	53		65		76	92			115		
	Water pressure drop	Cooling	Nom.		kPa	28		23	28	25	32		33	40	51	50	59	69
		Heating	Nom.		kPa	27		22	27	24	31			39	50	48	58	68
Compressor	Type					Scroll compressor												
	Quantity					4												
Sound power level	Cooling	Nom.			dBA	83	86	88	90	91			93	95		96		
Sound pressure level	Cooling	Nom.			dBA	65	68	70	72	74		73	76	77		78		
Operation range	Evaporator	Cooling	Min.		°CDB	-10												
			Max.		°CDB	15												
	Condenser	Cooling	Min.		°CDB	25												
			Max.		°CDB	55												
Refrigerant	Type					R-410A												
	GWP					2,087.5												
	Circuits	Quantity				2												
Refrigerant charge	Per circuit				kg	10.0		11.0		12.0		15.0	16.0	17.0		19.0	20.0	
					TCO_2eq	20.9		23.0		25.1		31.3	33.4	35.5		39.7	41.8	
Piping connections	Evaporator water inlet/outlet (OD)					3"												
	Condenser water inlet/outlet (OD)					1" 1/2		2" 1/2							3"			
Unit	Starting current	Max			A	263	320	333	388	403	456	484	597	626	785	822	860	898
	Running current	Cooling	Nom.		A	83	89	96	109	121	137	151	171	189	210	236	260	284
		Max			A	118	131	144	160	175	205	232	262	290	328	366	403	441
Power supply	Phase/Frequency/Voltage				Hz/V	3~/50/400												

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

Dual compressor & dual circuit unit

1,200 kW - 2,100 kW

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

VZ CHILLER SERIES

Full inverter water cooled chiller

INVERTER

New condenser design with integral oil separator

High efficient flooded heat exchangers

Highest efficiency in the market in its category

TOP CLASS EFFICIENCY

Unique Daikin single screw compressor technology

UNIQUE SOLUTION

Why choose EWWD-VZ chiller series?

1 **Top class efficiency: 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

YouTube
www.youtube.com/
DaikinEurope

Marketing material

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

Product profile

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

Water cooled screw inverter chiller, standard efficiency, standard sound

- 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

Cooling only/Heating only				EWWD-VZSS	600	700	760	890	C10
Cooling capacity	Nom.			kW	609.9	704.1	756.5	894.2	1,039
Heating capacity	Nom.			kW	756.7	877.8	943.2	1,107	1,292
Power input	Cooling	Nom.		kW	110	132	142	162	196
	Heating	Nom.		kW	140	166	179	201	244
Capacity control	Method				Stepless				
	Minimum capacity			%	20				
EER					5.51	5.31		5.52	5.28
COP					5.42	5.27	5.28	5.5	5.3
ESEER					7.62	7.50	7.63	7.54	7.52
IPLV					9.08	9.27	9.20	9.22	9.40
Dimensions	Unit	Height		mm	2,120			2,290	2,480
		Width		mm	1,180			1,240	1,340
		Depth		mm	3,460	3,690			3,830
Weight	Unit			kg	2,892	2,928	2,941	3,451	4,237
	Operation weight			kg	2,977	3,033	3,053	3,611	4,488
Water heat exchanger - evaporator	Type				Flooded single pass shell and tube				
	Water volume			l	88		96	134	156
	Water flow rate	Cooling	Nom.	l/s	29.3	33.8	36.3	42.9	49.9
		Heating	Nom.	l/s	29.6	34.2	36.7	43.5	50.4
	Water pressure drop	Cooling	Nom.	kPa	80.0	106	89.0	98.0	104
		Heating	Nom.	kPa	82	108	90	100	106
Water heat exchanger - condenser	Type				Single pass shell and tube				
	Water volume			l	81	102		126	217
	Water flow rate	Cooling	Nom.	l/s	34.5	40.2	43.1	50.7	59.4
		Heating	Nom.	l/s	36.46	42.33	45.47	53.38	62.35
	Water pressure drop	Cooling	Nom.	kPa	31	29	32	30	33.0
		Heating	Nom.	kPa	60	44	51	48	36
Compressor	Type				Inverter driven single screw compressor				
	Quantity				1				
Sound power level	Cooling	Nom.		dBA	101	105			108
Sound pressure level	Cooling	Nom.		dBA	82	86			89
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-3~20				
	Condenser	Cooling	Min.~Max.	°CDB	16~63				
Refrigerant	Type / GWP				R-134a / 1,430				
	Circuits	Quantity			1				
Refrigerant charge	Per circuit			kg	100	110		170	180
				TCO_2eq	143	157		243	257
Piping connections	Evaporator water inlet/outlet			mm	141.3			168.3	219.1
	Condenser water inlet/outlet			mm	168.3			219.1	
Unit	Starting current	Max		A	179	214	245	295	344
	Running current	Cooling	Nom.	A	171	202	220	249	300
		Max		A	256	306	350	421	491
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400				

Water cooled screw inverter chiller, high efficiency, standard sound

- High 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-VZXS MicroTech III

Cooling only/Heating only				EWWD-VZXS	450	500	610	710	800	900	C11
Cooling capacity	Nom.			kW	448.8	500.5	612.8	713	793.5	901.2	1,053
Heating capacity	Nom.			kW	553	617.2	756.7	882.2	984.6	1,110	1,302
Power input	Cooling	Nom.		kW	81.1	89.6	108	128	146	158	192
	Heating	Nom.		kW	102	112	138	163	185	199	240
Capacity control	Method				Stepless						
	Minimum capacity			%	20						
EER					5.53	5.58	5.64	5.54	5.43	5.67	5.46
COP					5.45	5.49	5.48	5.42	5.33	5.58	5.43
ESEER					7.51	7.92	8.10	8.20	8.22	7.92	8.17
IPLV					9.42	9.59	9.52	9.66	9.64	9.48	9.58
Dimensions	Unit	Height		mm	2,090	2,120		2,230	2,290	2,480	
		Width		mm	1,180			1,220	1,240	1,340	
		Depth		mm	3,460		3,690			3,830	
Weight	Unit			kg	2,968	2,911	3,102	3,470	3,451	4,257	4,552
	Operation weight			kg	3,098	3,006	3,274	3,648	3,611	4,518	4,860
Water heat exchanger - evaporator	Type				Flooded single pass shell and tube						
	Water volume			l	70	88	136	134		168	199
	Water flow rate	Cooling	Nom.	l/s	21.6	24.0	29.4	34.2	38.0	43.2	50.4
		Heating	Nom.	l/s	21.7	24.2	29.7	34.5	38.4	43.7	50.9
	Water pressure drop	Cooling	Nom.	kPa	89.0	63.0	59.0	63.0	55.0	67.0	58.0
		Heating	Nom.	kPa	90	64	60	64	56	68	59
Water heat exchanger - condenser	Type				Single pass shell and tube						
	Water volume			l	81	92	126	145	126	217	241
	Water flow rate	Cooling	Nom.	l/s	25.4	28.3	34.7	40.4	45.2	50.9	59.9
		Heating	Nom.	l/s	26.68	29.78	36.53	42.6	47.53	53.59	62.85
	Water pressure drop	Cooling	Nom.	kPa	31.0	28.0	22.0	20.0	24.0	25.0	
		Heating	Nom.	kPa	34	31	24	22	27	28	27
Compressor	Type				Inverter driven single screw compressor						
	Quantity				1						
Sound power level	Cooling	Nom.		dBA	97	99	101	105			108
Sound pressure level	Cooling	Nom.		dBA	78	80	82	86			89
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-3~20						
	Condenser	Cooling	Min.~Max.	°CDB	16~65						
Refrigerant	Type / GWP				R-134a / 1,430						
	Circuits	Quantity			1						
Refrigerant charge	Per circuit			kg	95		100	110	170		180
				TCO_2eq	136		143	157	243		257
Piping connections	Evaporator water inlet/outlet			mm	141.3			168.3		219.1	
	Condenser water inlet/outlet			mm	168.3		219.1				
Unit	Starting current	Max		A	155	173	179	214	256	295	344
	Running current	Cooling	Nom.	A	126	140	171	201	229	249	299
		Max		A	222	247	256	306	366	421	491
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400						

Water cooled screw inverter chiller, premium efficiency, standard sound

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

EWWD-VZPS MicroTech III

Cooling only/Heating only				EWWD-VZPS	505	715	910
Cooling capacity	Nom.			kW	504.9	717.7	908.1
Heating capacity	Nom.			kW	619.7	885.3	1,115
Power input	Cooling	Nom.		kW	87.5	126	156
	Heating	Nom.		kW	110	161	196
Capacity control	Method				Stepless		
	Minimum capacity			%	20		
EER					5.77	5.66	5.81
COP					5.62	5.49	5.68
ESEER					8.15	8.48	8.25
IPLV					9.61	9.68	9.57
Dimensions	Unit	Height		mm	2,090	2,430	2,480
		Width		mm	1,180	1,330	1,340
		Depth		mm	3,690		3,830
Weight	Unit			kg	3,247	4,082	4,346
	Operation weight			kg	3,375	4,349	4,660
Water heat exchanger - evaporator	Type				Flooded single pass shell and tube		
	Water volume			l	96	168	199
	Water flow rate	Cooling	Nom.	l/s	24.2	34.4	43.5
		Heating	Nom.	l/s	24.4	34.7	44
	Water pressure drop	Cooling	Nom.	kPa	55.0	42.0	44.0
		Heating	Nom.	kPa	56	43	45
Water heat exchanger - condenser	Type				Single pass shell and tube		
	Water volume			l	126	217	241
	Water flow rate	Cooling	Nom.	l/s	28.5	40.6	51.2
		Heating	Nom.	l/s	29.93	42.76	53.83
	Water pressure drop	Cooling	Nom.	kPa	15.0	17.0	19.0
		Heating	Nom.	kPa	17	18	21
Compressor	Type				Inverter driven single screw compressor		
	Quantity				1		
Sound power level	Cooling	Nom.		dBA	99	105	
Sound pressure level	Cooling	Nom.		dBA	80	86	
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-3~20		
	Condenser	Cooling	Min.~Max.	°CDB	16~65		
Refrigerant	Type / GWP				R-134a / 1,430		
	Circuits	Quantity			1		
Refrigerant charge	Per circuit			kg	100	150	180
				TCO_2eq	143	215	257
Piping connections	Evaporator water inlet/outlet			mm	141.3	219.1	
	Condenser water inlet/outlet			mm	219.1		
Unit	Starting current	Max		A	173	214	295
	Running current	Cooling	Nom.	A	138	200	247
		Max		A	247	306	421
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400		

Water cooled screw chiller, standard efficiency, standard sound

› Stepless single-screw compressor
› **one, two or three** truly independent **refrigerant circuits**
› Standard electronic expansion valve
› DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
› Partial and total heat recovery option available
› MicroTech III controller with superior control logic and easy interface

Heating only & Cooling only				**EWWD-I-SS**	**340**	**400**	**460**	**550**	**650**	**700**	**800**	**850**	**900**	**950**	**C10**	**C12**	**C13**	**C14**	**C15**	**C16**	**C17**	**C18**
Cooling capacity	Nom.			kW	332	392	458	536	637	703	779	841	907	982	1,024	1,151	1,200	1,270	1,341	1,395	1,449	1,503
Heating capacity	Nom.			kW	405	481	562	660	783	863	955	1,032	1,112	1,207	1,267	1,412	1,475	1,560	1,648	1,721	1,793	1,866
Power input	Cooling	Nom.		kW	73.5	88.6	104	124	146	160	176	191	205	225	243	262	275	290	307	325	344	363
	Heating	Nom.		kW	73.5	88.6	104	124	146	160	176	191	205	225	243	262	275	290	307	325	344	363
Capacity control	Method				Stepless																	
	Minimum capacity			%	25.0				12.5							8.3						
EER					4.51	4.43	4.39	4.31	4.37	4.38	4.41	4.40	4.42	4.37	4.22	4.40	4.36	4.38	4.37	4.29	4.21	4.14
COP					5.51	5.43	5.39	5.31	5.37	5.38	5.41	5.40	5.42	5.37	5.22	5.40	5.36	5.38	5.37	5.29	5.21	5.14
ESEER					4.55	4.46	4.44	4.37	4.99	5.18	5.00	5.13	4.92	5.05	4.82	4.96	5.00		4.99	5.00	4.91	4.79
IPLV					5.41	5.28	5.26	5.19	5.83	6.27	5.81	6.16	5.76	5.90	5.64	5.71	5.74	5.76	5.74		5.65	5.45
Dimensions	Unit	Height	mm		1,821				2,103							2,323						
		Width	mm		1,466				1,350							2,130						
		Depth	mm		3,298				4,116							4,439						
Weight	Unit		kg		2,150	2,160	2,179	2,224	3,909	3,927	3,945	3,971	3,996	4,080	4,092	6,079	6,097	6,136	6,174	6,192	6,210	6,228
	Operation weight		kg		2,380	2,396	2,410	2,457	4,217	4,228	4,243	4,262	4,288	4,369	4,386	6,628	6,646	6,670	6,699	6,717	6,735	6,761
Water heat exchanger - evaporator	Type				Single pass shell and tube																	
	Water volume		l		193		183	172	271	263	256	248	241	233		472	504	489	472			
Compressor	Type				Single screw compressor																	
	Quantity				1				2							3						
Sound power level	Cooling	Nom.	dBA		94	97			98	99	100					101			103			
Sound pressure level	Cooling	Nom.	dBA		75	76	78		79	80	81					80	81		83			
Operation range	Evaporator	Cooling			1				2							3						
Refrigerant	Type				R-134a																	
	GWP				1,430																	
Refrigerant charge	Per circuit		kg		54.0	52.0	60.0	55.0	60.0	75.0	55.0		50.0			52.0	51.7	51.3	51.0	50.7	50.3	58.0
			TCO_2eq		77.2	74.4	85.8	78.7	85.8	107.3	78.7		71.5			74.4	73.9	73.4	72.9	72.5	72.0	82.9
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm											219.1mm						
	Condenser water inlet/outlet (OD)				5"																	
Unit	Starting current	Max		A	330	464			493	627	650	681		703		836	867	898		920	942	
	Running current	Cooling	Nom.	A	119	145	166	196	236	262	288	310	329	355	382	431	450	470	493	520	547	574
		Max		A	204	233	271	299	407	436	465	504	542	570	597	698	737	775	814	841	868	896
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																	

Water cooled screw chiller, high efficiency, standard sound

EWWD-I-SS/XS

MicroTech III

Heating only & Cooling only				EWWD-I-XS	360	440	500	600	750	800	850	950	C10	C11	C12
Cooling capacity	Nom.			kW	360	431	504	570	717	791	863	929	971	1,035	1,130
Heating capacity	Nom.			kW	435	520	608	697	865	995	1,040	1,122	1,180	1,263	1,380
Power input	Cooling	Nom.		kW	74.5	89.5	104	127	148	163	178	193	208	228	250
	Heating	Nom.		kW	74.5	89.5	104	127	148	163	178	193	208	228	250
Capacity control	Method				Stepless										
	Minimum capacity			%	25.0				12.5						
EER					4.83	4.82		4.50	4.85	4.84	4.85	4.81	4.66	4.53	4.51
COP					5.83	5.82		5.50	5.85	5.84	5.85	5.81	5.66	5.53	5.51
ESEER					4.81	4.74	4.70	4.60	5.52	5.68	5.41	5.53	5.31	5.45	5.10
IPLV					5.72	5.63	5.57	5.47	6.45	6.89	6.33	6.63	6.19	6.35	5.97
Dimensions	Unit	Height		mm	1,883				2,245						
		Width		mm	1,430				1,350						
		Depth		mm	4,012				4,782						
Weight	Unit			kg	2,594	2,667	2,704		4,964	4,997	5,049	5,073	5,097	5,132	
	Operation weight			kg	2,998	3,078	3,116		5,582	5,615	5,671	5,695	5,729	5,741	
Water heat exchanger - evaporator	Type				Single pass shell and tube										
	Water volume			l	326	317	308		539			528		504	
	Water pressure drop	Cooling	Nom.	kPa	64		54	68	58	68	56	64	72	46	52
		Heating	Nom.	kPa	64		54	68	58	68	56	64	72	46	52
Compressor	Type				Single screw compressor										
	Quantity				1				2						
Sound power level	Cooling	Nom.		dBA	94	97					98	99	100		
Sound pressure level	Cooling	Nom.		dBA	75	76	78				79	80	81		
Operation range	Evaporator	Cooling	Min.	°CDB	-8										
			Max.	°CDB	15										
	Condenser	Cooling	Min.	°CDB	20										
			Max.	°CDB	55										
Refrigerant	Type				R-134a										
	GWP				1,430										
	Circuits	Quantity			1				2						
Refrigerant charge	Per circuit			kg	100.0	87.0	130.0	105.0	90.0	88.5	87.0	86.0	85.0		
				TCO_2eq	143.0	124.4	185.9	150.2	128.7	126.6	124.4	123.0	121.6		
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm				219.1mm						
	Condenser water inlet/outlet (OD)				5"										
Unit	Starting current	Max		A	330	464			493	627	650	681		703	
	Running current	Cooling	Nom.	A	117	144	164	194	235	261	287	307	327	358	388
		Max		A	204	233	271	299	407	436	465	504	542	570	597
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

Heating only & Cooling only				EWWD-J-SS	120	140	150	180	210	250	280	310	330	360	380	400	450	500	530	560
Cooling capacity	Nom.			kW	120	146	154	177	207	255	284	309	333	356	385	415	463	512	540	568
Heating capacity	Nom.			kW	148	180	194	223	258	315	354	388	417	446	486	515	573	631	669	709
Power input	Cooling	Nom.		kW	28.0	34.0	39.5	45.3	50.4	59.9	70.0	78.8	84.6	90.3	101		110	120	130	140
	Heating	Nom.		kW	28.0	34.0	39.5	45.3	50.4	59.9	70.0	78.8	84.6	90.3	101		110	120	130	140
Capacity control	Method				Stepless															
	Minimum capacity			%	25.0							12.5								
EER					4.28	4.29	3.90	3.91	4.11	4.26	4.06	3.92	3.94		3.82	4.12	4.20	4.28	4.16	4.05
COP					5.28	5.29	4.90	4.91	5.11	5.26	5.06	4.92	4.94		4.82	5.12	5.20	5.28	5.16	5.05
ESEER					4.51	4.20			4.28	4.68	4.01	4.32	4.35	4.50	4.31	4.65	4.74	4.83	4.73	4.33
IPLV					5.18	5.06		5.05	5.16	5.70	4.88	5.06	5.13	5.29	5.03	5.48	5.59	5.71	5.55	5.09
Space heating	Average climate water outlet 35°C	General	ηs (Seasonal space heating efficiency)	%	168	166	158		162	170	160	154	-							
			SCOP		4.40	4.34	4.14	4.15	4.24	4.46	4.21	4.04	-							
Dimensions	Unit	Height		mm	1,020							2,000								
		Width		mm	913															
		Depth		mm	2,684															
Weight	Unit			kg	1,177	1,233	1,334	1,366	1,416	1,600	1,607	2,668	2,700	2,732	2,782	2,832	3,016	3,200	3,207	3,215
	Operation weight			kg	1,211	1,276	1,378	1,415	1,473	1,663	1,675	2,755	2,792	2,830	2,888	2,946	3,136	3,327	3,338	3,350
Water heat exchanger - evaporator	Type				Plate heat exchanger															
	Water volume			l	14	18	14	17	20	26		29	31	33	37	41	46	52		
	Water pressure drop	Cooling	Nom.	kPa	15	14	43	40	35	28	34	43	40		37	35	31	28	31	34
		Heating	Nom.	kPa	15	14	43	40	35	28	34	43	40		37	35	31	28	31	34
Compressor	Type				Single screw compressor															
	Quantity				1							2								
Sound power level	Cooling	Nom.		dBA	89							94								
Sound pressure level	Cooling	Nom.		dBA	79							82								
Operation range	Evaporator	Cooling	Min.	°CDB	-10															
			Max.	°CDB	15															
	Condenser	Cooling	Min.	°CDB	23															
			Max.	°CDB	60															
Refrigerant	Type				R-134a															
	GWP				1,430															
	Circuits	Quantity			1							2								
Refrigerant charge	Per circuit			kg	18.0	35.0	34.0	37.0		38.0		33.0	33.5	34.0	35.0	36.0	37.0	38.0		
				TCO_2eq	25.7	50.1	48.6	52.9		54.3		47.2	47.9	48.6	50.1	51.5	52.9	54.3		
Piping connections	Evaporator water inlet/outlet			mm	76.2															
	Condenser water inlet/outlet (OD)				2" 1/2	4"														
Unit	Starting current	Max		A	151		195			288		281	293		310		403	422	440	
	Running current	Cooling	Nom.	A	48	57	67	74	83	97	109	134	141	149	157	165	180	195	206	218
		Max		A	76	97	107	122	143	167	189	215	230	245	265	286	311	335	357	378
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

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

Cooling only				EWWD-FZXS	320	430	520	640	860	C10
Cooling capacity	Min.			kW	113	133	170	113	133	169
	Max.			kW	316	439	520	639	887	1,054
Power input	Cooling	Min.		kW	20.6	25.5	32.7	20.5	25.5	32.6
		Max.		kW	65.1	90.4	106	129	179	208
Capacity control	Method				Stepless					
EER					4.85	4.86	4.93	4.97	4.95	5.06
ESEER					8.11	8.39	8.66	8.83	8.52	8.88
IPLV					9.25	9.64	9.89	9.50	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	3,401
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				Flooded shell and tube					
	Water volume			l	78	107	134	184	210	302
	Water flow rate	Nom.		l/s	15.1	21.0	24.9	30.6	42.4	50.4
	Water pressure drop	Cooling	Nom.	kPa	30	32	33	35	33	31
Water heat exchanger - condenser	Type				Flooded shell and tube					
	Water flow rate	Nom.		l/s	18.3	25.5	30.1	36.9	51.3	60.7
	Water pressure drop	Cooling	Nom.	kPa	24	26	29	23	32	29
Compressor	Type				Oil free centrifugal compressor					
	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					
	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	Maximum starting current			A	2					
	Nominal running current (RLA)		Cooling	A	104	142	168	207	285	335
	Maximum running current			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

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

DWSC-DWDC

MicroTech II

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

* not Eurovent certified

Options - Water cooled chillers

Description	Code	EWWQ-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

(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: EWWDC12I-SS - EWWDC18I-SS (10) Forklift loading-unloading operations are not allowed when option 01 is selected for model sizes as follows: EWWDC12I-SS - EWWDC18I-SS - (11) Special Transport is required (flat rack truck and open top) for model sizes as follows: EWLDC10I-SS - EWLDC17I-SS or EWWQC11B-SS - EWWQC20B-SS or EWWQC10B-XS, EWWQC12B-XS - EWWQC21B-XS - (12) Forklift loading-unloading operations are not allowed for model sizes as follows: EWLDC10I-SS - EWLDC17I-SS or EWWQC11B-SS - EWWQC20B-SS or EWWQC10B-XS, EWWQC12B-XS - EWWQC21B-XS - (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	EWWQ-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
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										
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 EWWD~FZ	Water-cooled chillers									Centrifugals
Panels	EWWP~KB EWLP~KB	EWWQ~KB	EWLQ~KB	EW_Q-G EW_Q_-L	EWWD~G- EWLD~G-	EWWD~I- EWLD~I-	EWWD~J- EWLD~J-	EWWQ~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)										●
EKTSMS Temperature sensor for master/slave configuration				●						
EKRUMCL1 User Interface										

	Water-cooled chillers									Centrifugals
Serial Cards & Communication Modules	EWWP~KB EWLP~KB	EWWQ~KB	EWLQ~KB	EW_Q-G EW_Q_-L	EWWD~G- EWLD~G-	EWWD~I- EWLD~I-	EWWD~J- EWLD~J-	EWWQ~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				●	●	●	●	●	●	
EKCMLON LON communication module				●	●	●	●	●	●	
EKCMBACMSTP BACnet/MSTP communication module				●	●	●	●	●	●	
EKCMBACIP BACnet/IP communication module				●	●	●	●	●	●	
EKACPG Communication cards										

	Water-cooled chillers									Centrifugals
Other Systems & Accessories	EWWP~KB EWLP~KB	EWWQ~KB	EWLQ~KB	EW_Q-G EW_Q_-L	EWWD~G- EWLD~G-	EWWD~I- EWLD~I-	EWWD~J- EWLD~J-	EWWQ~B-	EWWD~VZ A	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				●	●	●	●	●	●	
EKPWPROEXT PlantWatchPro I/O extension module for hardwiring and retrofit										●
EKGWWEB Gateway web (Ethernet LAN SNMP)										●
EKGWMODEM Gateway for modem										●
EKRUPG Remote user interface										
EKGN210 European Kit Grouved Nipple (for sizes 080-210)										
EKGN260 European Kit Grouved Nipple (for sizes 230-260)										
EKSS Soft Starter kit 5/8/10/12 Hp-units										
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		●								
EKRP1HB (f) Digital input/output PCB (remote alarm and ON/OFF signalisation										
EKRP1AHT Digital input/output PCB										
EKRUAHTB Remote user interface										
DTA104A62 External control adapter										
BHGP26A1 Digital pressure gauge kit										
EKQDP2M016 (h) Differential Pressure Sensor 4-20 mA 0-160 kPa				●	●	●	●	●	●	●
EKQDP2M020 (h) Differential Pressure Sensor 4-20 mA 0-250 kPa				●	●	●	●	●	●	●
EKQDP2M040 (h) Differential Pressure Sensor 4-20 mA 0-400 kPa				●	●	●	●	●	●	●
EKQDP2M060 (h) Differential Pressure Sensor 4-20 mA 0-600 kPa				●	●	●	●	●	●	●

Notes:
(a) Price does not include commissioning of panel; if commissioning is required please refer to RN17-041
(b) iCM panels work in cooling mode only; heat pump versions and total heat recovery options on A/C and W/C chillers are not compatible
(c) in case you are ordering iCM panels please contact factory
(d) For 45/55/65 Hp-units 2 pieces are needed
(e) Only available for modulare units (EWWP~KAW1M)
((f) For 009/010/011/013 units (price available in SAP system)
(g) Price available in SAP system
(h) Differential pressure sensor are specific for iCM panels in variable primary flow management

Table of content

Condenserless chiller

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

Condenserless scroll chiller

- One of the most **compact units** on the market: 600mmx600mmx600mm
- Daikin scroll compressor
- Electronic DDC controller
- Low operating sound level
- Low energy consumption
- Low refrigerant volume
- Easy installation and maintenance
- Stainless steel plate heat exchanger
- Compatible with hydraulic module EHMC
- Standard integrated: main switch, pressure ports, flow switch, filter, shut-off valves and air purge
- Advanced µC²SE controller for direct connection to a Modbus based BMS or to a remote user interface.

EWLP012-030KBW1N

µC²SE

Cooling only				**EWLP-KBW1N**	**012**	**020**	**026**	**030**	**040**	**055**	**065**
Cooling capacity	Nom.			kW	12.1	20.0	26.8	31.2	40.0	53.7	62.4
Power input	Cooling	Nom.		kW	4.2	6.6	8.5	10.1	13.4	17.8	20.3
Capacity steps number					1				2		
EER					2.88	3.03	3.15	3.09	2.99	3.02	3.07
Dimensions	Unit	HeightxWidthxDepth		mm	600x600x600				600x600x1,200		
Weight	Unit			kg	108	141	147	151	252	265	274
Water heat exchanger - evaporator	Minimum water volume in the system			l	62	103	134	155	205	268	311
	Type				Brazed plate						
	Water flow rate	Min.		l/min	31	53	65	76	101	131	152
		Nom.		l/min	35	57	77	89	115	154	179
		Max.		l/min	69	115	154	179	229	308	357
	Model	Quantity			1						
Compressor	Type				Hermetically sealed scroll compressor						
	Quantity				1				2		
Sound power level	Cooling	Nom.		dBA	64			71	67		74
Operation range	Evaporator	Cooling	Min.~Max.	°CDB	-10~20						
	Condenser	Cooling	Min.~Max.	°CDB	25~60						
Refrigerant	Type / GWP				R-407C / 1,773.9						
	Control				Thermostatic expansion valve						
	Circuits	Quantity			1				2		
Piping connections	Evaporator water inlet/outlet (OD)				FBSP 25mm				FBSP 40mm		
	Evaporator water drain				Field installation						
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400						

Condenserless multi-scroll chiller, standard efficiency, standard sound

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

EWLQ-G-SS

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

Condenserless multi-scroll chiller, standard efficiency, standard sound

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

EWLQ-L-SS

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

Condenserless screw chiller, standard efficiency, standard sound

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

EWLD-J-SS

MicroTech III

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				Stepless															
	Minimum capacity			%	25.0							12.5								
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							2,000								
		Width		mm	913															
		Depth		mm	2,684															
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
	Water pressure drop	Cooling	Nom.	kPa	14	13	39	37	26	33	32	39	37		34	33	29	26	29	32
Compressor	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

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			%	25.0				12.5					
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

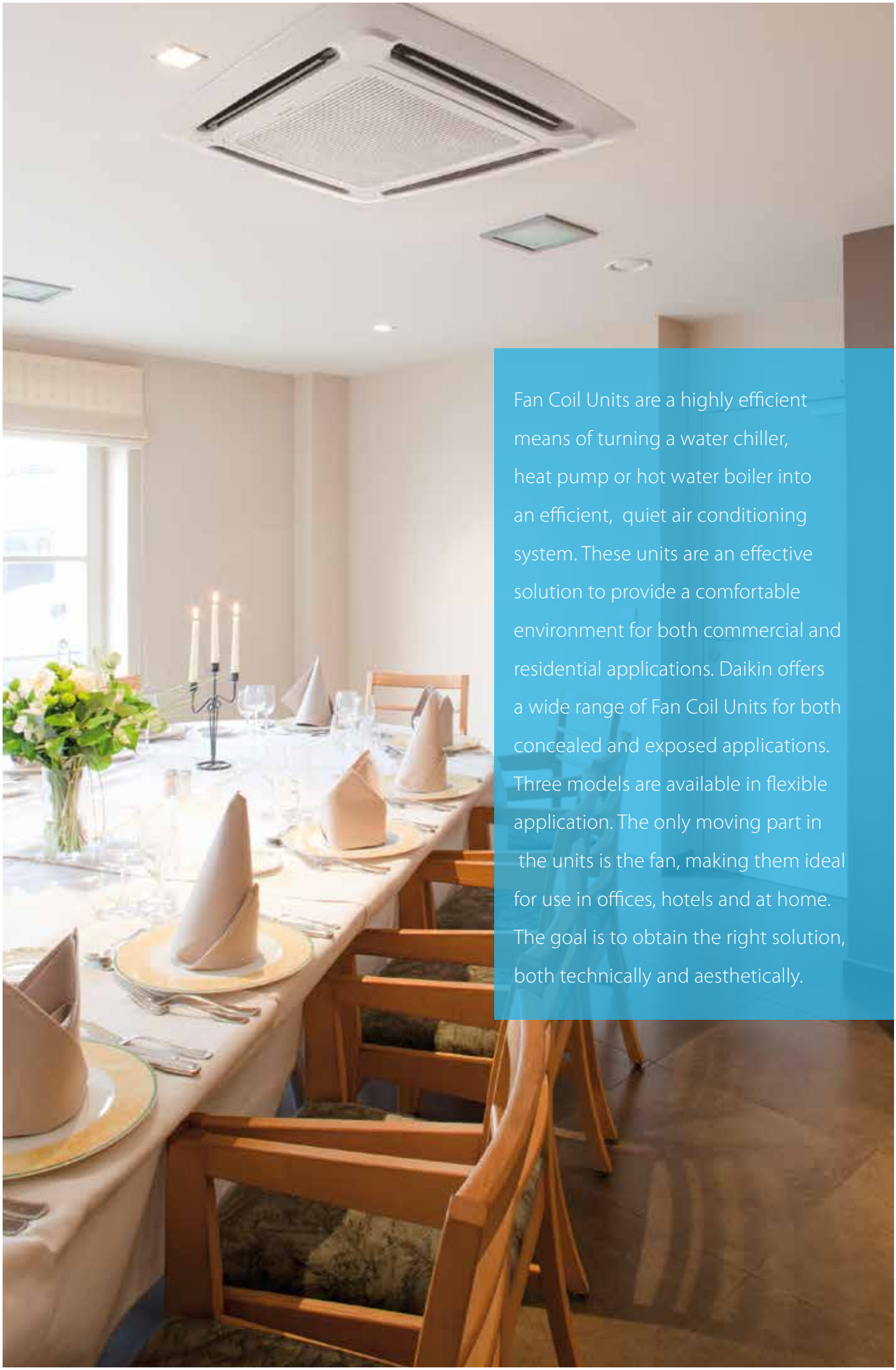
Cooling only				EWLD-I-SS	320	400	420	500	600	650	750	800	850	900	950	C10	C11	C12	C13	C14	C15	C16	C17
Cooling capacity	Nom.			kW	315	374	437	509	607	670	740	802	865	935	975	1,029	1,097	1,144	1,210	1,278	1,330	1,381	1,433
Power input	Cooling	Nom.		kW	80.3	96.0	113	134	160	175	192	208	224	246	264	283	286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

Options - Condenserless chillers

Options - Small condenserless chillers

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

(1) 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.

Table of content

Fan coil units

Fan coil units with BLDC motor

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

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

Why choose Daikin fan coil units?

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

Benefits for the installer

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

Benefits for the consultant

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

Benefits for the end user

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

Fan coil unit software

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

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

Payback tool

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

BLDC fan motors Video

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

Check on YouTube
www.youtube.com/DaikinEurope

Benefits of brushless inverter technology on fan coil units:

Higher efficiency than AC (Alternative Current) motor

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

High comfort level

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

Low sound levels

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

High flexibility level

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


FWN-AT/AF


FWG-AT/AF


FWR-AT/AF


FWS-AT/AF


FWC-BT/BF

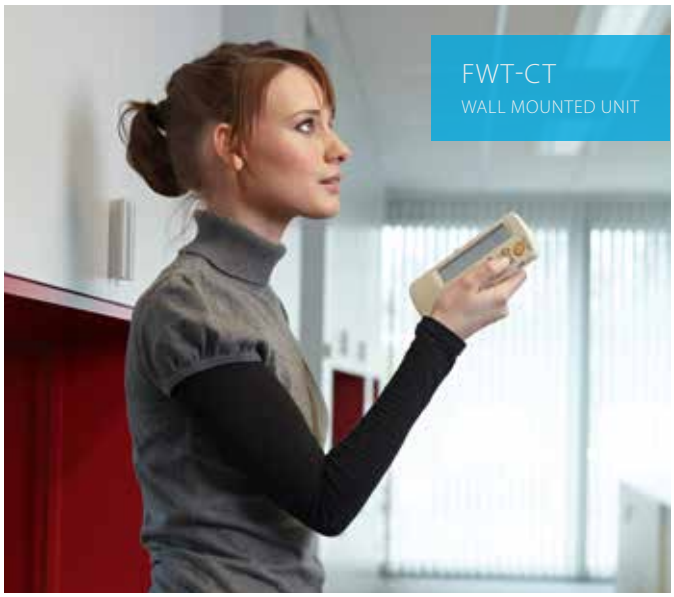

FWP-AT


FWZ-AT/AF

FWS-AT/AF
FLEXI TYPE UNIT

FWF-BT/BF
CEILING MOUNTED CASSETTE

FWC-BT/BF
CEILING MOUNTED CASSETTE


FWT-CT
WALL MOUNTED UNIT


FWR-AT/AF
FLOOR STANDING UNIT

Products overview

Type	Model	Product name		Fan motor type	2-pipe	4-pipe	Inverter	Capacity
Round flow cassette	**Round flow cassette** - 900 x 900 cassette - 360° air discharge ensures uniform air flow - Integrated fresh air intake - Easy installation in corners - Standard drain pump with 850 mm lift	FWC-BT/BF		BLDC	●	●	●	Cooling: 4.0 - 8.7 kW Heating: 5.5 -12.1 kW
4-way blow ceiling mounted cassette	**4-way blow ceiling mounted cassette** - 900 x 900 cassette - High efficiency, continuous air flow regulation and fan speed modulation - Reduced sound emissions - Easy installation and maintenance	FWG-AT/AF		BLDC	●	●	●	Cooling: 2.0~ 11.75 kW Heating: 3.3~ 15.65 kW
	4-way blow ceiling mounted cassette - 600 x 600 cassette - Integrated fresh air intake - Horizontal auto swing - Easy installation in corners - Standard drain pump with 750 mm lift	FWF-BT/BF		AC	●	●		Cooling: 1.4 - 5.2 kW Heating: 2.3 - 6.7 kW
	4-way blow ceiling mounted cassette - 600 x 600 cassette - Easy installation and maintenance - High power air flow - Standard drain pump with 700 mm lift	FWF-CT		AC	●			Cooling: 1.91 - 4.54 kW Heating: 2.64 - 5.28 kW
Floor standing units	**Floor standing unit** - For vertical mounting - Continuous air flow regulation and fan speed modulation - Up to 70% energy savings - Low sound levels	FWZ-AT/AF		BLDC	●	●	●	Cooling: 2.64 - 10.08 kW Heating: 2.46 - 11.18 kW
	Floor standing unit - For horizontal or vertical concealed mounting - Insulated valve packages, no extra drain pan required - Fast-on connections for electrical options: no tools needed - Easy maintenance	FWV-DAT/DAF		AC	●	●		Cooling: 1.46 -8.02 kW Heating: 1.90 - 10.03 kW
Flexi type units	**Flexi type unit** - **For horizontal or vertical mouting** - Continuous air flow regulation and fan speed modulation - Up to 70% energy savings - Low sound levels	FWR-AT/AF		BLDC	●	●	●	Cooling: 2.64 - 10.08 kW Heating: 2.46- 11.18 kW
	Flexi type unit - For horizontal or vertical concealed mounting - Insulated valve packages, no extra drain pan required - Fast-on connections for electrical options: no tools needed - Easy maintenance	FWL-DAT/DAF		AC	●	●		Cooling: 1.46 - 8.02 kW Heating: 1.90 - 10.03 kW
	Concealed flexi type unit - For horizontal or vertical concealed mounting - Continuous air flow regulation and fan speed modulation - Up to 70% energy savings - Low sound levels	FWS-AT/AF		BLDC	●	●	●	Cooling: 2.64 - 10.08 kW Heating: 2.46 - 11.18 kW
	Concealed flexi type unit - For horizontal or vertical concealed mounting - Insulated valve packages, no extra drain pan required - Fast-on connections for electrical options: no tools needed - Easy maintenance	FWM-DAT/DAF		AC	●	●		Cooling: 1.46 -8.02 kW Heating: 1.90 - 10.03 kW
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
Ducted units	**Ducted unit with low ESP** - For horizontal concealed mounting - Available static pressure up to 30 Pa - Easy installation and maintenance - 4-speed fan motor - High power air flow	FWE-CT/CF		AC	●	●		Cooling: 2.10 - 9.96 kW Heating: 2.3 - 13.00 kW
	Ducted unit with medium ESP - For horizontal concealed mounting - Instant adjustment to temperature and relative humidity changes - Available static pressure up to 70 Pa - Low sound levels	FWP-AT		BLDC	●		●	Cooling: 2.61 - 6.47 kW Heating: 5.47 - 12.28 kW
	Ducted unit with medium ESP - For horizontal concealed mounting - Available static pressure up to 60 Pa - 7-speed electrical motors (thermal protection on windings) - Easy maintenance	FWB-BT		AC	●			Cooling: 2.61 - 10.34 kW Heating: 5.47 - 18.78 kW
	Ducted unit with medium ESP - For horizontal or vertical concealed mounting - Avaiable static pressure up to 70 Pa - Easy maintenance	FWN-AT/AF		BLDC	●	●	●	Cooling: 2.83 - 8.75 kW Heating: 3.63 - 18.10 kW
	Ducted unit with high ESP - For horizontal or vertical concealed mounting - Available static pressure from 60 up to 145 Pa - Easy maintenance	FWD-AT/AF		AC	●	●		Cooling: 3.90 - 18.30 kW Heating: 4.05 - 21.92 kW

Capacity class

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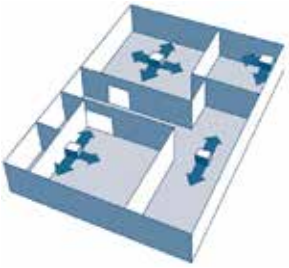
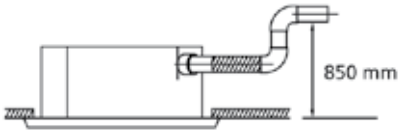
Round flow cassette

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

- 360° air discharge ensures uniform air flow and temperature distribution
- Modern style decoration panel in white (RAL9010)
- Optional fresh air intake
- Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- Possibility to shut 1 or 2 flaps for easy installation in corners



- Standard drain pump with 675mm lift increases flexibility and installation speed



FWC-BT/BF

BRC7E532F/533F

BRC315D7

			FWC-BT/BF	06	07	08	09	06	07	08	09
				2-pipe				4-pipe			
Cooling capacity (standard conditions)	Latent capacity	High	kW	1.3	1.4	1.5	1.6	1.7		1.8	1.9
	Sensible capacity	Low	kW	2.8	3.3	3.5	4.1	3.1	3.3	3.5	4.0
		Medium	kW	3.5	4.0	4.5	5.3	3.6	4.0	4.5	5.2
		High	kW	4.2	4.7	5.7	6.5	4.2	4.6	5.4	6.4
	Total capacity	Low	kW	3.9	4.5	4.8	5.4	4.3	4.6	4.8	5.7
		Medium	kW	4.7	5.3	5.9	6.8	5.1	5.6	6.2	6.9
		High	kW	5.5	6.1	7.2	8.1	5.9	6.3	7.2	8.3
Heating capacity (standard conditions)	Capacity	Low	kW	4.8	5.5	5.8	7.0	5.2	5.5	5.8	6.8
		Medium	kW	5.8	6.6	7.6	8.8	6.1	6.7	7.6	8.7
		High	kW	6.8	7.7	9.2	10.6	6.9	7.8	9.2	10.4
Power input			kW	0.034	0.037	0.039	0.045	0.035	0.038	0.040	0.046
			kW	0.040	0.046	0.058	0.076	0.041	0.047	0.059	0.077
			kW	0.045	0.054	0.077	0.107	0.046	0.055	0.077	0.107
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	Low	m^3/h	720	834	888	1,044	708	804	852	1,014
		Medium	m^3/h	894	1,038	1,200	1,410	864	1,002	1,164	1,374
		High	m^3/h	1,068	1,236	1,518	1,776	1,032	1,200	1,476	1,746
Total sound power level	Low		dBA	31.0	33.0	36.0	40.0	33.0	36.0		40.0
	Medium		dBA	36.0	39.0	44.0	49.0	36.0	39.0	44.0	49.0
	High		dBA	43.0	47.0	53.0	57.0	43.0	47.0	53.0	57.0
Sound pressure level	Low		dBA	21.0	22.0	24.0	28.0	21.0	22.0	24.0	28.0
	Medium		dBA	24.0	28.0	32.0	37.0	24.0	28.0	32.0	37.0
	High		dBA	29.0	33.0	39.0	43.0	29.0	33.0	39.0	43.0
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

FWG-AT/AF

BRC51A61

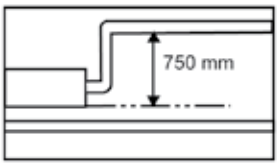
BRC52A61/62/63

				FWG-AT/AF	05	08	11	05	08	11
					2-pipe			4-pipe		
Cooling capacity (standard conditions)	Sensible capacity	Low	kW		2.53	4.23	5.50	2.23	3.78	4.86
		Medium	kW		3.42	5.36	6.89	2.97	4.80	5.98
		High	kW		4.47	6.34	8.25	3.81	5.66	7.05
	Total capacity	Low	kW		3.49	5.77	7.81	2.79	4.97	6.46
		Medium	kW		4.63	7.20	9.62	3.58	6.05	7.67
		High	kW		5.86	8.71	11.63	4.36	7.11	8.88
Heating capacity (standard conditions)		Low	kW		4.75	7.60	9.65	4.45	7.09	10.09
		Medium	kW		5.95	9.45	11.75	5.47	8.51	11.82
		High	kW		7.10	11.20	13.70	6.74	9.86	13.79
Power input	Low		kW		0.02	0.03	0.05	0.02	0.04	0.05
	Medium		kW		0.04	0.06	0.10	0.03	0.06	0.09
	High		kW		0.049	0.093	0.130	0.047	0.100	0.130
FCEER					B			A	B	
FCCOP					B		C	A	B	
Dimensions	Unit	Height x Width x Depth	mm		265 x 820 x 820		300 x 820 x 820	265 x 820 x 820	268 x 820 x 820	300 x 820 x 820
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 Height x Width x Depth	mm		85 x 990 x 990					
	Weight		kg		4.0					
Heat exchanger	Water volume		l		1	2		1	2	
Water flow	Cooling	Low	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
		High	l/h		1,030	1,530	2,040	770	1,250	1,570
	Heating	Low	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
		High	l/h		1,030	1,530	2,040	670	970	1,360
Fan	Type				Turbo fan					
	Quantity				1					
	Air flow rate	Low	m^3/h		595	951	1,155	595	951	1,155
		Medium	m^3/h		799	1,223	1,478	799	1,223	1,478
		High	m^3/h		1,053	1,512	1,801	1,053	1,512	1,801
Air filter	Type				Washable Saranet					
Total sound power level	Low		dBA		34	49		34	49	
	Medium		dBA		40	52	55	40	52	55
	High		dBA		46	57	59	46	57	59
Sound pressure level	Low		dBA		23	37	41	23	37	41
	Medium		dBA		31	42	46	31	42	46
	High		dBA		37	47	51	37	47	51
Piping connections	Drain	OD	mm		19					
Power supply	Phase/Frequency/Voltage		Hz/V		1N~/50/220-240					
Current input	Low		A		0.13	0.28	0.35	0.13	0.28	0.35
	Medium		A		0.19	0.43	0.55	0.19	0.43	0.55
	High		A		0.26	0.74	0.95	0.26	0.74	0.95

4-way blow ceiling mounted cassette

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

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



FWF-BT/BF

BRC7E530/531

BRC315D7

			FWF-BT/BF	02	03	04	05	02	03	04	05
				2-pipe				4-pipe			
Cooling capacity (standard conditions)	Latent capacity	High	kW	0.3	1.0	1.3	1.4	0.3	1.1	1.3	1.4
	Sensible capacity	Low	kW	1.0	1.4		1.8		1.0		1.6
		Medium	kW	1.2	1.7	2.0	2.7	1.2	1.5	1.9	2.5
		High	kW	1.4	2.0	2.7	3.5	1.5	1.8	2.5	3.2
	Total capacity	Low	kW	1.3	2.4		2.8	1.3	1.6		2.6
		Medium	kW	1.5	2.7	3.1	4.0	1.5	2.4	3.1	3.8
		High	kW	1.7	3.0	4.0	4.9	1.8	2.9	3.8	4.6
Heating capacity (standard conditions)	Capacity	Low	kW	1.9	2.7		3.0	2.4	2.6		3.2
		Medium	kW	2.1	2.9	3.5	4.4	2.9	3.1	3.7	4.7
		High	kW	2.4	3.3	4.5	5.6	3.3	3.6	4.7	5.7
Power input			kW	0.060		0.055	0.062	0.060	0.055		0.066
			kW	0.067		0.070	0.089	0.067	0.062	0.074	0.093
			kW	0.074		0.090	0.118	0.074		0.094	0.121
FCEER				22	40	44	45	22	33	34	40
FCCOP				32	45	49		41	48		49
Dimensions	Unit	HeightxWidthxDepth	mm	285 x575x575							
Weight	Unit		kg	19				20			
Fan	Type			Turbo fan							
	Quantity			1							
	Air flow rate	Low	m^3/h	300	318		420	318	300		390
		Medium	m^3/h	384	390	486	648	390	366	456	612
		High	m^3/h	456	468	660	876	468	438	618	822
Total sound power level	Low		dBA	36.0	38.0		42.0	36.0	38.0	41.0	44.0
	Medium		dBA	40.0		44.0	49.0	40.0	42.0	46.0	51.0
	High		dBA	44.0		50.0	55.0	44.0	46.0	52.0	57.0
Sound pressure level	Low		dBA	26.0			30.0	26.0	27.0		32.0
	Medium		dBA	27.0		33.0	39.0	27.0	29.0	35.0	41.0
	High		dBA	31.0		40.0	45.0	31.0	33.0	42.0	47.0
Piping connections	Drain	OD	mm	VP20 (External dia.26 / Internal dia. 20)							
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-440							

4-way blow ceiling mounted cassette

AC fan motor unit for ceiling mounting

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

FWF-CT

MERCA

WRC-HPC

				FWF-CT	02	03	04
					2-pipe		
Cooling capacity (standard conditions)	Sensible capacity	Low	kW		1.39	1.83	2.36
		Medium	kW		1.62	2.37	2.71
		High	kW		1.85	2.87	3.29
	Total capacity	Low	kW		1.86	2.73	3.30
		Medium	kW		2.15	3.46	3.74
		High	kW		2.43	4.04	4.46
Heating capacity (standard conditions)		Low	kW		2.08	2.18	2.91
		Medium	kW		2.50	3.08	3.40
		High	kW		3.03	3.88	4.37
Power input	Low		kW		0.05		0.07
	Medium		kW		0.05	0.06	0.07
	High		kW		0.063	0.064	0.079
FCEER					E	D	E
FCCOP						E	
Dimensions	Unit	Height x Width x Depth	mm			250 x 570 x 570	
Weight	Unit		kg		15.0	17.0	
	Operation weight		kg		19	21	
Decoration panel	Dimensions	Unit Height x Width x Depth	mm			45 x 460 x 460	
	Weight		kg			3.0	
Heat exchanger	Water volume		l		0	1	
Water flow	Cooling	Low	l/h		460	780	810
		Medium	l/h		460	780	810
		High	l/h		460	780	810
	Heating	Low	l/h		460	780	810
		Medium	l/h		460	780	810
		High	l/h		460	780	810
Fan	Type					Turbo fan	
	Quantity					1	
	Air flow rate	Low	m^3/h		391	374	476
		Medium	m^3/h		493	527	561
		High	m^3/h		646	680	748
Air filter	Type					Washable Saranet	
Total sound power level	Low		dBA		39	41	45
	Medium		dBA		45	47	49
	High		dBA		52	54	56
Sound pressure level	Low		dBA		29	30	36
	Medium		dBA		35	38	40
	High		dBA		42	45	48
Piping connections	Drain	OD	mm			19.05	
Power supply	Phase/Frequency/Voltage		Hz/V			1N~/50/220-240	
Current input	Low		A		0.21	0.24	0.31
	Medium		A		0.23	0.25	0.32
	High		A		0.28		0.35

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

FWZ-AT/AF

FWEC3A

FWECSA

			FWZ-AT/AF	02	03	06	02	03	06
				2-pipe			4-pipe		
Cooling capacity (standard conditions)	Latent capacity	High	kW	0.54	0.82	0.98	0.33	0.80	1.19
	Sensible capacity	Low	kW	1.04	1.25	2.31	0.97	1.23	2.27
		Medium	kW	1.30	1.69	2.90	1.21	1.65	2.85
		High	kW	1.49	2.09	3.62	1.44	2.06	3.54
	Total capacity	Low	kW	1.35	1.75	2.99	1.25	1.72	3.10
		Medium	kW	1.69	2.37	3.64	1.55	2.32	3.79
		High	kW	1.94	2.91	4.48	1.77	2.86	4.64
Heating capacity (standard conditions)	Capacity	Low	kW	1.50	1.76	3.36	1.36	1.88	3.55
		Medium	kW	1.81	2.37	4.11	1.56	2.31	4.07
		High	kW	2.15	2.94	4.88	1.76	2.68	4.64
Power input	Low		kW	0.01					
	Medium		kW	0.01		0.02	0.01		0.02
	High		kW	0.019	0.016	0.033	0.019	0.016	0.033
FCEER				B	A		B	A	
FCCOP				B	A		B	A	
Dimensions	Unit	Height x Width x Depth	mm	564 x 774 x 226	564 x 984 x 226	564 x 1,190 x 226	564 x 774 x 226	564 x 984 x 226	564 x 1,190 x 226
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					
Additional heat exchanger	Water volume		l		-			0	
Water flow	Cooling	Low	l/h	234	302	515	216	297	535
		Medium	l/h	292	408	628	267	400	654
		High	l/h	337	503	774	307	493	802
	Heating	Low	l/h	260	301	575	119	165	311
		Medium	l/h	315	408	709	136	202	357
		High	l/h	373	506	866	154	234	406
Fan	Type			Centrifugal					
	Quantity			1	2		1	2	
	Air flow rate	Low	m^3/h	211	241	470	205	237	460
		Medium	m^3/h	271	341	605	261	332	593
		High	m^3/h	344	442	785	327	431	763
Air filter	Type			Polypropylene net					
Total sound power level	Low		dBA	40	36	43	38	33	48
	Medium		dBA	44	42	49	44	41	53
	High		dBA	50	48	56	50	47	58
Sound pressure level	Low		dBA	35	31	38	33	28	43
	Medium		dBA	39	37	44	39	36	48
	High		dBA	45	43	51	45	42	54
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

FWV-DAT/DAF

FWEC1,2,3A

FWECSA

				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)	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
	Sensible 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
		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
		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
	Total 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
		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
		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
Heating capacity (standard conditions)	Capacity	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
		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
		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
Power input	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
	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
	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
FCEER					E				D	E	D		E						D	E	D		E	
FCCOP					E					D			E							D			E	
Dimensions	Unit	Height x Width x Depth	mm		564 x 774 x 226			564 x 984 x 226		564 x 1,190 x 226			564 x 1,400 x 251		564 x 774 x 226			564 x 984 x 226		564 x 1,190 x 226			564 x 1,400 x 251	
Weight	Unit		kg		19.7		20.6	25.5	26.7	31.0	30.4	32.3	41.4	41.6	19.7		20.6	25.5	26.7	31.0	30.4	32.3	41.4	41.6
Casing	Colour				White - RAL9010																			
Heat exchanger	Water volume		l		0			1					2		0			1					2	
Additional heat exchanger	Water volume		l		-										0								1	
Water flow	Cooling	Low	l/h		179	216	234	275	302	340	431	515	682	706	169	212	216	272	297	336	425	535	676	699
		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
		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
	Heating	Low	l/h		211	252	260	302	301	415	430	575	690	764	115	120	119	156	165	247	238	311	440	425
		Medium	l/h		256	300	315	393	408	545	563	709	898	1,135	130	137	136	191	202	304	281	357	527	551
		High	l/h		317	320	373	469	506	704	736	866	1,129	1,455	146	154		222	234	368	334	406	610	643
Fan	Type				Centrifugal																			
	Quantity				1			2							1			2						
	Air flow rate	Low	m^3/h		178	211		241		320	361	470	570	642	174	205		238	237	316	356	460	565	636
		Medium	m^3/h		233	271		341		450	497	605	771	1,022	225	261		334	332	444	490	593	765	1,007
		High	m^3/h		319	344		442		640	706	785	1,011	1,393	307	330	327	432	431	628	690	763	998	1,362
Air filter	Type				Polypropylene net																			
Total sound power level	Low		dBA		37	38	40	35	36	35		43	47	49	33	40	38	34	33	36	39	48	46	48
	Medium		dBA		42	44		43	42	43		49	54	60	39	44		43	41	45	46	53	54	58
	High		dBA		47	49	50	48		52	53	56	61	67	45	49	50	48	47	53	56	58	60	66
Sound pressure level	Low		dBA		32	33	35	30	31	30		38	42	44	28	33		29	28	29	32	43	41	43
	Medium		dBA		37	39		38	37	38		44	49	55	34	39		38	36	38	41	48	49	53
	High		dBA		42	44	45	43		47	48	51	56	62	40	44	45	43	42	46	51	54	55	61
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	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
	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
	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

Flexi type unit

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

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

FWR-AT/AF

FWEC3A

FWECSA

				FWR-AT/AF	02	03	06	02	03	06
					2-pipe			4-pipe		
Cooling capacity (standard conditions)	Latent capacity	High	kW		0.54	0.82	0.98	0.33	0.80	1.19
	Sensible capacity	Low	kW		1.04	1.25	2.31	0.97	1.23	2.27
		Medium	kW		1.30	1.69	2.90	1.21	1.65	2.85
		High	kW		1.49	2.09	3.62	1.44	2.06	3.54
	Total capacity	Low	kW		1.35	1.75	2.99	1.25	1.72	3.10
		Medium	kW		1.69	2.37	3.64	1.55	2.32	3.79
		High	kW		1.94	2.91	4.48	1.77	2.86	4.64
Heating capacity (standard conditions)	Capacity	Low	kW		1.50	1.76	3.36	1.36	1.88	3.55
		Medium	kW		1.81	2.37	4.11	1.56	2.31	4.07
		High	kW		2.15	2.94	4.88	1.76	2.68	4.64
Power input	Low		kW		0.01					
	Medium		kW		0.01		0.02	0.01		0.02
	High		kW		0.019	0.016	0.033	0.019	0.016	0.033
FCEER					B	A		B	A	
FCCOP					B	A		B	A	
Dimensions	Unit	Height x Width x Depth	mm		564 x 774 x 246	564 x 984 x 246	564 x 1,190 x 246	564 x 774 x 246	564 x 984 x 246	564 x 1,190 x 246
Weight	Unit		kg		21.2	27.5	33.6	21.2	27.5	33.6
Casing	Colour				White - RAL9010					
Heat exchanger	Water volume		l		1					
Additional heat exchanger	Water volume		l			-			0	
Water flow	Cooling	Low	l/h		234	302	515	216	297	535
		Medium	l/h		292	408	628	267	400	654
		High	l/h		337	503	774	307	493	802
	Heating	Low	l/h		260	301	575	119	165	311
		Medium	l/h		315	408	709	136	202	357
		High	l/h		373	506	866	154	234	406
Fan	Type				Centrifugal					
	Quantity				1	2		1	2	
	Air flow rate	Low	m^3/h		211	241	470	205	237	460
		Medium	m^3/h		271	341	605	261	332	593
		High	m^3/h		344	442	785	327	431	763
Air filter	Type				Polypropylene net					
Total sound power level	Low		dBA		40	36	43	38	33	48
	Medium		dBA		44	42	49	44	41	53
	High		dBA		50	48	56	50	47	58
Sound pressure level	Low		dBA		35	31	38	33	28	43
	Medium		dBA		39	37	44	39	36	48
	High		dBA		45	43	51	45	42	54
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

FWL-DAT/DAF

FWEC1,2,3A

FWECSA

				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)	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
	Sensible 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
		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
		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
	Total 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
		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
		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
Heating capacity (standard conditions)	Capacity	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
		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
		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
Power input	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
	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
	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
FCEER					E			D		E	D				E				D	E	D		E	
FCCOP					E					D					E					D			E	
Dimensions	Unit	Height x Width x Depth	mm		564 x 774 x 246			564 x 984 x 246		564 x 1,190 x 246			564 x 1,400 x 271		564 x 774 x 246			564 x 984 x 246		564 x 1,190 x 246			564 x 1,400 x 271	
Weight	Unit		kg		20.6		21.2	26.5	27.5	32.5	33.5	33.6	43.1		20.6		21.2	26.5	27.5	32.5	33.5	33.6	43.1	
Casing	Colour				White - RAL9010																			
Heat exchanger	Water volume		l		0		1						2		0		1						2	
Additional heat exchanger	Water volume		l		-										0								1	
Water flow	Cooling	Low	l/h		179	216	234	275	302	340	431	515	682	706	169	212	216	272	297	336	425	535	676	699
		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
		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
	Heating	Low	l/h		211	252	260	302	301	415	430	575	690	764	115	120	119	156	165	247	238	311	440	425
		Medium	l/h		256	300	315	393	408	545	563	709	898	1,135	130	137	136	191	202	304	281	357	527	551
		High	l/h		317	320	373	469	506	704	736	866	1,129	1,455	146	154		222	234	368	334	406	610	643
Fan	Type				Centrifugal																			
	Quantity				1			2							1			2						
	Air flow rate	Low	m^3/h		178	211		241		320	361	470	570	642	174	205		238	237	316	356	460	565	636
		Medium	m^3/h		233	271		341		450	497	605	771	1,022	225	261		334	332	444	490	593	765	1,007
		High	m^3/h		319	344		442		640	706	785	1,011	1,393	307	330	327	432	431	628	690	763	998	1,362
Air filter	Type				Polypropylene net																			
Total sound power level	Low		dBA		37	38	40	35	36	35		43	47	49	33	40	38	34	33	36	39	48	46	48
	Medium		dBA		42	44		43	42	43		49	54	60	39	44		43	41	45	46	53	54	58
	High		dBA		47	49	50	48		52	53	56	61	67	45	49	50	48	47	53	56	58	60	66
Sound pressure level	Low		dBA		32	33	35	30	31	30		38	42	44	28	33		29	28	29	32	43	41	43
	Medium		dBA		37	39		38	37	38		44	49	55	34	39		38	36	38	41	48	49	53
	High		dBA		42	44	45	43		47	48	51	56	62	40	44	45	43	42	46	51	54	55	61
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	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
	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
	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

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

FWS-AT/AF

FWEC3A

FWECSA

				FWS-AT/AF	02	03	06	02	03	06
					2-pipe			4-pipe		
Cooling capacity (standard conditions)	Latent capacity	High	kW		0.54	0.82	0.98	0.33	0.80	1.19
	Sensible capacity	Low	kW		1.04	1.25	2.31	0.97	1.23	2.27
		Medium	kW		1.30	1.69	2.90	1.21	1.65	2.85
		High	kW		1.49	2.09	3.62	1.44	2.06	3.54
	Total capacity	Low	kW		1.35	1.75	2.99	1.25	1.72	3.10
		Medium	kW		1.69	2.37	3.64	1.55	2.32	3.79
		High	kW		1.94	2.91	4.48	1.77	2.86	4.64
Heating capacity (standard conditions)	Capacity	Low	kW		1.50	1.76	3.36	1.36	1.88	3.55
		Medium	kW		1.81	2.37	4.11	1.56	2.31	4.07
		High	kW		2.15	2.94	4.88	1.76	2.68	4.64
Power input	Low		kW		0.01					
	Medium		kW		0.01		0.02	0.01		0.02
	High		kW		0.019	0.016	0.033	0.019	0.016	0.033
FCEER					B	A		B	A	
FCCOP					B	A		B	A	
Dimensions	Unit	Height x Width x Depth	mm		535 x 584 x 224	535 x 794 x 224	535 x 1,000 x 224	535 x 584 x 224	535 x 794 x 224	535 x 1,000 x 224
Weight	Unit		kg		16.9	22.1	26.6	16.9	22.1	26.6
Heat exchanger	Water volume		l		1					
Additional heat exchanger	Water volume		l		-			0		
Water flow	Cooling	Low	l/h		234	302	515	216	297	535
		Medium	l/h		292	408	628	267	400	654
		High	l/h		337	503	774	307	493	802
	Heating	Low	l/h		260	301	575	119	165	311
		Medium	l/h		315	408	709	136	202	357
		High	l/h		373	506	866	154	234	406
Fan	Type				Centrifugal					
	Quantity				1	2		1	2	
	Air flow rate	Low	m^3/h		211	241	470	205	237	460
		Medium	m^3/h		271	341	605	261	332	593
		High	m^3/h		344	442	785	327	431	763
Air filter	Type				Polypropylene net					
Total sound power level	Low		dBA		40	36	43	38	33	48
	Medium		dBA		44	42	49	44	41	53
	High		dBA		50	48	56	50	47	58
Sound pressure level	Low		dBA		35	31	38	33	28	43
	Medium		dBA		39	37	44	39	36	48
	High		dBA		45	43	51	45	42	54
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					

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

FWM-DAT/DAF

FWEC1,2,3A

FWECSA

				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)	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
	Sensible 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
		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
		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
	Total 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
		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
		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
Heating capacity (standard conditions)	Capacity	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
		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
		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
Power input	Low		kW		0.02	0.03		0.03		0.04		0.05	0.09	0.11	0.02	0.03	0.02	0.03		0.04	0.04	0.05	0.09	0.11
	Medium		kW		0.03	0.04		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
	High		kW		0.037	0.053	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
FCEER					E				D	E	D		E						D	E	D		E	
FCCOP					E					D			E							D			E	
Dimensions	Unit	Height x Width x Depth	mm		535 x 584 x 224			535 x 794 x 224		535 x 1,000 x 224			535 x 1,210 x 249		535 x 584 x 224			535 x 794 x 224		535 x 1,000 x 224			535 x 1,210 x 249	
Weight	Unit		kg		16.5		16.9	21.4	22.1	26.3	26.4	26.6	35.4		16.5		16.9	21.4	22.1	26.3	26.4	26.6	35.4	
Heat exchanger	Water volume		l		0		1						2		0		1						2	
Additional heat exchanger	Water volume		l		-										0								1	
Water flow	Cooling	Low	l/h		179	216	234	275	302	340	431	515	682	706	169	212	216	272	297	336	425	535	676	699
		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
		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
	Heating	Low	l/h		211	252	260	302	301	415	430	575	690	764	115	120	119	156	165	247	238	311	440	425
		Medium	l/h		256	300	315	393	408	545	563	709	898	1,135	130	137	136	191	202	304	281	357	527	551
		High	l/h		317	320	373	469	506	704	736	866	1,129	1,455	146	154		222	234	368	334	406	610	643
Fan	Type				Centrifugal																			
	Quantity				1			2							1			2						
	Air flow rate	Low	m^3/h		178	211	211	241		320	361	470	570	642	174	205		238	237	316	356	460	565	636
		Medium	m^3/h		233	271	271	341		450	497	605	771	1,022	225	261		334	332	444	490	593	765	1,007
		High	m^3/h		319	344	344	442		640	706	785	1,011	1,393	307	330	327	432	431	628	690	763	998	1,362
Air filter	Type				Polypropylene net																			
Total sound power level	Low		dBA		37	38	40	35	36	35		43	47	49	33	40	38	34	33	36	39	48	46	48
	Medium		dBA		42	44	44	43	42	43		49	54	60	39	44		43	41	45	46	53	54	58
	High		dBA		47	49	50	48		52	53	56	61	67	45	49	50	48	47	53	56	58	60	66
Sound pressure level	Low		dBA		32	33	35	30	31	30		38	42	44	28	33		29	28	29	32	43	41	43
	Medium		dBA		37	39	39	38	37	38		44	49	55	34	39		38	36	38	41	48	49	53
	High		dBA		42	44	45	43		47	48	51	56	62	40	44	45	43	42	46	51	54	55	61
Electric heater	Power input		kW		1.0	1.5	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																	/-/-	1~/50/230	
Current input	Low		A		0.09	0.11	0.11	0.14		0.19			0.39	0.54	0.09	0.11		0.14			0.19		0.39	0.54
	Medium		A		0.11	0.14	0.14	0.20		0.29		0.28	0.57	0.78	0.11	0.14		0.20		0.29	0.29	0.28	0.57	0.78
	High		A		0.16	0.20	0.20	0.27		0.40		0.39	0.80	1.07	0.16	0.20		0.27		0.40	0.40	0.39	0.80	1.07

Wall mounted unit

AC fan motor unit for wall mounting

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

FWT-CT

MERCA

SRC-HPA

Indoor unit				FWT-CT	02	03	04	05	06
					2-pipe				
Cooling capacity (standard conditions)	Sensible capacity	Low	kW		1.50	1.49	1.91	2.77	3.22
		Medium	kW		1.73	1.69	2.21	3.00	3.52
		High	kW		1.82	1.99	2.60	3.38	4.03
	Total capacity	Low	kW		1.94	2.02	2.52	3.76	4.04
		Medium	kW		2.20	2.23	2.79	4.02	4.32
		High	kW		2.40	2.67	3.27	4.49	5.21
Heating capacity (standard conditions)	Capacity	Low	kW		2.06	2.25	2.75	4.03	4.83
		Medium	kW		2.41	2.62	3.29	4.51	5.38
		High	kW		2.71	2.96	3.71	5.07	6.23
Power input			kW			0.03		0.04	0.06
			kW		0.03		0.04	0.05	0.07
			kW		0.031	0.032	0.042	0.053	0.072
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	Low	m^3/h		340	374	442	663	782
		Medium	m^3/h		391	425	544	765	883
		High	m^3/h		442	476	629	866	1,053
Total sound power level	Low		dBA		36	39	45	47	51
	Medium		dBA		41	44	50	51	54
	High		dBA		45	48	55		59
Sound pressure level	Low		dBA		25		32	34	39
	Medium		dBA		29	30	39	38	42
	High		dBA		34	35	42		46
Water flow	Cooling	Low	l/h		420	460	570	780	910
		Medium	l/h		420	460	570	780	910
		High	l/h		420	460	570	780	910
	Heating	Low	l/h		420	460	570	780	910
		Medium	l/h		420	460	570	780	910
		High	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	Low		A		0.17		0.19	0.25	0.31
	Medium		A		0.18		0.20	0.26	0.32
	High		A		0.19	0.20	0.21	0.29	0.34
Control systems	Infrared remote control						WRC-HPC		
	Wired remote control						MERCA / SRC-HPA		

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

FWE-CT/CF

FWEC1,2,3A

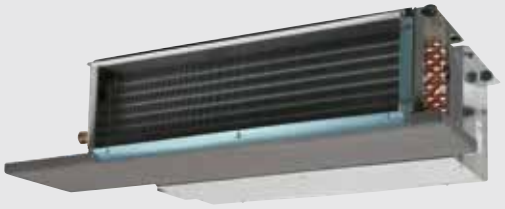
FWECSA

			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)	Latent capacity	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
		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
	Sensible capacity	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
		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
		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
		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
	Total capacity	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
		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
		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
		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
Heating capacity (standard conditions)	Capacity	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
		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
		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
		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
Power input	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
	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
	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
	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
Dimensions	Unit	Height x Width x Depth	mm	253x 590x705	253x 590x875	253x 590x1,010	253x 590x1,210	253x 590x1,460	253x 590x1,560	253x5 90x1,820	253x 590x705	253x 590x875	253x 590x1,010	253x 590x1,210	253x 590x1,460	253x 590x1,560	253x 590x1,820
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													
Water flow	Cooling	Low	l/h	115	184	209	327	388	497	565	109	184	193	319	388	459	563
		Medium	l/h	191	294	343	559	631	784	870	188	284	313	547	628	705	866
		High	l/h	212	331	404	668	733	899	1,050	206	320	373	653	724	800	1,046
		Super high	l/h	254	382	526	768	886	1,023	1,229	246	374	478	767	879	918	1,223
	Heating	Low	l/h	192	322	364	530	650	780	995	148	250	290	406	589	665	773
		Medium	l/h	326	518	593	821	970	1,172	1,520	253	398	460	664	861	974	1,156
		High	l/h	370	592	707	1,051	1,279	1,531	1,773	280	445	540	764	970	1,094	1,318
		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
Fan	Type			Centrifugal (Blade: Forward - curve)													
	Quantity			1		2		3		4	1		2		3		4
	Air flow rate	Low	m^3/h	150	256	284	426	569	688	808	142	256	257	414	569	684	804
		Medium	m^3/h	238	385	413	630	851	1,016	1,202	232	371	377	618	846	1,001	1,199
		High	m^3/h	311	518	619	926	1,188	1,413	1,735	302	501	571	905	1,173	1,386	1,729
		Super high	m^3/h	430	638	910	1,195	1,559	1,753	2,177	416	626	835	1,193	1,548	1,742	2,166
Air filter	Type			Aluminium Frame PP Filter Net G2 Class													
Total sound power level	Low		dBA	31	38	32	39	38	41	40	31	38	32	39	38	41	40
	Medium		dBA	37	49	40	48	47	50		37	49	40	48	47	50	
	High		dBA	49	56	50	55	57	58	60	49	56	50	55	57	58	60
	Super high		dBA	51	61	58	62		64	65	51	61	58	62		64	65
Sound pressure level	Low		dBA	21	28	22	29	27	31	29	21	28	22	29	27	31	29
	Medium		dBA	26	39	28	36	37	40	39	26	39	28	36	37	40	39
	High		dBA	39	46	38	45	47	48	49	39	46	38	45	47	48	49
	Super high		dBA	41	51	48	52		54	55	41	51	48	52		54	55
Piping connections	Drain	OD	mm	R 3/4"													
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-240													
Current input	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
	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
	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
	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

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



FWP-AT

FWEC3A

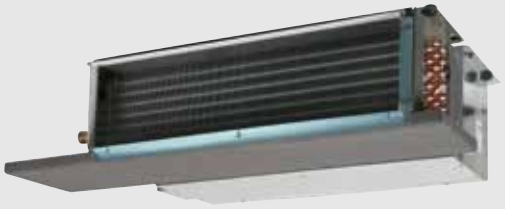
FWECSA

				FWP-AT	02	03	04	05	06	07
Cooling capacity (standard conditions)	Latent capacity 2-pipe	Fan speed 7	kW	0.67	0.92	1.06	1.35	1.41	1.87	
	Sensible capacity 2-pipe	Fan speed 1	kW	0.95	1.03	1.11	1.62	1.79	1.92	
		Fan speed 2	kW	1.02	1.17	1.23	1.82	1.88	2.15	
		Fan speed 3	kW	1.10	1.25	1.32	2.20	2.22	2.55	
		Fan speed 4	kW	1.29	1.47	1.56	2.69	2.79	3.19	
		Fan speed 5	kW	1.41	1.61	1.72	2.82	2.94	3.36	
		Fan speed 6	kW	1.53	1.85	1.99	2.91	3.06	3.49	
		Fan speed 7	kW	1.71	1.96	2.13	3.23	3.44	3.93	
	Total capacity 2-pipe	Fan speed 1	kW	1.35	1.51	1.69	2.23	2.58	2.86	
		Fan speed 2	kW	1.38	1.70	1.83	2.52	2.55	3.15	
		Fan speed 3	kW	1.50	1.83	1.97	3.07	2.97	3.75	
		Fan speed 4	kW	1.77	2.14	2.33	3.79	3.87	4.71	
		Fan speed 5	kW	1.95	2.35	2.57	3.97	4.10	4.96	
		Fan speed 6	kW	2.12	2.70	2.98	4.11	4.28	5.15	
		Fan speed 7	kW	2.38	2.88	3.19	4.58	4.85	5.80	
Heating capacity (standard conditions)	Capacity 2-pipe	Fan speed 1	kW	1.40	1.48	1.53	2.46	2.59	2.74	
		Fan speed 2	kW	1.56	1.67	1.74	2.71	2.96	3.12	
		Fan speed 3	kW	1.68	1.80	1.88	3.23	3.45	3.64	
		Fan speed 4	kW	1.93	2.08	2.19	3.93	4.25	4.53	
		Fan speed 5	kW	2.11	2.29	2.42	4.10	4.45	4.76	
		Fan speed 6	kW	2.27	2.62	2.80	4.24	4.61	4.95	
		Fan speed 7	kW	2.54	2.80	3.00	4.71	5.15	5.56	
Power input	Fan speed 1		kW	0.01				0.02		
	Fan speed 2		kW	0.01				0.02		
	Fan speed 3		kW	0.02				0.03		
	Fan speed 4		kW	0.02				0.05		
	Fan speed 5		kW	0.03				0.05		
	Fan speed 6		kW	0.033				0.065		
	Fan speed 7		kW	0.046				0.076		
FCEER				A						
FCCOP				A						
Dimensions	Unit	Height x Width x Depth	mm	551 x 1,040 x 239				551 x 1,390 x 239		
Weight	Unit		kg	26.0	27.0	29.0	35.0	37.0	39.0	
Heat exchanger	Water volume		l	1	2				3	
Water flow	Cooling	Fan speed 1	l/h	219	256	283	318	400	465	
		Fan speed 2	l/h	238	294	316	436	440	544	
		Fan speed 3	l/h	259	318	342	533	516	649	
		Fan speed 4	l/h	307	372	403	659	647	817	
		Fan speed 5	l/h	340	410	448	690	712	859	
		Fan speed 6	l/h	369	471	519	715	744	894	
		Fan speed 7	l/h	418	502	555	799	847	1,009	
	Heating	Fan speed 1	l/h	242	256	265	372	448	469	
		Fan speed 2	l/h	272	290	302	472	515	542	
		Fan speed 3	l/h	292	313	327	562	600	634	
		Fan speed 4	l/h	335	362	381	684	739	789	
		Fan speed 5	l/h	367	399	422	713	774	828	
		Fan speed 6	l/h	395	456	487	738	802	860	
		Fan speed 7	l/h	442	486	521	819	898	969	
Fan	Type			Centrifugal						
	Quantity			1				2		
	Air flow rate	Fan speed 1	m^3/h	184			283	331		
		Fan speed 2	m^3/h	210			371	385		
		Fan speed 3	m^3/h	228				455		
		Fan speed 4	m^3/h	267				576		
		Fan speed 5	m^3/h	297				607		
		Fan speed 6	m^3/h	324	345			633		
		Fan speed 7	m^3/h	371				722		
Air filter	Type			Acrylic fiber - Filtering class G2 (G3 on request)						
Total sound power level	Fan speed 1		dBA	36		38		39		
	Fan speed 2		dBA	40				43		
	Fan speed 3		dBA	43				47		
	Fan speed 4		dBA	46				52		
	Fan speed 5		dBA	50				54		
	Fan speed 6		dBA	52				56		
	Fan speed 7		dBA	58				60		
Sound pressure level	Fan speed 1		dBA	31		33		34		
	Fan speed 2		dBA	35				38		
	Fan speed 3		dBA	38				42		
	Fan speed 4		dBA	41				47		
	Fan speed 5		dBA	45				49		
	Fan speed 6		dBA	47				51		
	Fan speed 7		dBA	53				55		
Electric heater	Power input		kW	2.0				2.5		
Piping connections	Drain	OD	mm	17						
Power supply	Phase/Frequency		Hz/V	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



FWB-BT

FWEC1,2,3A

FWECSA

			FWB-BT	02	03	04	05	06	07	08	09	10
Cooling capacity (standard conditions)	Latent capacity 2-pipe	Fan speed 7	kW	0.67	0.92	1.06	1.35	1.41	1.87	1.80	2.09	2.63
	Sensible capacity 2-pipe	Fan speed 1	kW	0.93	1.01	1.09	1.56	1.73	1.86	2.67	2.92	3.25
		Fan speed 2	kW	0.99	1.14	1.20	1.75	1.81	2.08	2.80	3.06	3.42
		Fan speed 3	kW	1.06	1.22	1.29	2.12	2.14	2.47	2.99	3.30	3.70
		Fan speed 4	kW	1.25	1.43	1.53	2.60	2.70	3.10	3.25	3.60	4.05
		Fan speed 5	kW	1.37	1.57	1.68	2.72	2.84	3.26	3.50	3.90	4.42
		Fan speed 6	kW	1.48	1.81	1.95	2.80	2.95	3.38	3.89	4.37	4.99
		Fan speed 7	kW	1.65	1.90	2.07	3.12	3.33	3.82	3.90	4.39	5.02
	Total capacity 2-pipe	Fan speed 1	kW	1.33	1.49	1.67	2.17	2.52	2.80	3.83	4.26	4.94
		Fan speed 2	kW	1.35	1.67	1.80	2.45	2.48	3.08	4.02	4.48	5.20
		Fan speed 3	kW	1.46	1.80	1.94	2.99	2.89	3.67	4.32	4.84	5.62
		Fan speed 4	kW	1.73	2.10	2.29	3.70	3.78	4.62	4.69	5.28	6.15
		Fan speed 5	kW	1.91	2.31	2.53	3.87	4.00	4.86	5.08	5.74	6.72
		Fan speed 6	kW	2.07	2.66	2.94	4.00	4.17	5.04	5.67	6.43	7.58
		Fan speed 7	kW	2.32	2.82	3.13	4.47	4.74	5.69	5.70	6.48	7.65
Heating capacity (standard conditions)	Capacity 2-pipe	Fan speed 1	kW	1.39	1.48	1.53	2.14	2.81	2.71	4.11	4.42	4.69
		Fan speed 2	kW	1.56	1.67	1.74	2.71	2.96	3.12	4.29	4.62	5.15
		Fan speed 3	kW	1.68	1.80	1.88	3.23	3.45	3.64	4.59	4.96	5.31
		Fan speed 4	kW	1.93	2.08	2.19	3.93	4.25	4.53	4.95	5.39	5.80
		Fan speed 5	kW	2.11	2.29	2.42	4.10	4.45	4.76	5.34	5.85	6.33
		Fan speed 6	kW	2.27	2.62	2.80	4.24	4.61	4.95	5.91	6.53	7.31
		Fan speed 7	kW	2.54	2.80	3.00	4.70	5.15	5.56	5.95	6.57	7.18
Power input	Fan speed 1		kW		0.03			0.08			0.16	
	Fan speed 2		kW		0.04			0.09			0.16	
	Fan speed 3		kW		0.05			0.12			0.18	
	Fan speed 4		kW		0.06			0.14			0.19	
	Fan speed 5		kW		0.07			0.16			0.22	
	Fan speed 6		kW		0.085			0.167			0.252	
	Fan speed 7		kW		0.106			0.192			0.294	
FCEER					D	C			D			
FCCOP					C			D	C		D	
Dimensions	Unit	Height x Width x Depth	mm		551 x 1,040 x 239			551 x 1,390 x 239			551 x 1,740 x 239	
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
Water flow	Cooling	Fan speed 1	l/h	219	256	283	318	400	465	683	758	874
		Fan speed 2	l/h	238	294	316	436	440	544	717	797	920
		Fan speed 3	l/h	259	318	342	533	516	649	772	861	996
		Fan speed 4	l/h	307	372	403	659	647	817	839	938	1,089
		Fan speed 5	l/h	340	410	448	690	712	859	910	1,023	1,191
		Fan speed 6	l/h	369	471	519	715	744	894	1,015	1,147	1,344
		Fan speed 7	l/h	418	502	555	799	847	1,009	1,028	1,162	1,363
	Heating	Fan speed 1	l/h	242	256	265	372	448	469	714	768	815
		Fan speed 2	l/h	272	290	302	472	515	542	746	804	895
		Fan speed 3	l/h	292	313	327	562	600	634	797	863	923
		Fan speed 4	l/h	335	362	381	684	739	789	861	937	1,008
		Fan speed 5	l/h	367	399	422	713	774	828	929	1,017	1,100
		Fan speed 6	l/h	395	456	487	738	802	860	1,028	1,134	1,240
		Fan speed 7	l/h	442	486	521	819	898	969	1,040	1,148	1,256
Fan	Type							Centrifugal				
	Quantity				1			2			3	
	Air flow rate	Fan speed 1	m^3/h		184		283	331			572	
		Fan speed 2	m^3/h		210		371	385		602		631
		Fan speed 3	m^3/h		228			455			652	
		Fan speed 4	m^3/h		267			576			715	
		Fan speed 5	m^3/h		297			607			785	
		Fan speed 6	m^3/h	324	345			633			892	
		Fan speed 7	m^3/h		371			722			905	
Air filter	Type							Acrylic fiber - Filtering class G2 (G3 on request)				
Total sound power level	Fan speed 1		dBA		36	38		39			53	
	Fan speed 2		dBA		40			43			54	
	Fan speed 3		dBA		43			47			56	
	Fan speed 4		dBA		46			52		59		64
	Fan speed 5		dBA		50			54			64	
	Fan speed 6		dBA		52			56			67	
	Fan speed 7		dBA		58			60			69	
Sound pressure level	Fan speed 1		dBA		31	33		34			48	
	Fan speed 2		dBA		35			38			49	
	Fan speed 3		dBA		38			42			51	
	Fan speed 4		dBA		41			47		54		49
	Fan speed 5		dBA		45			49			59	
	Fan speed 6		dBA		47			51			62	
	Fan speed 7		dBA		53			55			64	
Electric heater	Power input		kW		2.0			2.5			3.0	
Piping connections	Drain	OD	mm					17				
Power supply	Phase/Frequency		Hz/V					1~/50				

Ducted unit with medium 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
- Available static pressure up to 70 Pa
- The air filter can easily be removed for cleaning
- Straight duct connector mounted to discharge side

FWN-AT/AF

FWEC3A

FWECSA

				FWN-AT/AF	04	05	06	07	08	10	04	05	06	07	08	10
					2-pipe						4-pipe					
Cooling capacity	Total capacity	High	kW		3.91 (1) / 3.80 (2)	4.76 (1) / 4.65 (2)	6.17 (1) / 6.02 (2)	6.81 (1) / 6.66 (2)	7.83 (1) / 7.58 (2)	8.75 (1) / 8.50 (2)	3.88 (1) / 2.76 (3)	4.72 (1) / 3.60 (3)	6.06 (1) / 4.54 (3)	6.69 (1) / 5.17 (3)	7.70 (1) / 5.22 (3)	8.60 (1) / 6.12 (3)
		Medium	kW		3.54 (1) / 3.47 (2)	4.27 (1) / 4.20 (2)	5.77 (1) / 5.65 (2)	6.37 (1) / 6.25 (2)	7.01 (1) / 6.84 (2)	7.79 (1) / 7.62 (2)	3.51 (1) / 2.78 (3)	4.24 (1) / 3.51 (3)	5.70 (1) / 4.45 (3)	6.29 (1) / 5.04 (3)	6.92 (1) / 5.22 (3)	7.69 (1) / 5.99 (3)
		Low	kW		2.87 (1) / 2.83 (2)	3.42 (1) / 3.38 (2)	5.33 (1) / 5.23 (2)	5.87 (1) / 5.77 (2)	6.32 (1) / 6.20 (2)	6.97 (1) / 6.85 (2)	2.86 (1) / 2.46 (3)	3.40 (1) / 3.00 (3)	5.26 (1) / 4.24 (3)	5.81 (1) / 4.79 (3)	6.26 (1) / 5.02 (3)	6.90 (1) / 5.66 (3)
	Sensible capacity	High	kW		3.09 (1) / 2.98 (2)	3.68 (1) / 3.57 (2)	4.63 (1) / 4.48 (2)	5.21 (1) / 5.06 (2)	6.55 (1) / 6.30 (2)	7.10 (1) / 6.85 (2)	3.06 (1) / 1.94 (3)	3.64 (1) / 2.52 (3)	4.54 (1) / 3.02 (3)	5.11 (1) / 3.59 (3)	6.43 (1) / 3.95 (3)	6.96 (1) / 4.48 (3)
		Medium	kW		2.77 (1) / 2.70 (2)	3.26 (1) / 3.19 (2)	4.32 (1) / 4.20 (2)	4.85 (1) / 4.73 (2)	5.77 (1) / 5.60 (2)	6.24 (1) / 6.07 (2)	2.75 (1) / 2.02 (3)	3.24 (1) / 2.51 (3)	4.27 (1) / 3.02 (3)	4.78 (1) / 3.53 (3)	5.69 (1) / 3.99 (3)	6.15 (1) / 4.45 (3)
		Low	kW		2.23 (1) / 2.19 (2)	2.58 (1) / 2.54 (2)	3.99 (1) / 3.89 (2)	4.45 (1) / 4.35 (2)	5.14 (1) / 5.02 (2)	5.53 (1) / 5.41 (2)	2.22 (1) / 1.82 (3)	2.56 (1) / 2.16 (3)	3.94 (1) / 2.92 (3)	4.40 (1) / 3.38 (3)	5.09 (1) / 3.85 (3)	5.47 (1) / 4.23 (3)
Heating capacity		High	kW		4.85 (4) / 8.22 (5)	5.79 (4) / 9.78 (5)	7.67 (4) / 13.02 (5)	8.65 (4) / 14.68 (5)	9.46 (4) / 15.98 (5)	10.70 (4) / 18.10 (5)	4.48 (4)	4.45 (4)	6.53 (4)	6.44 (4)	9.13 (4)	9.07 (4)
		Low	kW		3.63 (4) / 6.16 (5)	4.24 (4) / 7.17 (5)	6.68 (4) / 11.31 (5)	7.49 (4) / 12.71 (5)	7.74 (4) / 13.10 (5)	8.70 (4) / 14.74 (5)	3.70 (4)	3.69 (4)	5.98 (4)	5.93 (4)	8.01 (4)	7.98 (4)
Power input	High		W		112 (6)		152 (6)		248 (6)		112 (2)		152 (2)		248 (2)	
	Medium		W		73 (6)		125 (6)		170 (6)		73 (2)		125 (2)		170 (2)	
	Low		W		40 (6)		102 (6)		124 (6)		40 (2)		102 (2)		124 (2)	
FCEER					C	B	C			B	C					
FCCOP					B	A	B		C	B	C					
Weight	Unit		kg		32.5	33.3	40.6	41.7	47.3	48.7	-					
	2-pipe Unit		kg		-						32.5	33.3	40.6	41.7	47.3	48.7
	4-pipe Unit		kg		-						34.7	35.5	43.2	44.3	50.3	51.7
Water pressure drop	Cooling	High	kPa		17 (6) / 17 (1)	14 (6) / 14 (1)	24 (6) / 24 (1)	19 (6) / 19 (1)	24 (6) / 24 (1)	16 (6) / 16 (1)	17 (1)	14 (1)	23 (1)	19 (1)	23 (1)	15 (1)
	Heating	High	kPa		14 (4) / 15 (5)	12 (4) / 12 (5)	19 (4) / 21 (5)	15 (4) / 17 (5)	20 (4) / 20 (5)	13 (4) / 13 (5)	9 (4)		17 (4)	14 (4)	13 (4)	30 (4)
Water heat exchanger	Water flow rate	Cooling	High	l/min	11.19 (1)	13.62 (1)	17.65 (1)	19.48 (1)	22.40 (1)	25.02 (1)	11.10 (1)	13.50 (1)	17.33 (1)	19.13 (1)	22.03 (1)	24.60 (1)
			Medium	l/min	10.12 (1)	12.20 (1)	16.50 (1)	18.22 (1)	20.03 (1)	22.27 (1)	10.03 (1)	12.12 (1)	16.30 (1)	17.98 (1)	19.78 (1)	21.98 (1)
			Low	l/min	8.22 (1)	9.78 (1)	15.25 (1)	16.80 (1)	17.92 (1)	19.95 (1)	8.18 (1)	9.73 (1)	15.07 (1)	16.63 (1)	17.92 (1)	19.75 (1)
		Heating	High	l/min	12.02 (5)	14.32 (5)	19.03 (5)	21.48 (5)	23.37 (5)	26.47 (5)	6.55 (4)	6.52 (4)	9.55 (4)	9.43 (4)	13.35 (4)	13.27 (4)
			Medium	l/min	10.93 (5)	12.90 (5)	17.87 (5)	20.13 (5)	21.07 (5)	23.80 (5)	6.15 (4)	6.12 (4)	9.18 (4)	9.08 (4)	12.48 (4)	12.43 (4)
			Low	l/min	9.00 (5)	10.48 (5)	16.53 (5)	18.58 (5)	19.15 (5)	21.55 (5)	5.40 (4)		8.75 (4)	8.68 (4)	11.72 (4)	11.68 (4)
Fan	Air flow rate	High		m^3/h	802 (6)	792 (6)	1,241 (6)	1,206 (6)	1,609 (6)	1,584 (6)	794 (2)	784 (2)	1,212 (2)	1,179 (2)	1,573 (2)	1,550 (2)
		Low		m^3/h	534 (6)	531 (6)	1,021 (6)	998 (6)	1,208 (6)	1,200 (6)	532 (2)	529 (2)	1,004 (2)	985 (2)	1,194 (2)	1,186 (2)
Sound power level	Total	High		dBA	66 (3)		69 (3)		72 (3)		66 (5)		69 (5)		72 (5)	
		Medium		dBA	61 (3)		63 (3)		67 (3)		61 (5)		64 (5)	63 (5)	67 (5)	
		Low		dBA	54 (3)		59 (3)	61 (3)	62 (3)		54 (5)		61 (5)	59 (5)	62 (5)	
	Inlet section + radiated	High		dBA	64 (3) / 64 (6)		66 (3) / 66 (6)		70 (3) / 70 (6)		64 (5) / 64 (2)		66 (5) / 66 (2)		70 (5) / 70 (2)	
		Medium		dBA	59 (3) / 59 (6)		60 (3) / 60 (6)		64 (3) / 64 (6)		59 (5) / 59 (2)		60 (5) / 60 (2)		64 (5) / 64 (2)	
		Low		dBA	52 (3) / 52 (6)		56 (3) / 56 (6)		60 (3) / 60 (6)		52 (5) / 52 (2)		56 (5) / 56 (2)		60 (5) / 60 (2)	
	Outlet section	High		dBA	63 (3) / 63 (6)		65 (3) / 65 (6)		69 (3) / 69 (6)		63 (5) / 63 (2)		65 (5) / 65 (2)		69 (5) / 69 (2)	
		Medium		dBA	58 (3) / 58 (6)		59 (3) / 59 (6)		63 (3) / 63 (6)		58 (5) / 58 (2)		62 (5) / 62 (2)	59 (5) / 59 (2)	63 (5) / 63 (2)	
		Low		dBA	51 (3) / 51 (6)		55 (3) / 55 (6)		58 (3) / 58 (6)		51 (5) / 51 (2)		59 (5) / 59 (2)	55 (5) / 55 (2)	58 (5) / 58 (2)	
Water connections	Primary coil			inch	3/4„											
	Additional coil			inch	-						3/4„					
Water content	Primary coil			dm^3	1.29	1.64	1.65	2.13	2.16	2.75	1.29	1.64	1.65	2.13	2.16	2.75
	Additional coil			dm^3	-						0.93		1.05		1.17	
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230											
Control systems	Wired remote control				FWEC3A / FWECSA											

(1) Inlet/outlet water temperature 7/12 °C; inlet air temperature 27°C DB 19°C WB (2) Reference: EN 1397; Eurovent certified data (3) Reference: UNI EN 3741 (4) Inlet water temperature 50 °C; same water flow as in cooling mode; inlet air temperature 20°C DB; Eurovent certified data (5) Inlet/outlet water temperature 70/60 °C; inlet air temperature 20°C DB (6) Eurovent certified data | FCEER and FCCOP are Eurovent certified data

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

FWD-AT/AF

FWEC1,2,3A

FWECSA

			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)	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
	Sensible capacity	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
		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
		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
	Total capacity	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
		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
		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
Heating capacity (standard conditions)	Capacity	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
		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
		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
Power input	Low		kW	0.14	0.35	0.29		0.37	0.87		0.14	0.35	0.29		0.37	0.87	
	Medium		kW	0.19	0.39	0.38		0.54	1.09		0.19	0.39	0.38		0.54	1.09	
	High		kW	0.265	0.460	0.505		0.750	1.300		0.265	0.460	0.505		0.750	1.300	
FCEER				E											D	E	
FCCOP				D	E						D	E	D		E		
Dimensions	Unit	Height x Width x Depth	mm	559 x 754 x 280	559 x 964 x 280	559 x 1,170 x 280		718 x 1,170 x 353	718 x 1,380 x 353		559 x 754 x 280	559 x 964 x 280	559 x 1,170 x 280		718 x 1,170 x 353	718 x 1,380 x 353	
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		
Water flow	Cooling	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
		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
		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
	Heating	Low	l/h	529	972	1,124	1,264	1,573	2,203	2,389	283	460	614	612	950	1,302	1,295
		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
		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
Fan	Type			Centrifugal													
	Quantity			1	2						1	2					
	Air flow rate	Low	m^3/h	534	1,021	1,208	1,200	1,485	2,092	2,073	532	1,004	1,194	1,186	1,466	2,084	2,065
		Medium	m^3/h	700	1,134	1,384	1,371	1,898	2,641	2,604	694	1,115	1,362	1,349	1,871	2,626	2,590
		High	m^3/h	802	1,241	1,609	1,584	2,380	3,206	3,175	794	1,212	1,573	1,550	2,328	3,186	3,155
Air filter	Type			Acrylic fiber - Filtering class G2 (G4 on request)													
Total sound power level	Low		dBA	54	59	62		60	69		54	61	62		60	69	
	Medium		dBA	61	63	67			73		61	64	67			73	
	High		dBA	66	69	72		74	78		66	69	72		74	78	
Sound pressure level	Low		dBA	49	54	57		55	64		49	56	57		55	64	
	Medium		dBA	56	58	62			68		56	59	62			68	
	High		dBA	61	64	67		69	73		61	64	67		69	73	
Electric heater	Power input		kW	2.0	6.0	9.0			12.0		2.0	6.0	9.0			12.0	
Piping connections	Drain	OD	mm	17													
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/230													

Options & accessories - Fan coil units

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

1. Decoration panel code includes wireless controller

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

	INDOOR UNITS	FWG-AT/AF	FWC-BT/BF	FWF-BT/BF	FWF-CT	FWZ-AT/AF	FWV-DAT/DAF	FWR-AT/AF
Filters	Long-life filter		KAFP551K160	KAFQ441BA60				
ON/OFF valves 230V	3-ways 230V ON/OFF valve kit (2-pipe)	VKFWGA012T3V (5 & 8 class) VKFWGA022T3V (11 class)	EKMV3C09B	EKMV3C09B	MCKCW2T3VN	E2MV03A6 (2, 3 & 6 class) E2MV10A6 (8 class)	E2MV03A6 (1 up to 35 class) E2MV06A6 (4 & 6 class) E2MV10A6 (8 & 10 class)	E2MV03A6 (2, 3 & 6 class) E2MV10A6 (8 class)
	3-ways 230V ON/OFF valve kit (4-pipe)	VKFWGA014T3V (5 & 8 class) VKFWGA024T3V (11 class)	EKMV3C09B x2	EKMV3C09B x2		E4MV03A6 (2, 3 & 6 class) E4MV10A6 (8 class)	E4MV03A6 (1 up to 35 class) E4MV06A6 (4 & 6 class) E4MV10A6 (8 & 10 class)	E4MV03A6 (2, 3 & 6 class) E4MV10A6 (8 class)
	2-ways 230V ON/OFF valve kit (2-pipe)		EKMV2C09B	EKMV2C09B				
	2-ways 230V ON/OFF valve kit (4-pipe)		EKMV2C09B x 2	EKMV2C09B x 2				
	2-ways 230V ON/OFF valve kit (cooling heat exchanger)					E2MV2B07A6 (2 up to 6 class) E2MV2B10A6 (8 class)	E2MV2B07A6 (1 up to 6 class) E2MV2B10A6 (8 & 10 class)	E2MV2B07A6 (2 up to 6 class) E2MV2B10A6 (8 class)
	2-ways 230V ON/OFF valve kit (additional heat exchanger)					E2MV2B07A6	E2MV2B07A6	E2MV2B07A6
	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)
	E2M2V207A6 2-ways 24V ON/OFF valve kit (additional heat exchanger)					•	•	•
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)	
	E2MPV207A6 2-ways proportional valve kit (additional heat exchanger)						•	

FWL-DAT/DAF	FWS-AT/AF	FWM-DAT/DAF	FWT-CT	FWE-CT/CF	FWP-AT	FWB-BT	FWD-AT/AF	FWN-AT/AF
E2MV03A6 (1 up to 35 class) E2MV06A6 (4 & 6 class) E2MV10A6 (8 & 10 class)	E2MV03A6 (2, 3 & 6 class) E2MV10A6 (8 class)	E2MV03A6 (1 up to 35 class) E2MV06A6 (4 & 6 class) E2MV10A6 (8 & 10 class)		EK2MV3B10C5		E2MV107A6	ED2MV04A6 (4 class) ED2MV10A6 (6, 8 & 10 class) ED2MV12A6 (12 class) ED2MV18A6 (16 & 18 class)	ED2MV04A6 (4 & 5 class) ED2MV10A6 (6 up 10 class)
E4MV03A6 (1 up to 35 class) E4MV06A6 (4 & 6 class) E4MV10A6 (8 & 10 class)	E4MV03A6 (2, 3 & 6 class) E4MV10A6 (8 class)	E4MV03A6 (1 up to 35 class) E4MV06A6 (4 & 6 class) E4MV10A6 (8 & 10 class)		EK2MV3B10C5			ED4MV04A6 (4 class) ED4MV10A6 (6, 8 & 10 class) ED4MV12A6 x 2 (12 class) ED4MV18A6 x 2 (16 & 18 class)	ED4MV04A6 (4 & 5 class) ED4MV10A6 (6 up 10 class)
				EK2MV2B10C5				
				EK4MV2B10C5				
E2MV2B07A6 (1 up to 6 class) E2MV2B10A6 (8 & 10 class)	E2MV2B07A6 (2 up to 6 class) E2MV2B10A6 (8 class)	E2MV2B07A6 (1 up to 6 class) E2MV2B10A6 (8 & 10 class)				E2MV207A6 (2 up to 7 class) E2MV210A6 (8 & 10 class)		
E2MV2B07A6	E2MV2B07A6	E2MV2B07A6			E2MV207A6	E2MV207A0 (2 up to 7 class) E2MV210A6 (8 & 10 class)		
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)						
•	•	•						
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)						
•		•						

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]				
	EKROROA Remote ON/OFF			•				
	Remote sensor		KRCS01-4	KRCS01-1				
	EKFCMBCB Optional PCB for MODBUS connection		•	•				
	EKRP1C11 Wiring adapter with 4 output signals for valve control PDB		•					
	FWTSKA Temperature sensor kit					•	•	•
	FWHSKA Relative humidity sensor kit					•	•	•
	YFSTA6 Fan stop thermostat						•	
	EPIMSA6 Master-slave interface						•	
	EPIB6 Power interface							
Others	KDDQ44XA60 Fresh air intake kit (direct installation type)			•				
	KDDQ55C140 Fresh air intake kit - 20% fresh air (direct installation type)		•					
	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)
	KJB212A Electrical box with earth terminal (2 blocks)		•	•				
	KJB311A Electrical box with earth terminal (3 blocks)		•	•				
	KJB411A Eletrical box with earth terminal		•	•				
	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

2. Requires KRP1H98

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

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

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

Table of content

Air handling units

Daikin air handling units

Why choose Daikin air handling units?

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

Benefits for the installer

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

Benefits for the consultant

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

Benefits for the end user

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

Marketing tools

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

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

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

Packaged control solution for Daikin AHU

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

Energy efficient while focusing on maximum comfort

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

Plug and play design

› Low voltage fast connectors in between AHU sections

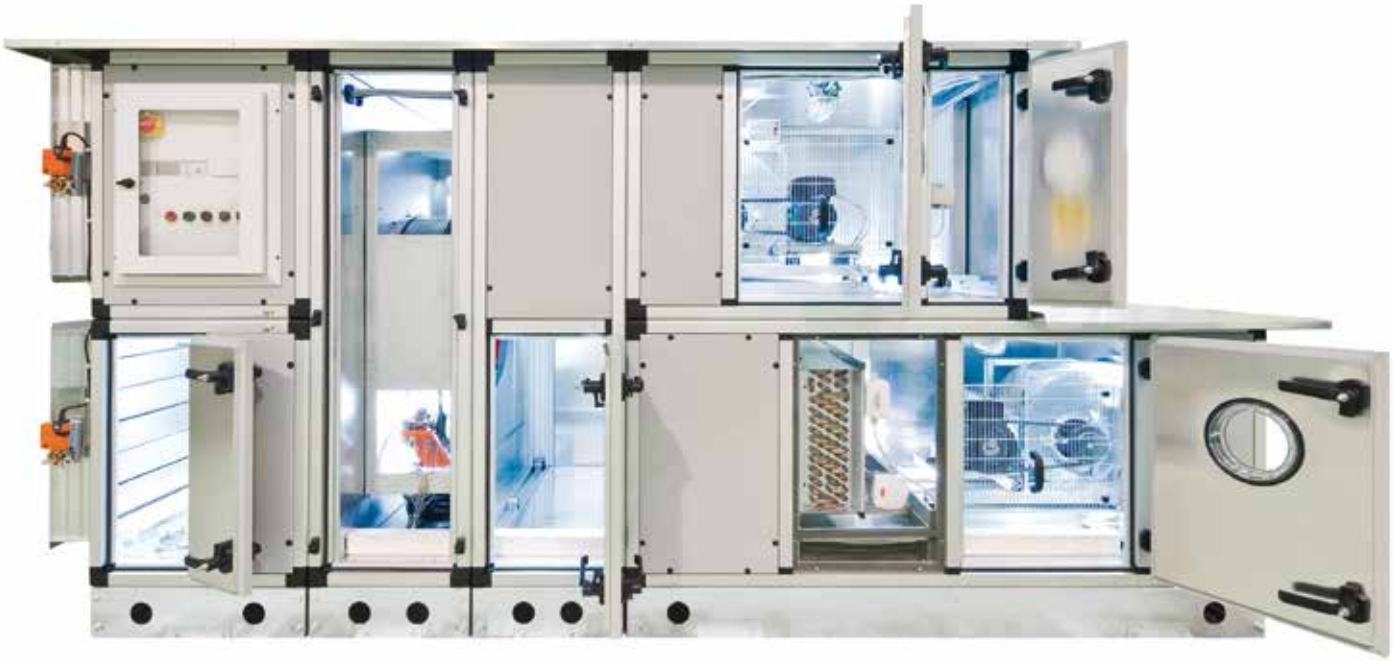
Easy start-up and commissioning

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

Daikin Fresh air package

Unique in the market

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



SMART CONTROLS

DAMPER AND EC FAN

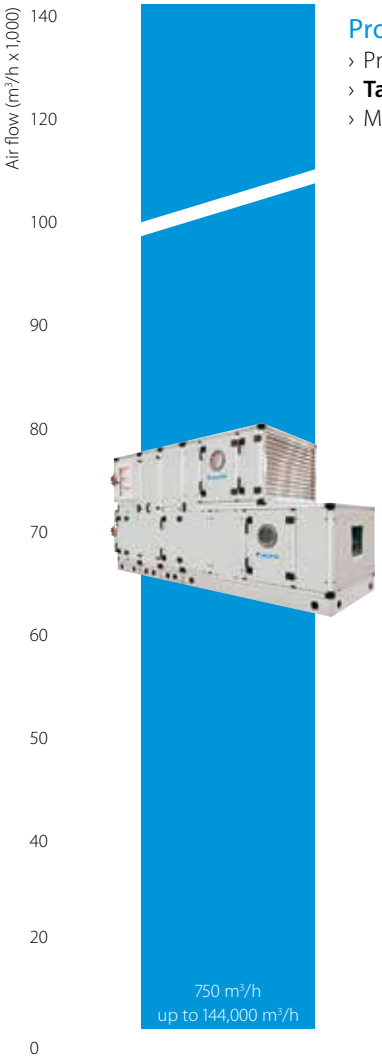
HEAT RECOVERY
WHEEL AND FILTER

D-AHU MODULAR R
INSTALLATION

COMFORTABLE
INDOOR CLIMATE

Products overview

D-AHU Professional



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**

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

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 R

500 m³/h
up to 25,000 m³/h

D-AHU Modular P

500 m³/h
up to 15,000 m³/h

D-AHU Modular L

250 m³/h
up to 2,500 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 or D-AHU Modular R
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!

Adding or changing the components: coils for the Modular R or filters, recuperators etc for the Professional range.
Options as insultation type and metal sheet can be selected.

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

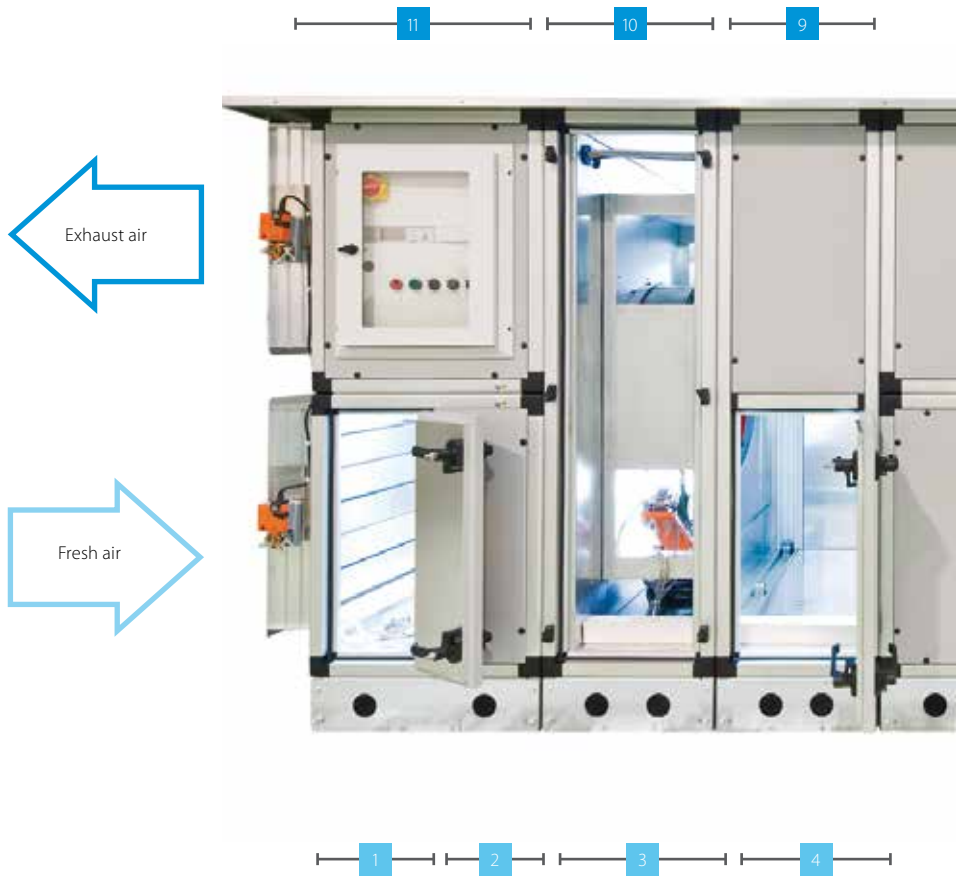
Result sp65	Eurovent Classification according to EN1886					
D1	Casing strength class	D1	D2	D3		
	Max. relative deflection mm x m^{-1}	4.00	10.00	EXCEEDING10		
L1	Casing air leakage class at -400 Pa	L1	L2	L3		
	Max. leakage rate (f_{400}) l x s^{-1} x m^{-2}	0.15	0.44	1.32		
L1	Casing air leakage class	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. R-410A with heat recovery system with galvanised condensate tray and drip protection
6. Supply air fan (with hinged door, opening, drive monitoring, mounted and cabled lighting and ON/OFF switch)



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

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

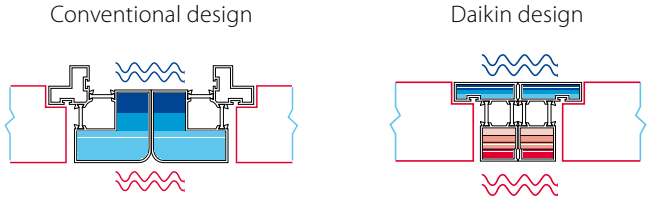
Humidifiers
- Evaporative humidifier without pump (loss water)
- Evaporative humidifier with re-circulating pump
- Air washer without pump (loss water)
- Air washer with re-circulating pump
- Steam humidifier with direct steam production
- Steam humidifier with local distributor
- Atomized water spray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

Control system on plug and play solution basis

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

Unique section to section thermal break profile

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



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 m^3/h up to 144,000 m^3/h.
› All the units can be modularly designed to facilitate the transport and the assembly on site.

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

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

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

Plug and play: More control, more flexibility

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

Modular R

High-end solution with heat recovery

Energy efficiency and indoor air quality

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

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		%	81.30	76.60	76.90	77.20	76.80	77.10	78.10	77.20	77.20	77.90
External static pressure	Nom.	Pa	200	200	200	200	200	200	200	200	200	200
Current	Nom.	A	2.64	3.98	2.20	3.3	4.10	4.60	4.98	6.48	8.52	10.68
Power input	Nom.	kW	0.59	0.89	1.40	2.03	2.60	2.84	3.10	4.14	5.20	6.68
SFPv		$kW/m^3/s$	1.78	1.88	1.86	1.78	1.70	1.68	1.60	1.64	1.63	1.60
Electrical supply	Phase	ph	1	1	1	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	Length	mm	1,320	1,320	1,540	1,740	1,740	1,920	1,920	2,180	2,460	2,570
	Depth	mm	1,700	1,700	1,800	1,920	2,080	2,280	2,400	2,450	2,280	2,400
	Height overall	mm	720	820	990	1,200	1,400	1,400	1,600	1,940	1,940	2,300
Weight unit		kg	325	350	475	575	750	790	950	1,330	1,410	1,750
Sound level at 1m		Lp dB(A)*	36	43	38	41	42	41	41	39	42	40

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 92% of the thermal energy recovered
› No cross contamination

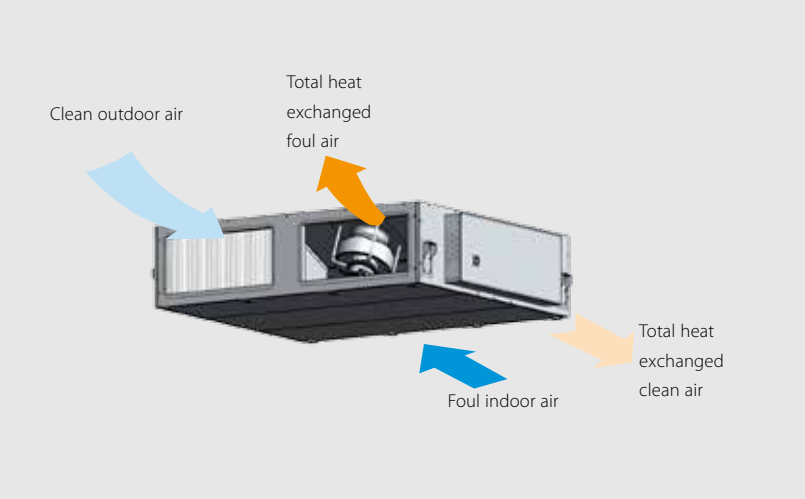
D-AHU Modular P			1	2	3	4	5	6	7	8	9	10
Airflow		m^3/h	1,100	1,600	2,400	3,100	3,700	4,750	5,500	8,000	10,400	12,500
Thermal efficiency		%	90.4	90.6	90	89.9	89.8	89.9	89.9	90.1	89.9	89.9
External static pressure	Nom.	Pa	200	200	200	200	200	200	200	200	200	200
Current	Nom.	A	1.952	3.12	1.576	2.26	2.56	3.3	3.8	4.86	7.32	8.24
Power input	Nom.	kW	0.44	0.676	0.956	1.286	1.504	1.92	2.27	3.02	4.36	5
SFPv		$kW/m^3/s$	1.44	1.52	1.43	1.49	1.46	1.46	1.49	1.36	1.51	1.44
Electrical supply	Phase	ph	1	1	3	3	3	3	3	3	3	3
	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 300 Pa (at nominal conditions)

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

D-AHU Modular L			2	3	4	5	6	7
Airflow		m³/h	300	600	1,200	1,500	2,500	3,000
Thermal efficiency		%	90.7	90.2	90.5	89.7	90.1	89.5
External static pressure	Nom.	Pa	100	100	100	100	100	100
Current	Nom.	A	0.60	1.21	2.28	2.89	4.30	2.13
Power input	Nom.	kW	0.14	0.28	0.53	0.66	0.99	1.40
SFPv		kW/m³/s	1.40	1.55	1.50	1.55	1.40	1.65
Electrical supply	Phase	ph	1	1	1	1	1	3
	Frequency	Hz	50	50	50	50	50	50
	Voltage	V	230	230	230	230	230	380
Dimensions unit	Width	mm	870	980	1,335	1,335	2,000	2,000
	Height	mm	280	350	415	415	500	500
	Length	mm	1,410	1,470	1,550	1,550	1,800	1,800
Weight unit		kg	109	142	202	209	335	337

Daikin fresh air package

Unique in the market

Plug and play connection of AHU to Daikin VRV and ERQ

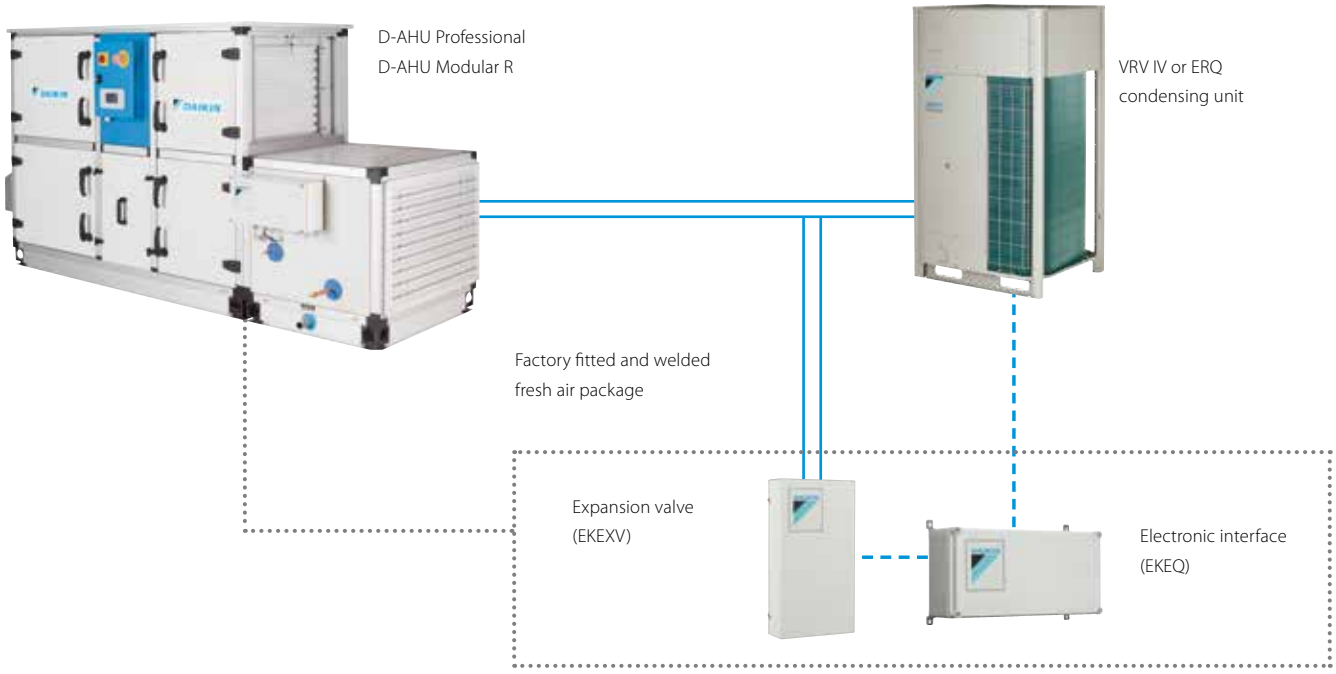
The Daikin fresh air package provides a complete solution, including all unit controls (expansion valve, control box and AHU controller) and sensors factory mounted and configured.

Higher efficiency

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

High comfort levels

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



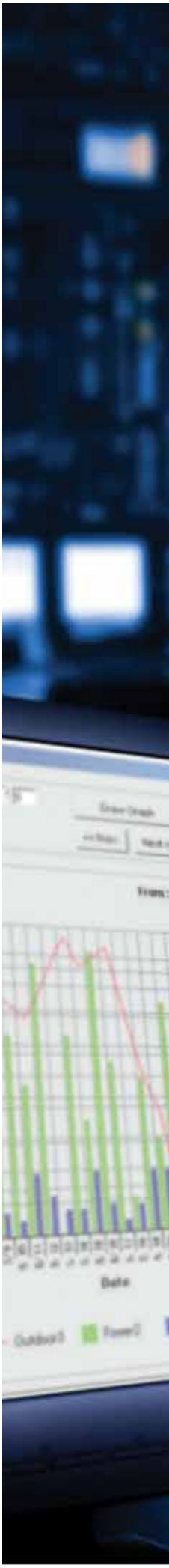
For more information on the connection of VRV or ERQ DX units with air handling units refer to the chapter Ventilation & Biddle air curtains of this catalogue

Options - D-AHU Professional

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/m³ thermal conductivity 0.022 W/m*K fire reaction class b-s2, diam. as per EN13501-1	standard	standard
	Mineral wool density 120 kg/m³ 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
	AISI 304 stainless steel	option	option
Internal sheet material	Pre-coated galvanized steel	option	option
	Aluzinc	standard	standard
	Aluminium	option	option
	AISI 304 stainless steel	option	option
Base frame	Aluminium up to 35,000 m³/h	standard	standard
	Galvanized steel from 35,000 m³/h	standard	standard
Handle	Glass fibre reinforced nylon	standard	standard
Type	Compression type	standard	standard
	Hinge function type (possibility to remove door)	option	option

Table of content

Control Systems




Print Graph
Export Data
Setup Graph
Exit
60
50
40
30
20
10
0
-10

Mini BMS

with full integration across all product pillars

DCM601A51

intelligent Manager touch

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

NEW

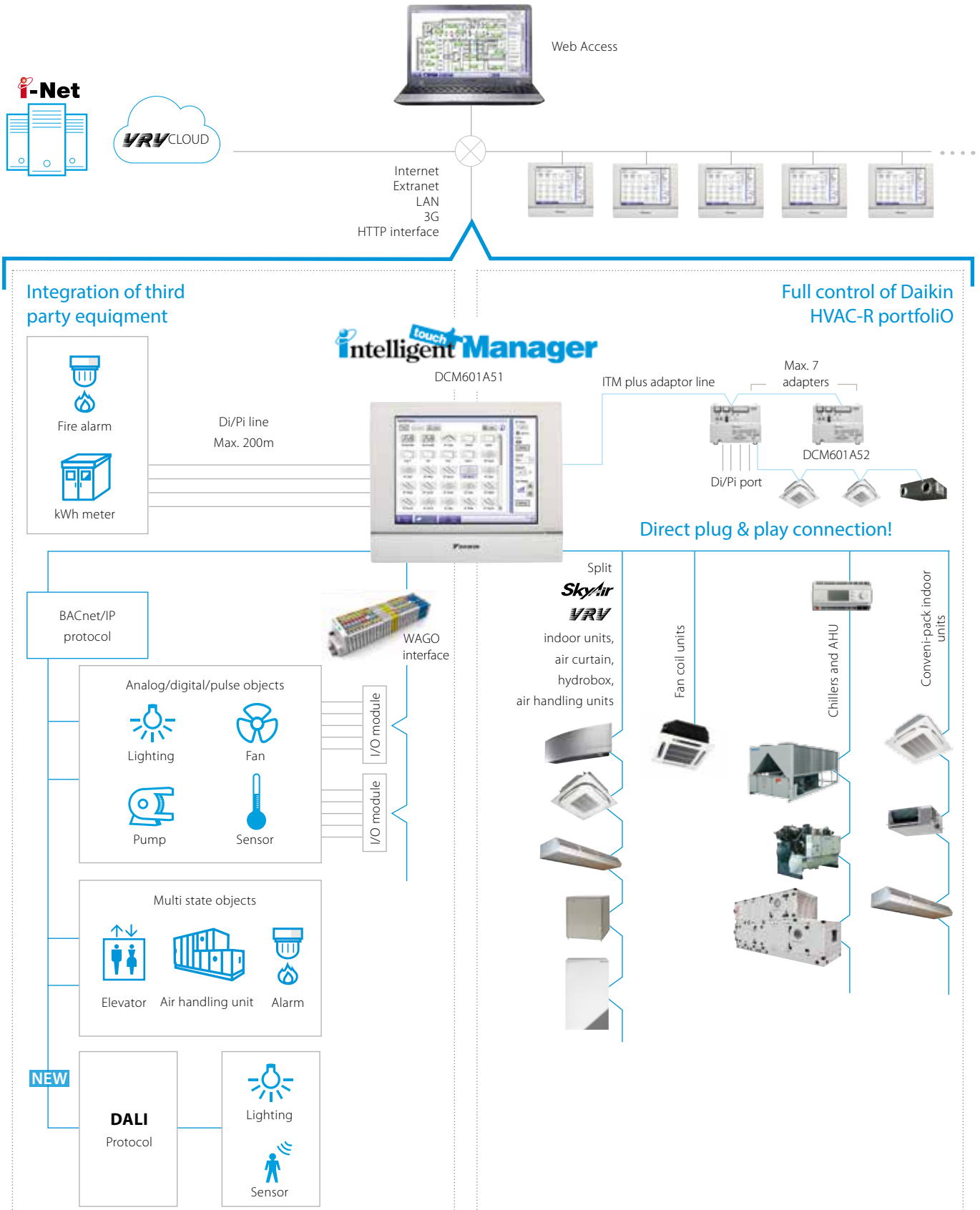
Download the WAGO selection tool from my.daikin.eu

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

Check on YouTube

https://www.youtube.com/DaikinEurope

System overview



touch intelligent Manager

User friendliness

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

Smart energy management

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

Flexibility

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

Easy servicing and commissioning

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

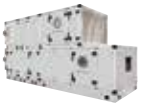
Plug & play


Split

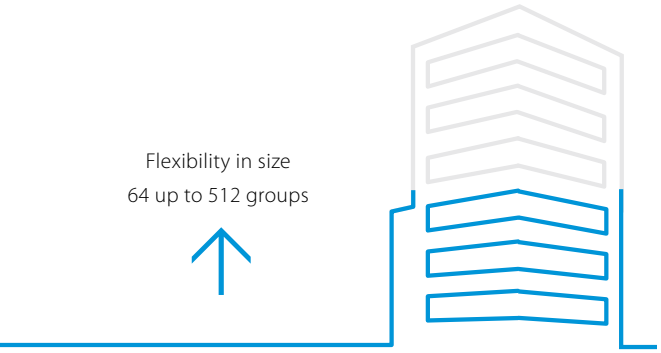

Sky Air


VRV


Fan coils

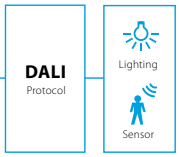

Chillers and AHU

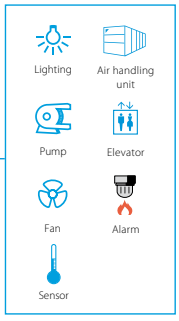

Conveni-pack indoor units

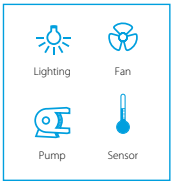


BACnet/IP protocol


WAGO I/O







Functions overview

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

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

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

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

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

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

NEW

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

Connectable to
- DX Split, Sky Air, VRV
- Chillers (via MT3-EKMBACIP controller)
- Daikin AHU
- Fan coils
- Daikin Altherma Flex type
- LT and HT hydroboxes
- Biddle Air curtains
- WAGO I/O
- BACnet/IP protocol

Chiller Intelligent Manager

Factory-engineered system control to manage a chiller plant room

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

iCM's main functionalities:

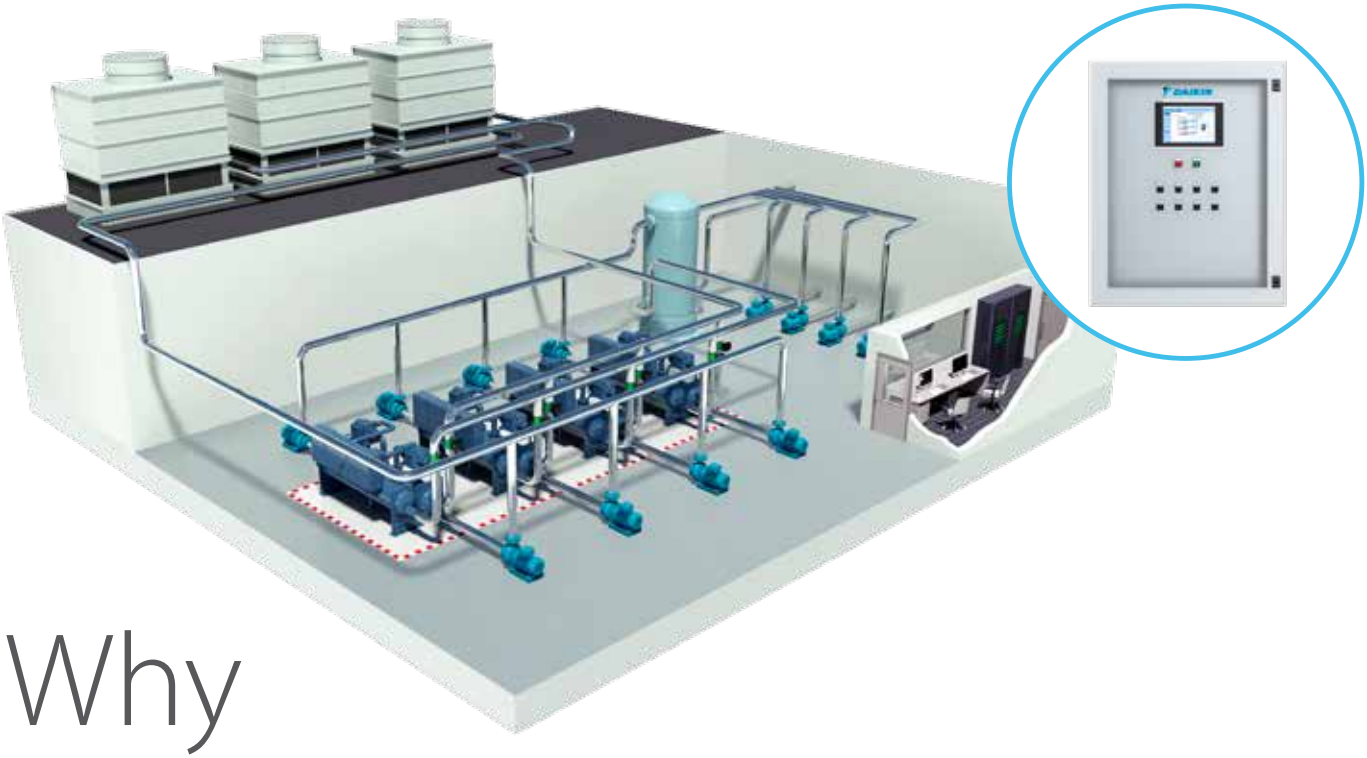
Availability
Determines whether chillers are available or not, based on:
› Inputs from the chiller unit controllers
› Modbus communication status
› Pump status

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

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

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

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



Why choose iCM?

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

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

Product line-up

and specifications

iCM is available in two versions:

Standard

(Configuration)

(Basic)
(≤4 MT3 chillers)

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

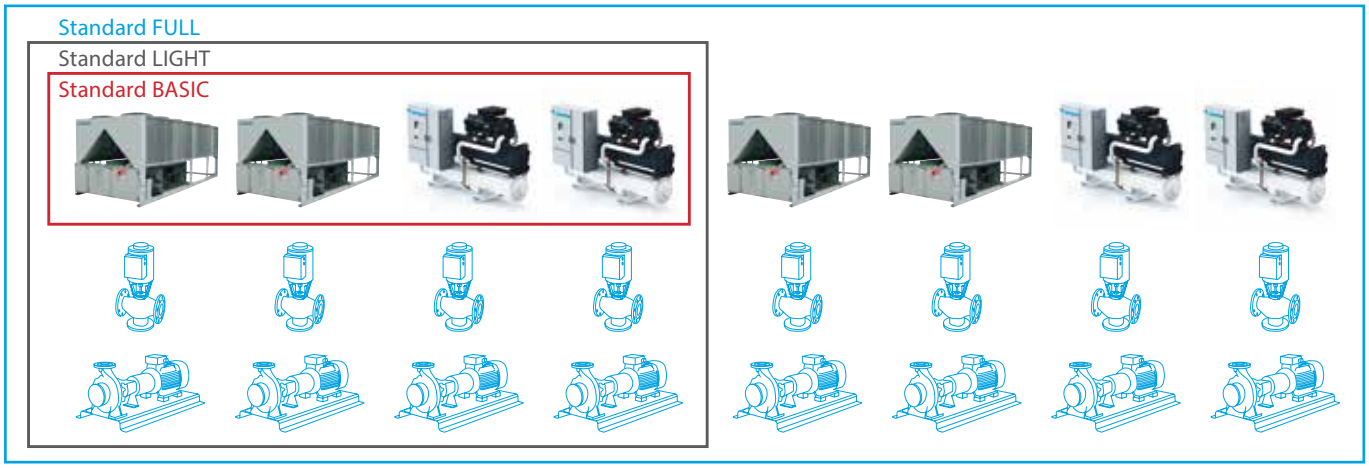
Customised

(Free-programmable)

(Customised)

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

Standard is the right solution for you when you have:
› Up to 8 x (Air-cooled/Water-cooled chillers + shut-off valves + pumps)
› 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

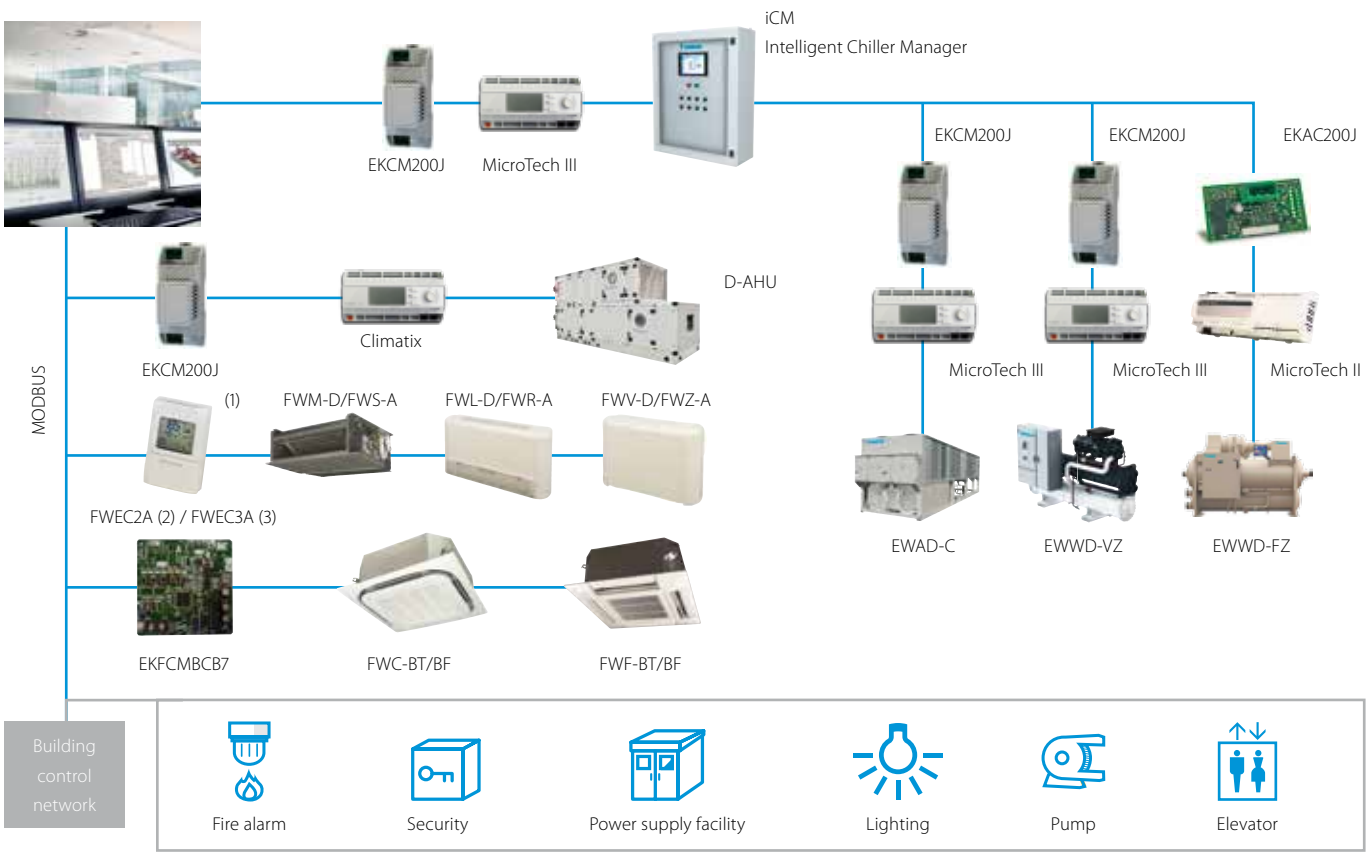
Modbus interface for monitoring and control of Daikin Altherma Flex Type, VRV HT hydrobox and **small inverter chiller**.

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

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

Modbus interface

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



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

Integrate Refrigeration units in BMS systems via modbus protocol

BRR9A1V1

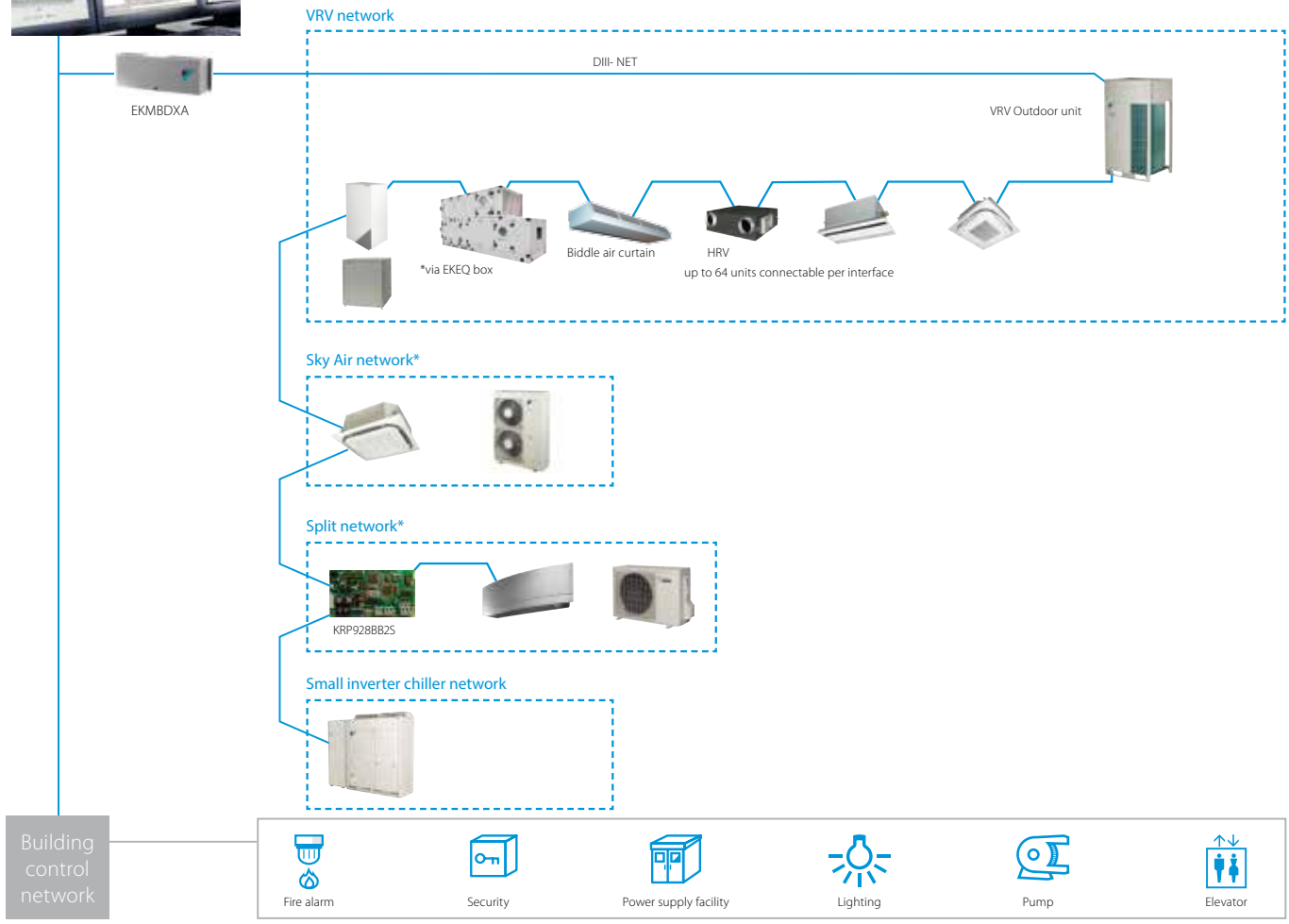
* For all connectable indoor units and Biddle air curtains please refer to the Conveni-pack pages in this catalogue

DIII-net Modbus interface

EKMBDXA

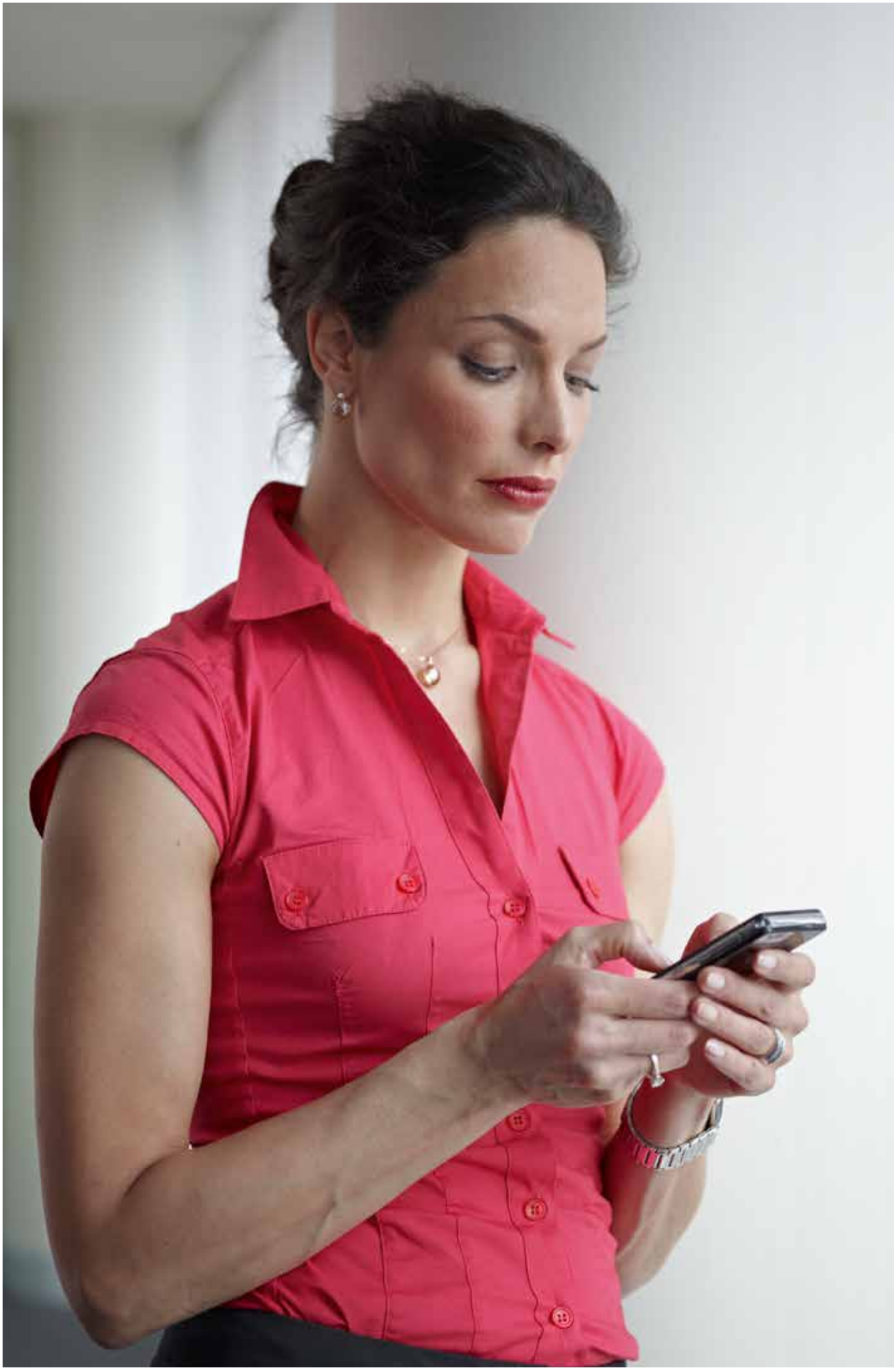
Integrated control system for seamless connection between Split, Sky Air, VRV and small inverter chillers and BMS systems

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



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

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

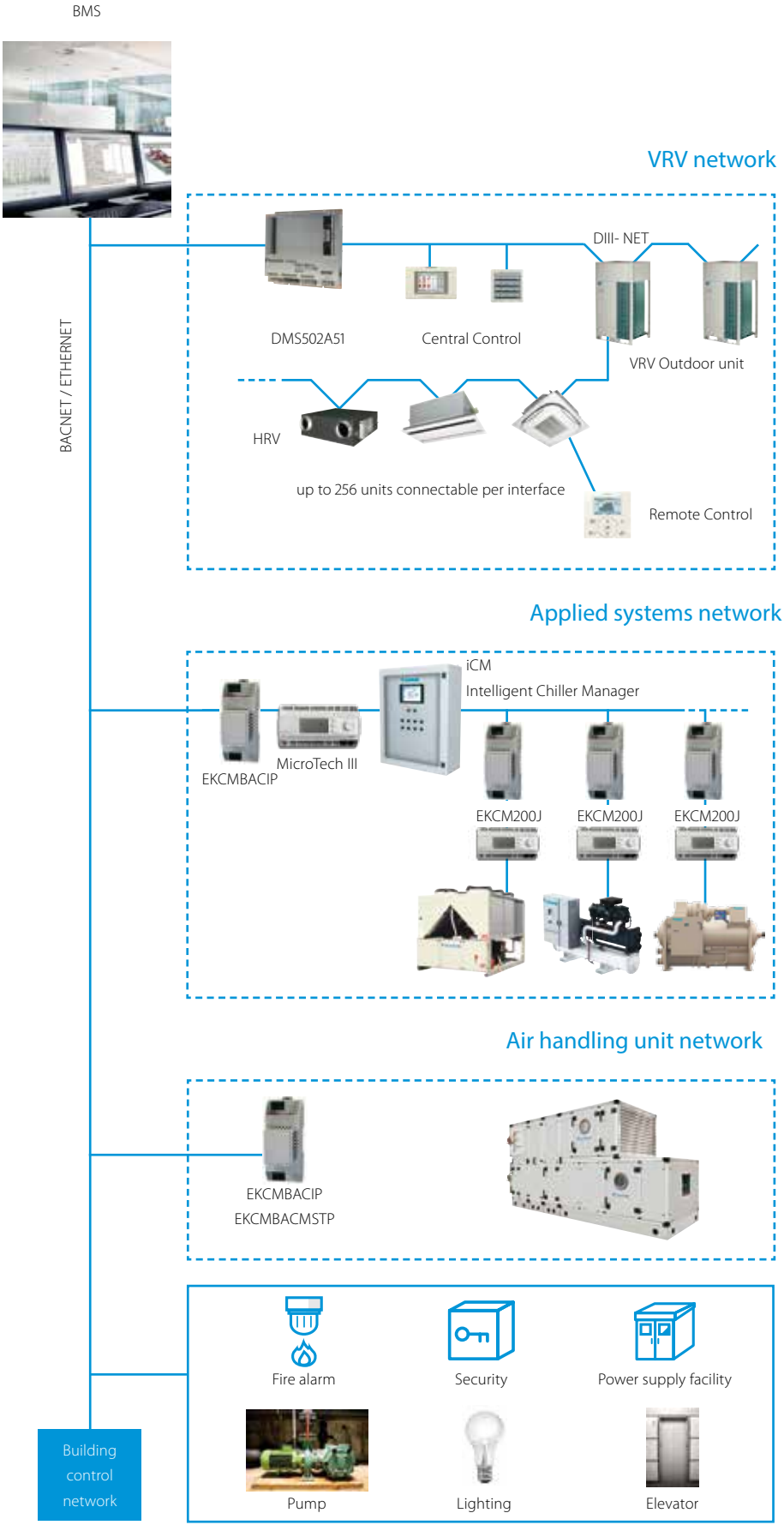


BACnet Interface

DMS502A51 / EKACBACMSTP / EKCMBACIP / EKCMBACMSTP

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

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



LonWorks Interface

DMS504B51 / EKACLONP

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

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

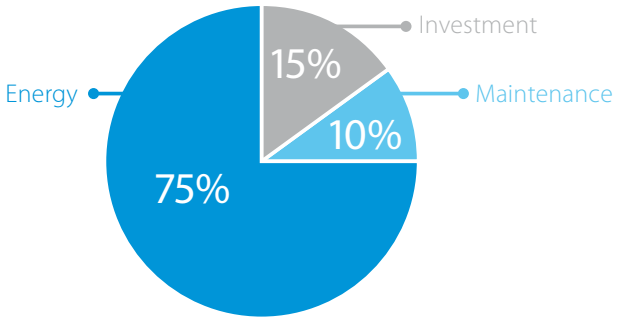
Why

having Daikin's remote monitoring?

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's remote 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

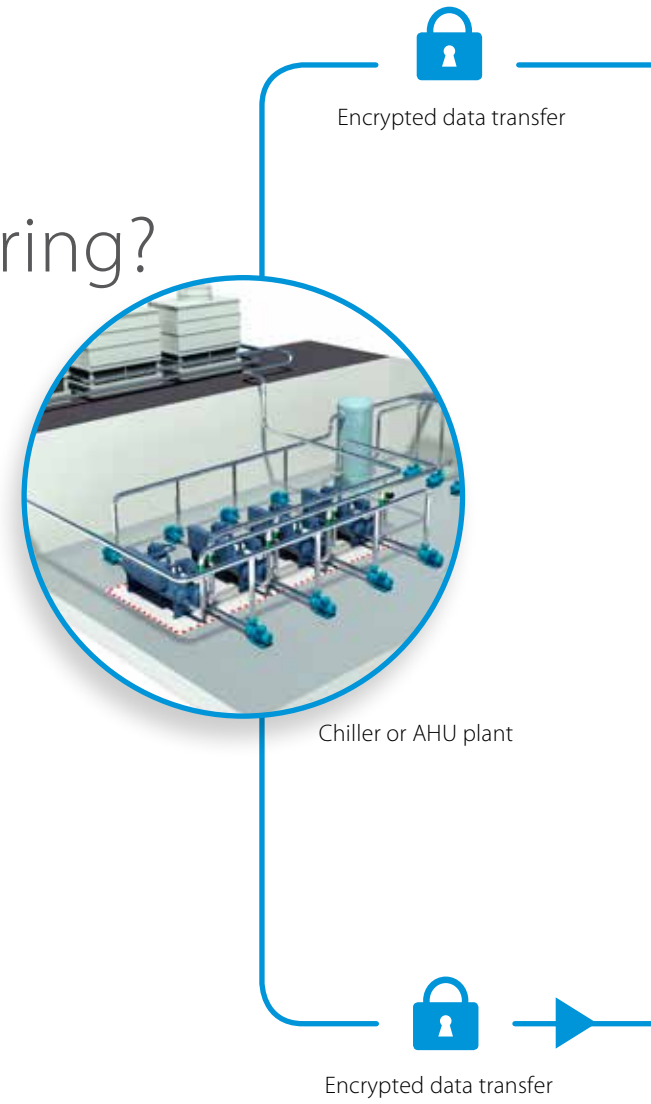
is Daikin's remote monitoring?

A solution for customer specific needs

Daikin's remote 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's remote monitoring has predefined user roles like:
› **operator**
› **service provider**
› **Daikin specialists**

The features of Daikin's remote monitoring 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's remote monitoring with the complementary service programme best suited to your needs.



The remote monitoring of Daikin products

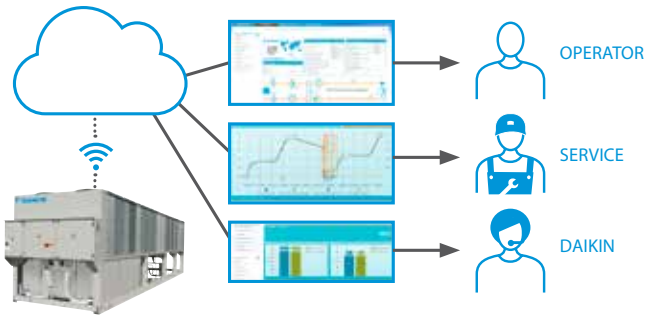
1 **Insight wherever and whenever required, full visibility and traceability of the HVAC installation.**

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

2 **With Daikin's remote monitoring, 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 onsite interventions

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



ACTION TAKEN

You can hand it to us

Alerts & web application

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

Active monitoring

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

Connected Service Plan

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

CLOUD DATA WAREHOUSE

Encrypted data transfer

SMARTCENTRE
Turns data into actions

Power supply

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

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

Conversion table refrigerant piping

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

F-gas regulation

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

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

Measuring conditions

Air cooled chiller	Cooling only	Evaporator: 12°C/7°C	Ambient: 35°CDB
	Heat pump	Evaporator: 12°C/7°C	Ambient: 35°C
		Condenser: 40°C/45°C	Ambient: 7°CDB/6°CWB
Water cooled chiller	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	Room temperature: 27°CDB /19°CWB	
		Water inlet/outlet temperature: 7°C/12°C	
	Heating	Room temperature: 20°C 2 pipe: Water inlet temperature: 50°C (same water flow as in cooling mode) 4 pipe: Water inlet/outlet temperature: 70°C/60°C	

All performance data in this catalogue is in compliance with the Eurovent EN14511 standard.

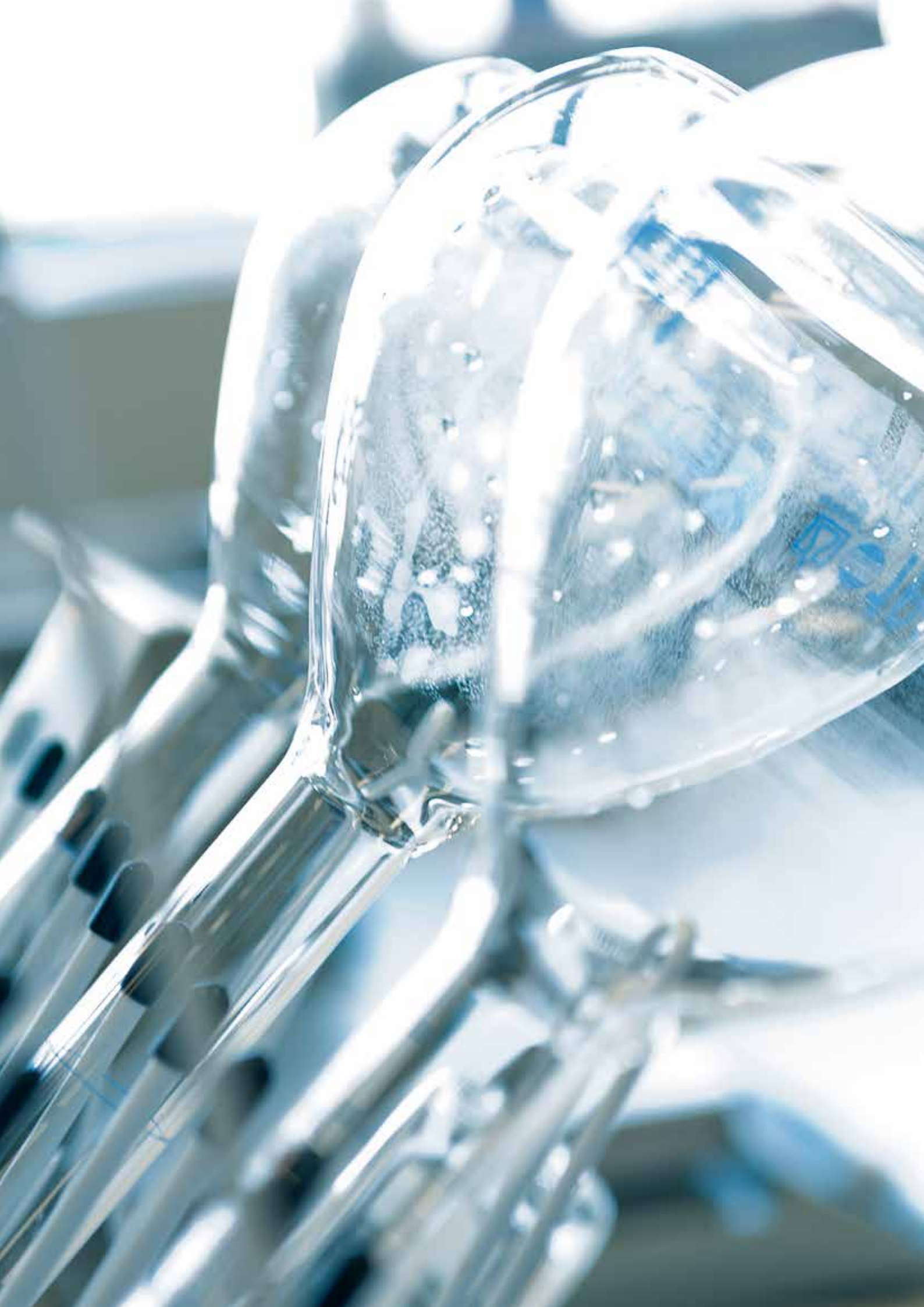
Energy efficiency Ratio (EER)
Describes the efficiency of a heat pump machine in cooling mode. The rated capacity is divided by the rated total power input.

European Seasonal Energy Efficiency Ratio (ESEER)
An efficiency metric of heat pumps which describes performance of the unit over a typical season where the source temperature varies.

Coefficient of Performance (COP)
Ratio of the heating capacity to the power input of the unit.

Seasonal Coefficient of Performance (SCOP)
SCOP describes the heat pump's average annual efficiency performance. SCOP is therefore an expression for how efficient a specific heat pump will be for a given heating demand profile.

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

The highest peak in chiller technology

VZ CHILLER SERIES

The new Daikin water cooled chiller delivers the highest efficiency in it's range. With it's small footprint, low noise level and wide operation range, the VZ chiller can be used for a variety of applications. In addition to this, the VZ chiller is future ready, using the best refrigerant today and ready for the new refrigerants of tomorrow.

Find out more on www.daikin.eu

EWWD-VZ chiller series

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