



Industrial yet personal

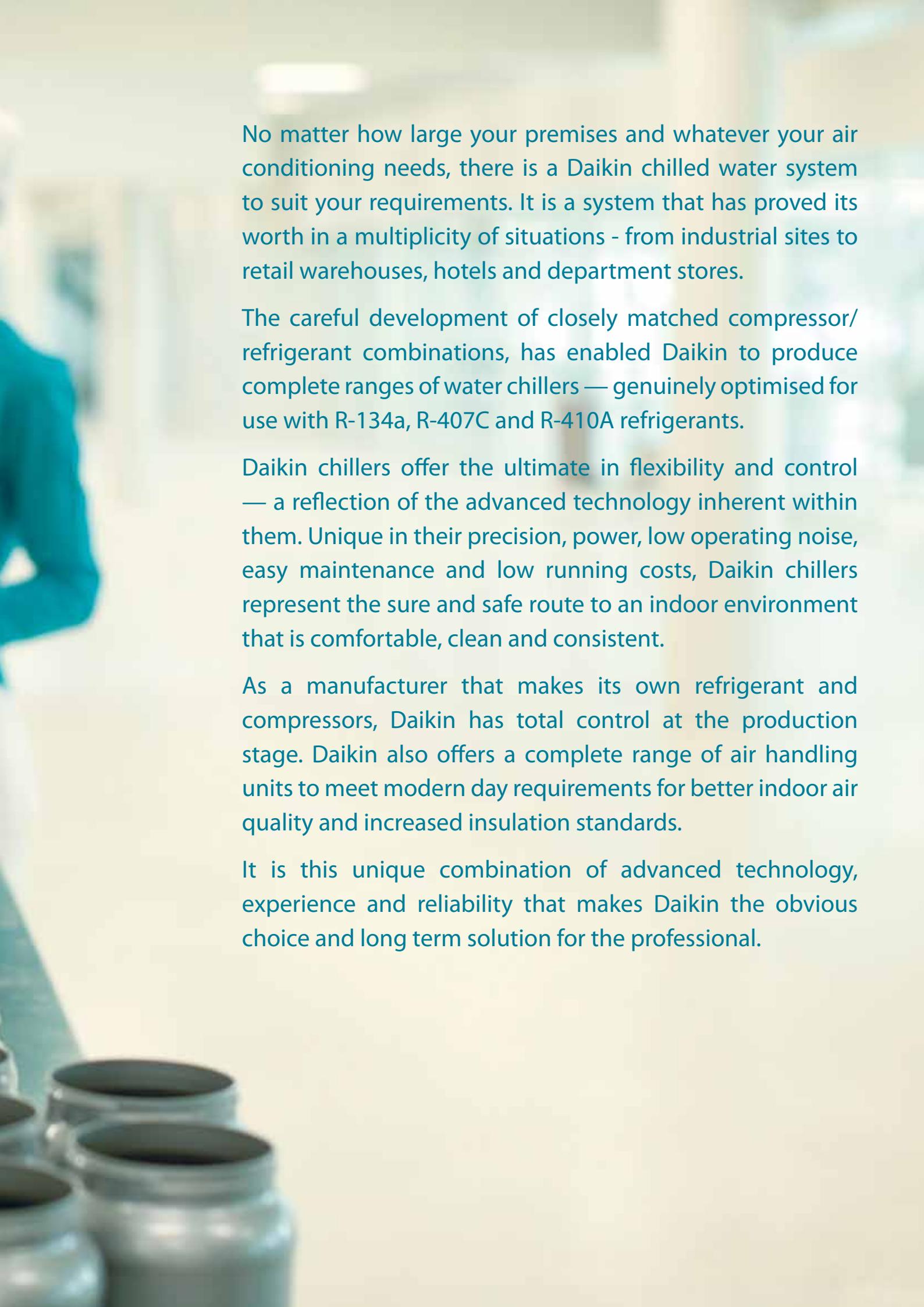


APPLIED SYSTEMS
CATALOGUE

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No matter how large your premises and whatever your air conditioning needs, there is a Daikin chilled water system to suit your requirements. It is a system that has proved its worth in a multiplicity of situations - from industrial sites to retail warehouses, hotels and department stores.

The careful development of closely matched compressor/refrigerant combinations, has enabled Daikin to produce complete ranges of water chillers — genuinely optimised for use with R-134a, R-407C and R-410A refrigerants.

Daikin chillers offer the ultimate in flexibility and control — a reflection of the advanced technology inherent within them. Unique in their precision, power, low operating noise, easy maintenance and low running costs, Daikin chillers represent the sure and safe route to an indoor environment that is comfortable, clean and consistent.

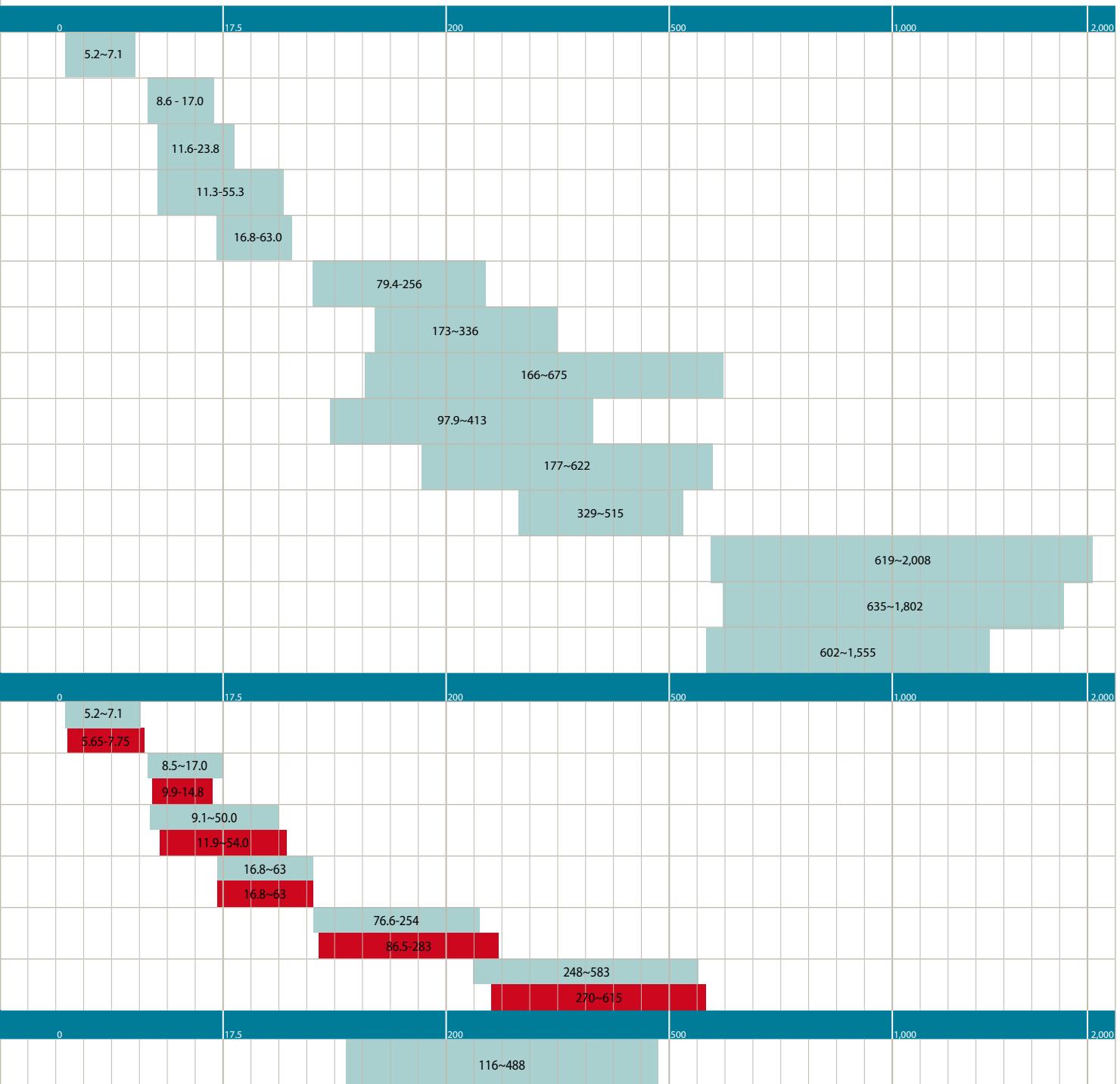
As a manufacturer that makes its own refrigerant and compressors, Daikin has total control at the production stage. Daikin also offers a complete range of air handling units to meet modern day requirements for better indoor air quality and increased insulation standards.

It is this unique combination of advanced technology, experience and reliability that makes Daikin the obvious choice and long term solution for the professional.

| | Refrigerant | Inverter | Free cooling | Compressor | | | Efficiency version | | | Sound version | | |
|------------------------|---|----------|--------------|------------|--------|-------|--------------------|----------|------|---------------|--------------|----------|
| | | | | Swing | Scroll | Screw | Centrifugal | Standard | High | Premium | High ambient | Standard |
| Cooling only | | | | | | | | | | | | |
| EWAQ~ADVP |  | R-410A | ✓ | | ✓ | | | ✓ | | | ✓ | |
| EWAQ~ACV3/ACW1 |  | R-410A | ✓ | | ✓ | | | ✓ | | | ✓ | |
| EUWAC~FBZW1 |  | R-407C | | | ✓ | | | ✓ | | | ✓ | |
| EUWA*~KBZW1 |  | R-407C | | | ✓ | | | ✓ | | | ✓ | |
| EWAQ~BA* |  | R-410A | ✓ | | ✓ | | | ✓ | | | ✓ | |
| EWAQ~DAYN |  | R-410A | | | ✓ | | | ✓ | | | ✓ | |
| EWAQ~E- |  | R-410A | | | ✓ | | | | ✓ | | ✓ | ✓ |
| EWAQ~F- |  | R-410A | | | ✓ | | | ✓ | ✓ | | ✓ | ✓ |
| EWAD~E- |  | R-134a | | | | ✓ | | ✓ | | | ✓ | ✓ |
| EWAD~D- |  | R-134a | | | | ✓ | | ✓ | ✓ | | ✓ | ✓ |
| EWAD~BZ |  | R-134a | ✓ | | | ✓ | | ✓ | ✓ | | ✓ | ✓ |
| EWAD~C- |  | R-134a | | | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| EWAD~CZ |  | R-134a | ✓ | | | ✓ | | ✓ | | | ✓ | ✓ |
| EWAD~CF |  | R-134a | | ✓ | | | ✓ | | ✓ | | ✓ | ✓ |
| Heat pump | | | | | | | | | | | | |
| EWYQ~ADVP |  | R-410A | ✓ | | ✓ | | | ✓ | | | ✓ | |
| EWYQ~ACV3/ACW1 |  | R-410A | ✓ | | ✓ | | | ✓ | | | ✓ | |
| EUWY*~KBZW1 |  | R-407C | | | ✓ | | | ✓ | | | ✓ | |
| EWYQ~BA* |  | R-410A | ✓ | | ✓ | | | ✓ | | | ✓ | |
| EWYQ~DAYN |  | R-410A | | | ✓ | | | ✓ | | | ✓ | |
| EWYD~BZ |  | R-134a | ✓ | | | ✓ | | ✓ | | | ✓ | ✓ |
| Condensing unit | | | | | | | | | | | | |
| ERAD~E- |  | R-134a | | | | | ✓ | ✓ | | | ✓ | ✓ |

Product portfolio air cooled

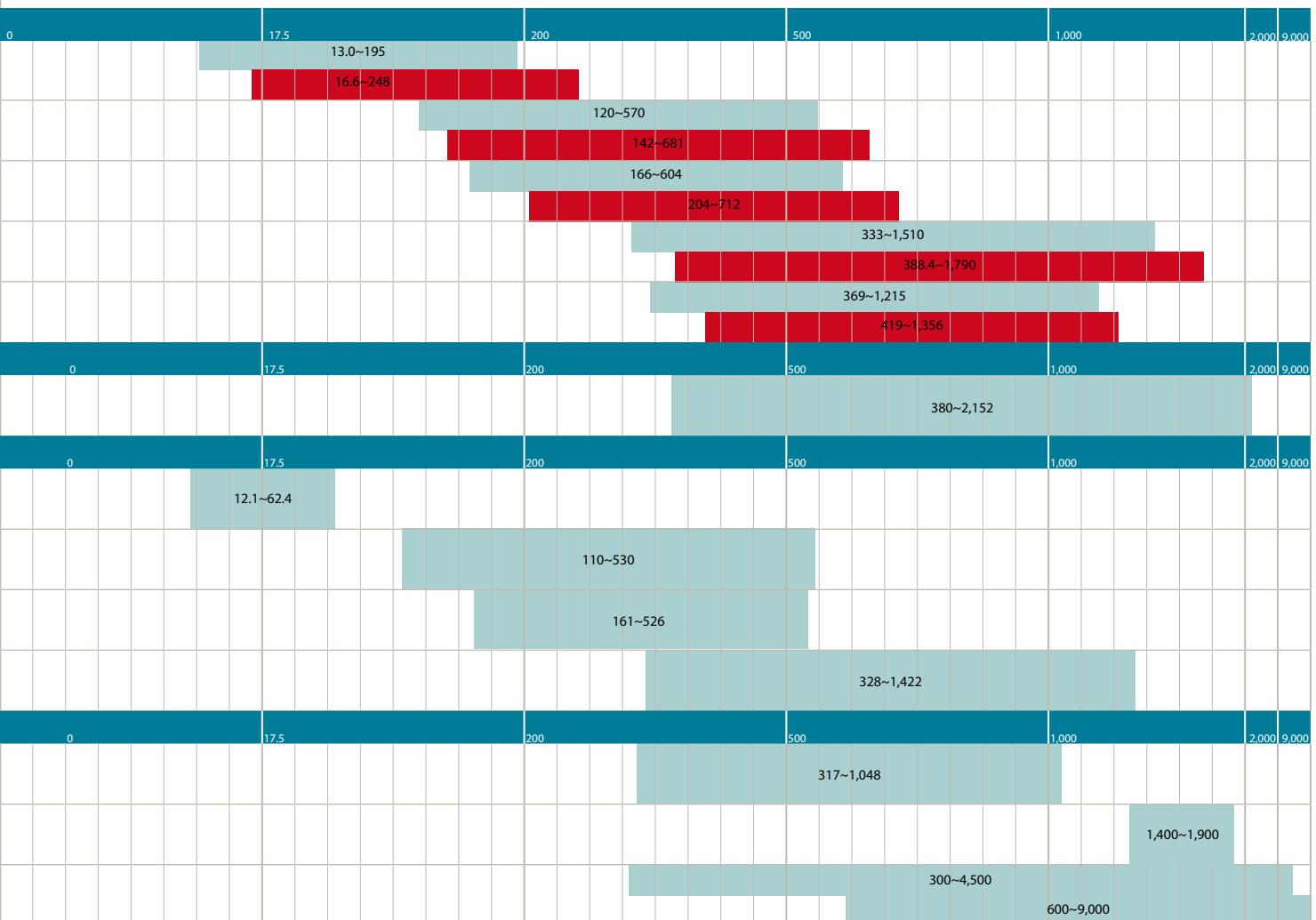
Capacity classes (kW)



Product portfolio water cooled

| | Refrigerant | Inverter | Free cooling | Compressor | Efficiency version | Sound version | | | | | | |
|--|---|----------|--------------|------------|--------------------|---------------|---------|--------------|----------|-----|---------|-----------|
| | | | | Swing | Standard | High | Premium | High ambient | Standard | Low | Reduced | Extra low |
| Water cooled chillers (Cooling only & Heating only) | | | | | | | | | | | | |
| EWWP-KBW1N |  | R-407C | | ✓ | | ✓ | | | | ✓ | | |
| EWWD-J- |  | R-134a | | | ✓ | | ✓ | | | ✓ | | |
| EWWD-G- |  | R-134a | | | ✓ | | ✓ | ✓ | | ✓ | | |
| EWWD-I- |  | R-134a | | | ✓ | | ✓ | ✓ | | ✓ | | |
| EWWD-H- |  | R-134a | | | ✓ | | | ✓ | | ✓ | | |
| Water cooled chillers (Cooling only) | | | | | | | | | | | | |
| EWWQ-B- |  | R-410A | | | ✓ | | ✓ | ✓ | | ✓ | | |
| Condenserless chillers | | | | | | | | | | | | |
| EWLP-KBW1N |  | R-407C | | | ✓ | | ✓ | | | ✓ | | |
| EWLD-J- |  | R-134a | | | ✓ | | ✓ | | | ✓ | | |
| EWLD-G- |  | R-134a | | | ✓ | | ✓ | | | ✓ | | |
| EWLD-I- |  | R-134a | | | ✓ | | ✓ | | | ✓ | | |
| Water cooled centrifugal chillers | | | | | | | | | | | | |
| EWWD-FZ |  | R-134a | ✓ | | | ✓ | | ✓ | | ✓ | | |
| DWME |  | R-134a | ✓ | | | ✓ | | ✓ | | ✓ | | |
| DWSC DWDC |  | R-134a | ✓ | | | ✓ | | ✓ | | ✓ | | |

Capacity classes (kW)





About Daikin

**Daikin has a worldwide reputation based
on 85 years' experience in the successful manufacture
of high quality air conditioning equipment for
industrial, commercial and residential use.**

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.

Environmental Awareness

DAIKIN AND THE ENVIRONMENT

Air conditioning systems provide a significant level of indoor comfort, making possible optimum working and living conditions in the most extreme climates. In recent years, motivated by a global awareness of the need to reduce the burdens on the environment, some manufacturers including Daikin have invested a great deal in limiting the negative effects associated with the production and the operation of air conditioners. Hence, models with energy saving features and improved eco-production techniques have seen the light of day, making a significant contribution to limiting the impact on the environment.

SMART CONTROL BRINGS COMFORT AND REDUCES ENERGY CONSUMPTION

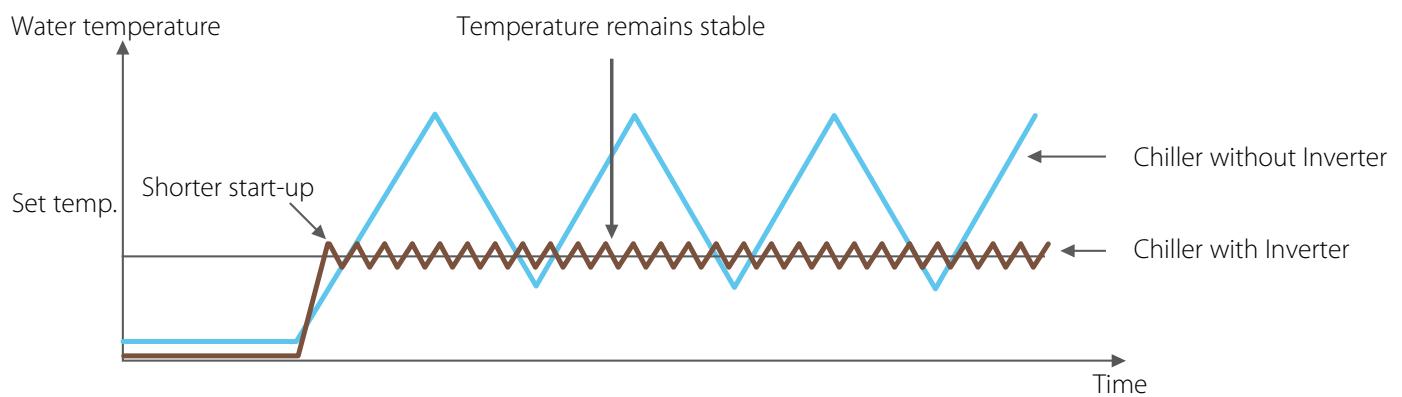
Inverter technology used in the air cooled Mini Chiller (EWAQ-AC & EYWQ-AC), the heat pump inverter EYWD-BZ and the cooling only inverter EWAD-CZ, allows more precise control of the leaving water condition in function of the load. This leads to energy savings and high comfort levels, ensuring it is never too cool or too hot. This is a major advantage over standard fixed speed models, which use on/off cycling of the compressor, creating greater fluctuations in control conditions. This technology has now also been introduced into our water cooled range with the centrifugal inverter DWSC/DWDC series.



Inverter technology

Inverter technology offers improved levels of comfort:

- › Energy efficient: continuous matching of load requirement
- › Start-up time is reduced by 1/3
- › Less frequent start/stop cycles
- › Reduced sound levels
- › High EER/COP values





INVERTER TECHNOLOGY FOR HIGHER EFFICIENCY

Both inverter drive (ID) and variable frequency drive (VFD) are terms used to describe a piece of electrical hardware that is used to start, stop, and control the speed of an electric motor. When fitted to a single screw compressor or scroll compressor, an inverter allows it to continuously adapt the cooling capacity to the requirement of the building load by controlling the speed of the compressor motor.

Traditional systems using electric motors running at full speed even when unloaded waste electricity and with most building energy being consumed by HVAC operations, possible savings are important. With soaring energy prices and global warming concerns, our variable frequency drives for HVAC compressors, pumps, fans and motors are a major efficiency improvement as well as an energy saver and these combine to reduce costs.

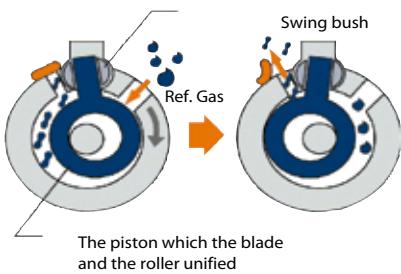
The full range of Daikin chillers now come with inverters already fitted or with an inverter alternative.

PRINCIPAL BENEFITS

- 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 and 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 achieving building 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 current absorbed in the 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 the minimum sound levels at all times.

Reliable and efficient

THE SWING COMPRESSOR:



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

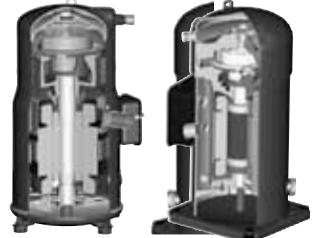


THE SCROLL COMPRESSOR FOR CONTROLLED CAPACITY:



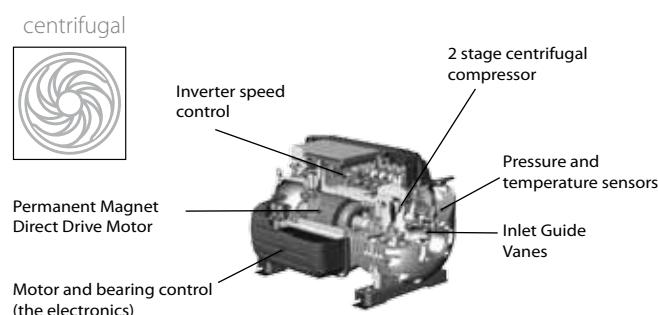
Being compact, the Daikin scroll compressor is used with R-407C and R-410A to provide constant reliability and high efficiency right throughout its service life. Designed for small and medium capacities, the scroll compressors are used with air cooled and water cooled chillers within the range of capacities between 8.6 and 675kW.

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 one moving part – the rotor shaft and impellers – is powered by the permanent magnet 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 operation.



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

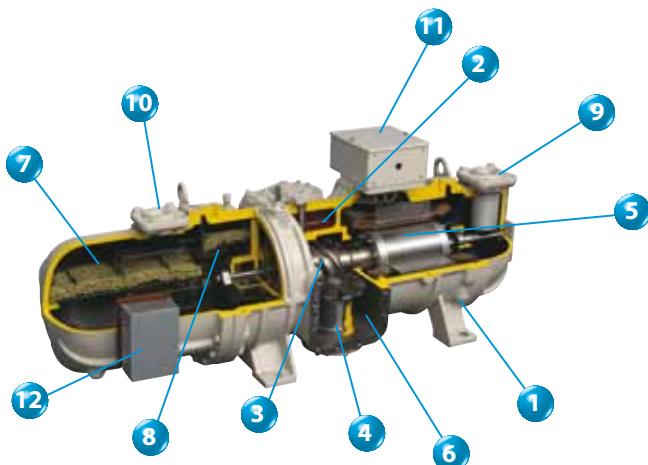
THE SINGLE SCREW STEPLESS COMPRESSOR FOR HIGH CAPACITY:

The heart of the larger Daikin chillers is a semi hermetic single screw compressor, designed, tested and manufactured in Daikin's own laboratories, in order to meet the highest capacity, performance and maintenance specifications. This compressor has been especially developed for operation with R-410A, R-134a or R-407C refrigerant, 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 in function of the chilled water temperature. 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.
- › Renowned for its low noise levels the double walled casing design and integrated oil separator, add to the attenuation effect.
- › Gate rotors made of polymer material result in closer tolerances with main screw and reduced friction greatly improving compressor efficiency and lifetime.
- › No oil pump necessary – lubrication based on differential pressure principle.
- › Easy access to both compressor and safety devices
- › Star delta starter with low starting current as standard



1. Casing
2. Slide valve
3. Screw rotor
4. Bearing
5. Motor
6. Gate rotor
7. 2nd stage oil separator
8. Demister (oil separator)
9. Refrigerant suction
10. Refrigerant discharge
11. Compressor terminal + CTP
12. Stepper Motor

STANDARD ANTI-CORROSION TREATMENT

As standard, condensers for air cooled chillers are given anti-corrosion treatment. This treatment significantly increases resistance to acid rain and saline corrosion. Depending on the capacities and models, treatments are of the following type:

Acrylic treatment (Daikin ref PE)



Example of acrylic treatment

The aluminium fins are coated with an acrylic resin and a hydrophilic film.

Epoxy Treatment

The aluminium fins are black epoxy coated.

Air Cooled

In the chilled water market, chillers of the air cooled type are most frequently used. Out of its wide range of chillers in cooling only or heat pump version, with or without integrated hydronic components, Daikin always offers you a chiller fitting your application needs.

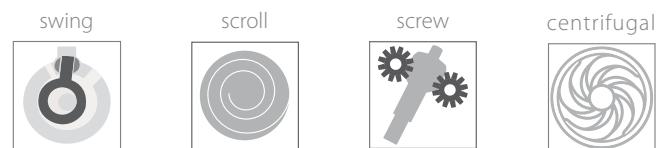
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| EWYQ-BAWN/BAWP | 32 | EWYD-BZSS | 72 |
| EWAQ-DAYN | 34 | EWYD-BZSL | 74 |
| EWYQ-DAYN | 36 | EWAD-C-SS/SL | 76 |
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| EWAQ-E-XR | 40 | EWAD-C-XS/XL | 80 |
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| EWAQ-F-SR | 44 | EWAD-C-PS/PL | 84 |
| EWAQ-F-XS/XL | 46 | EWAD-C-PR | 86 |
| EWAQ-F-XR | 48 | EWAD-CZXS/XL | 88 |
| EWAD-E-SS | 50 | EWAD-CZXR | 90 |
| EWAD-E-SL | 52 | EWAD-CFXS/XL | 92 |
| EWAD-D-SS | 54 | EWAD-CFXR | 94 |

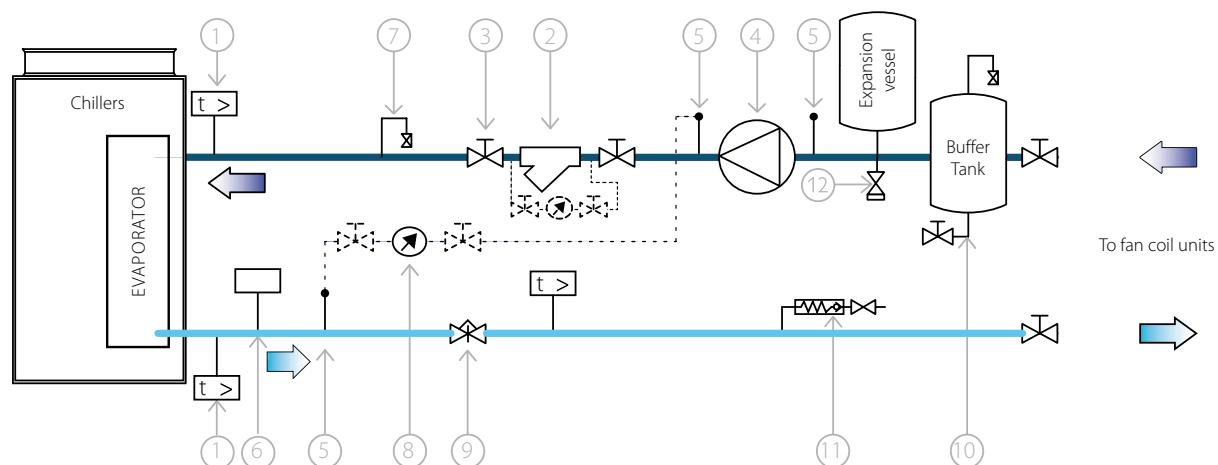


Daikin has taken great care to match major chiller components and refrigerant combinations to a point where high efficiency ranges of technically advanced and closely optimised air and water cooled units are now widely available for use with R-410A, R-407C and R-134a refrigerants.

R-410A **R-134a** **R-407C**



AIR COOLED CHILLER



1. Temperature sensor
2. Filter
3. Shut-off valve
4. Pump

5. Pressure port
6. Flow switch
7. Air purge
8. Pressure gauge

9. Balancing valve
10. Drain valve
11. Charging valve
12. Safety valve

STRENGTHS

- › Wide operating range
- › Low operating sound level
- › Easy 'plug and play' installation
- › Daikin swing compressor
- › Integrated hydronics

OPTIONS (FACTORY MOUNTED)

- › Evaporator heater tape

CONTROL

- › Leaving water control

AVAILABLE INPUTS

- › Voltage free contact:
 - ON/OFF
- › Schedule timer:
 - ON/OFF
 - Silent operation



Digital controller



R-410A

INVERTER





EWAQ-ADVP

Cooling only

| Capacity class | | | | EWAQ005ADVP | EWAQ006ADVP | EWAQ007ADVP |
|----------------------|-------------------------------------|--------------------|----------------|--------------------------------------|---------------|-------------|
| Cooling capacity | Nom. | kW | | 5.2 | 6.0 | 7.1 |
| Power input | Cooling | Nom. | kW | 1.89 | 2.35 | 2.95 |
| EER | | | | 2.75 | 2.55 | 2.41 |
| Dimensions | Unit | HeightxWidthxDepth | mm | | 805x1,190x360 | |
| Weight | Unit | kg | | | 100 | |
| | Operation weight | | kg | | 104 | |
| Water heat exchanger | Type | | | Brazed plate | | |
| | Nominal water flow | Cooling | l/min | 14.9 | 17.2 | 20.4 |
| Air heat exchanger | Type | | | Tube type | | |
| Pump | Nominal ESP unit | Cooling | kPa | 49.4 | 45.1 | 38.3 |
| Hydraulic components | Expansion vessel | Volume | l | | 6 | |
| Sound power level | Cooling | Nom. | dBA | 62 | | 63 |
| Sound pressure level | Cooling | Nom. | dBA | 48 | | 50 |
| Compressor | Type | | | Hermetically sealed swing compressor | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | 5~20 | | |
| | Air side | Cooling | Min.-Max. °CDB | 10~43 | | |
| Refrigerant | Type | | | R-410A | | |
| | Charge | | kg | 1.7 | | |
| | Control | | | Inverter | | |
| | Circuits | Quantity | | 1 | | |
| Piping connections | Water heat exchanger inlet / outlet | | | 1" MBSP | | |
| | Water heat exchanger drain | | | 5/16 SAE flare | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 1~/50/230 | | |

STRENGTHS

- › Optimised for use with R-410A
- › Inverter controlled scroll compressor
- › Low operating sound level
- › Easy 'plug and play' installation'
- › Wide operating range
- › Integrated hydronics



Digital controller

OPTIONS (FACTORY MOUNTED)

- › Evaporator heater tape

OPTION KIT

- › Digital Input/Output PCP

CONTROL

- › Leaving water control

AVAILABLE INPUTS

- › Voltage free contact:
 - ON/OFF
- › Schedule timer:
 - ON/OFF
 - Silent operation





EWAQ009-011ACV3 / EWAQ009-013ACW1

Cooling only

| Capacity class | | | EWAQ009ACV3 | EWAQ010ACV3 | EWAQ011ACV3 | EWAQ009ACW1 | EWAQ011ACW1 | EWAQ013ACW1 |
|----------------------|-------------------------|--------------------|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Cooling capacity | Nom. | kW | 12.2 ¹ / 8.6 ² | 13.6 ¹ / 9.6 ² | 15.7 ¹ / 11.1 ² | 12.9 ¹ / 9.1 ² | 15.7 ¹ / 11.1 ² | 17.0 ¹ / 13.3 ² |
| Capacity control | Method | | Inverter controlled | | | Inverter controlled | | |
| Power input | Cooling | Nom. | kW | 2.85 ¹ / 2.83 ² | 3.41 ¹ / 3.28 ² | 4.13 ¹ / 3.90 ² | 3.08 ¹ / 3.05 ² | 4.13 ¹ / 3.90 ² |
| EER | | | | 4.27 ¹ / 3.05 ² | 4.00 ¹ / 2.93 ² | 3.79 ¹ / 2.85 ² | 4.19 ¹ / 2.99 ² | 3.79 ¹ / 2.85 ² |
| ESEER | | | | 4.31 | 4.30 | 4.33 | 4.43 | 4.44 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,435x1,418x382 | | | 1,435x1,418x382 | |
| Weight | Unit | | kg | 180 | | | 180 | |
| Water heat exchanger | Type | | | Brazed plate | | | Brazed plate | |
| | Water volume | | l | 1.01 | | | 1.01 | |
| | Nominal water flow | Cooling | l/min | 24.7 | 27.6 | 31.9 | 26.1 | 31.9 |
| Air heat exchanger | Type | | | Hi-XSS | | | Hi-XSS | |
| Pump | Nominal ESP unit | Cooling | kPa | 58.0 | 54.6 | 49.1 | 56.4 | 49.1 |
| Hydraulic components | Expansion vessel | Volume | l | 10 | | | 10 | |
| Fan | Air flow rate | Cooling | Nom. | m ³ /min | 96 | 100 | 97 | - |
| Fan motor | Speed | Cooling | Nom. | rpm | 780 | | | 780 |
| | | | | Steps | 8 | | | 8 |
| Sound power level | Cooling | Nom. | | dBA | 64 | | | 64 |
| Sound pressure level | Cooling | Nom. | | dBA | 51 | | | 51 |
| | Night quiet mode | Cooling | | dBA | 45 | | | 45 |
| Compressor | Type | | | Hermetically sealed scroll compressor | | | Hermetically sealed scroll compressor | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | 5~22 | | | 5~22 |
| | Air side | Cooling | Min.-Max. | °CDB | 10~46 | | | 10~46 |
| Refrigerant | Type | | | | R-410A | | | R-410A |
| | Charge | | kg | | 2.95 | | | 2.95 |
| | Control | | | | Electronic expansion valve | | | Electronic expansion valve |
| | Circuits | Quantity | | | 1 | | | 1 |
| Water circuit | Piping connections | diameter | inch | | G 5/4" (female) | | | G 5/4" (female) |
| | Piping | | inch | | 5/4" | | | 5/4" |
| Power supply | Phase/Frequency/Voltage | | Hz/V | | 1~50/230 | | | 3N~/50/400 |

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

(2) Fan coil program: cooling Ta 35°C - LWE 7°C (Dt: 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C (Dt: 5°C)

STRENGTHS

- › Wide operating range
- › Low operating sound level
- › Easy 'plug and play' installation
- › Daikin swing compressor
- › Integrated hydronics

OPTIONS (FACTORY MOUNTED)

- › Evaporator heater tape



Digital controller

CONTROL

- › Leaving water control
- › Setpoint in heating & cooling

AVAILABLE INPUTS

- › Voltage free contact:
 - ON/OFF
 - Cooling/Heating changeover
- › Schedule timer:
 - ON/OFF
 - Dual setpoint
 - Silent operation





EWYQ-ADVP

Heating & Cooling

| Capacity class | | | EWYQ005ADVP | EWYQ006ADVP | EWYQ007ADVP |
|----------------------|-------------------------------------|--------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Cooling capacity | Nom. | kW | 5.2 | 6.0 | 7.1 |
| Heating capacity | Nom. | kW | 6.1 ¹ / 5.65 ² | 6.8 ¹ / 6.35 ² | 8.2 ¹ / 7.75 ² |
| Power input | Cooling | Nom. | 1.89 | 2.35 | 2.95 |
| | Heating | Nom. | 1.60 ¹ / 1.97 ² | 1.84 ¹ / 2.24 ² | 2.36 ¹ / 2.83 ² |
| EER | | | 2.75 | 2.55 | 2.41 |
| COP | | | 3.81 ¹ / 2.87 ² | 3.70 ¹ / 2.83 ² | 3.47 ¹ / 2.74 ² |
| Dimensions | Unit | HeightxWidthxDepth | mm | 805x1,190x360 | |
| Weight | Unit | kg | | 100 | |
| | Operation weight | kg | | 104 | |
| Water heat exchanger | Type | | | Brazed plate | |
| | Nominal water flow | Cooling | l/min | 14.9 | 17.2 |
| | | Heating | l/min | 17.5 | 19.5 |
| Air heat exchanger | Type | | | Tube type | |
| Pump | Nominal ESP unit | Cooling | kPa | 49.4 | 45.1 |
| Hydraulic components | Expansion vessel | Volume | l | | 38.3 |
| Sound power level | Cooling | Nom. | dBA | 62 | 6 |
| Sound pressure level | Cooling | Nom. | dBA | 48 | 50 |
| | Heating | Nom. | dBA | 48 | 49 |
| Compressor | Type | | | Hermetically sealed swing compressor | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | 5~20 | |
| | | Heating | Min.-Max. °CDB | 25~50 | |
| | Air side | Cooling | Min.-Max. °CDB | 10~43 | |
| | | Heating | Min.-Max. °CDB | -15~25 | |
| Refrigerant | Type | | | R-410A | |
| | Charge | kg | | 1.7 | |
| | Control | | | Inverter | |
| | Circuits | Quantity | | 1 | |
| Piping connections | Water heat exchanger inlet / outlet | | | 1" MBSP | |
| | Water heat exchanger drain | | | 5/16 SAE flare | |
| | Phase/Frequency/Voltage | Hz/V | | 1~/50/230 | |

(1) DB/WB 7°C/6°C - LWC 35°C (Dt=5°C)

(2) DB/WB 7°C/6°C - LWC 45°C (Dt=5°C)

STRENGTHS

- › Optimised for use with R-410A
- › Inverter controlled scroll compressor
- › Low operating sound level
- › Easy 'plug and play' installation
- › Integrated hydronics
- › Wide operating range



Digital controller

OPTIONS (FACTORY MOUNTED)

- › Evaporator heater tape

OPTION KIT

- › Digital Input/Output PCP (size 009-013 only)

CONTROL

- › Leaving water control
- › Setpoint in heating & cooling



AVAILABLE INPUTS

- › Voltage free contact:
 - ON/OFF
 - Cooling/Heating changeover
- › Schedule timer:
 - ON/OFF
 - Dual setpoint
 - Silent operation





EWYQ009-011ACV3/EWYQ009-013ACW1

Heating & Cooling

| Capacity class | | | EWYQ009ACV3 | EWYQ010ACV3 | EWYQ011ACV3 | EWYQ009ACW1 | EWYQ011ACW1 | EWYQ013ACW1 | | |
|----------------------|-----------------------------|---------------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|--|
| Cooling capacity | Nom. | kW | 12.2 ¹ / 8.6 ² | 13.6 ¹ / 9.6 ² | 15.7 ¹ / 11.1 ² | 12.9 ¹ / 9.1 ² | 15.7 ¹ / 11.1 ² | 17.0 ¹ / 13.3 ² | | |
| Heating capacity | Nom. | kW | 10.2 ¹ / 9.9 ² | 11.7 ¹ / 11.4 ² | 13.8 ¹ / 12.9 ² | 11.2 ¹ / 10.9 ² | 13.2 ¹ / 12.4 ² | 14.8 ¹ / 13.9 ² | | |
| Capacity control | Method | | Inverter controlled | | | Inverter controlled | | | | |
| Power input | Cooling | Nom. | kW | 2.85 ¹ / 2.83 ² | 3.41 ¹ / 3.28 ² | 4.13 ¹ / 3.90 ² | 3.08 ¹ / 3.05 ² | 4.13 ¹ / 3.90 ² | | |
| | Heating | Nom. | kW | 2.43 ¹ / 2.99 ² | 2.81 ¹ / 3.46 ² | 3.20 ¹ / 3.94 ² | 2.69 ¹ / 3.31 ² | 3.07 ¹ / 3.78 ² | | |
| EER | | | | 4.27 ¹ / 3.05 ² | 4.00 ¹ / 2.93 ² | 3.79 ¹ / 2.85 ² | 4.19 ¹ / 2.99 ² | 3.79 ¹ / 2.85 ² | | |
| ESEER | | | | 4.31 | 4.30 | 4.33 | 4.43 | 4.44 | | |
| COP | | | | 4.19 ¹ / 3.30 ² | 4.17 ¹ / 3.29 ² | 4.30 ¹ / 3.27 ² | 4.17 ¹ / 3.28 ² | 4.28 ¹ / 3.25 ² | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,435x1,418x382 | | | 1,435x1,418x382 | | | |
| Weight | Unit | kg | | 180 | | | 180 | | | |
| Water heat exchanger | Type | Brazed plate | | | Brazed plate | | | | | |
| | Water volume | I | | 1.01 | 1.01 | | | | | |
| | Nominal water flow | Cooling | l/min | 24.7 | 27.6 | 31.9 | 26.1 | 31.9 | | |
| | | Heating | l/min | 28.3 | 32.6 | 36.9 | 31.2 | 35.5 | | |
| Air heat exchanger | Type | Hi-XSS | | | Hi-XSS | | | | | |
| Pump | Nominal ESP unit | Cooling | kPa | 58.0 | 54.6 | 49.1 | 56.4 | 49.1 | | |
| Hydraulic components | Expansion vessel | Volume | I | | 10 | | | 10 | | |
| Fan | Air flow rate | Cooling Nom. | m ³ /min | 96 | 100 | 97 | - | - | | |
| | | Heating Nom. | m ³ /min | | 90 | | | | | |
| Fan motor | Speed | Cooling Nom. | rpm | | 780 | | 780 | | | |
| | | Heating Nom. | rpm | | 760 | | 760 | | | |
| | | Steps | | 8 | | | 8 | | | |
| Sound power level | Cooling | Nom. | dBA | | 64 | | 64 | | | |
| | Heating | Nom. | dBA | | 64 | | 64 | | | |
| Sound pressure level | Cooling | Nom. | dBA | | 51 | | 51 | | | |
| | Heating | Nom. | dBA | | 51 | | 51 | | | |
| | Night quiet mode | Cooling | dBA | | 45 | | 45 | | | |
| | | Heating | dBA | | 42 | | 42 | | | |
| Compressor | Type | Hermetically sealed scroll compressor | | | Hermetically sealed scroll compressor | | | | | |
| Operation range | Water side | Cooling Min.-Max. | °CDB | | 5~22 | | 5~22 | | | |
| | | Heating Min.-Max. | °CDB | | 25~50 | | 25~50 | | | |
| | Air side | Cooling Min.-Max. | °CDB | | 10~46 | | 10~46 | | | |
| | | Heating Min.-Max. | °CDB | | -15~35 | | -15~35 | | | |
| Refrigerant | Type | R-410A | | | R-410A | | | | | |
| | Charge | kg | | 2.95 | | | 2.95 | | | |
| | Control | Electronic expansion valve | | | Electronic expansion valve | | | | | |
| | Circuits | Quantity | | 1 | | | 1 | | | |
| Water circuit | Piping connections diameter | inch | | G 5/4" ¹ (female) | G 5/4" ¹ (female) | | | | | |
| | Piping | inch | | 5/4" | 5/4" | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 1~/50/230 | 3N~/50/400 | | | | | |

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

(2) FCU program: Cooling Ta 35°C - LWE 7°C (Dt:5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C (Dt:5°C)

STRENGTHS

- > Optimised for use with R-407C
- > Daikin scroll compressor
- > Electronic DDC controller
- > Standard phase sequence controller
- > Maximum external static pressure (ESP): 150Pa
- > Pressure gauges
- > Standard operation range down to -10°C
- > Regulating switch
- > Water inlet or outlet temperature control
- > Input contacts/available outputs
- > Input: on/off (per circuit), pump/flow switch
- > Outputs: compressor operation, summary alarm, pump relay contact
- > Compatible with hydraulic module
- > μ C² SE controller



μ C² SE

scroll



R-407C

OPTIONS (FACTORY MOUNTED)

- > Chilled water temperature down to - 5°C or -10°C

ACCESSORIES (KIT)

- > Address card for connection to BMS or remote user interface (EKAC10C)
- > Remoted installed user interface (EKRUMCA)
*To install EKRUMCA -> EKAC10C needs to be installed on the unit

CONTROL

- > Water inlet temperature control

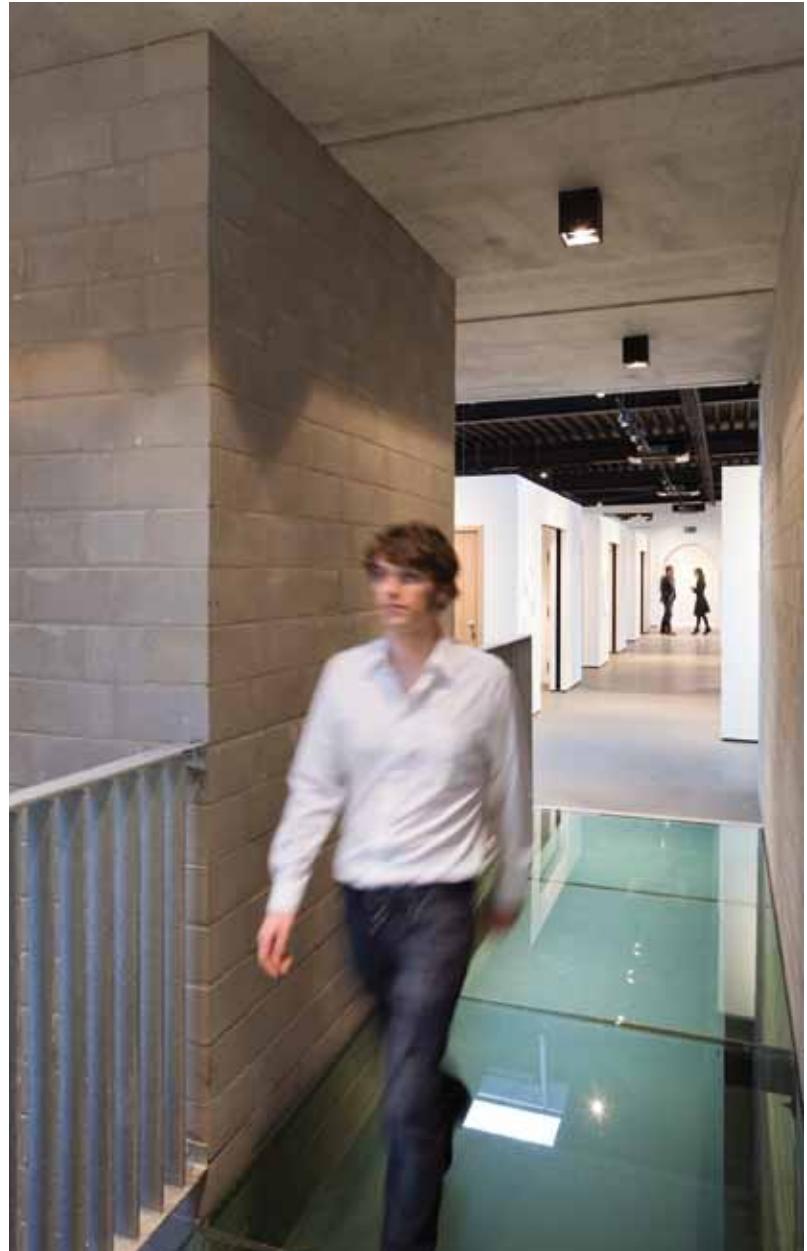
AVAILABLE INPUTS / OUTPUTS

Input

- > ON / OFF (per circuit)
- > Pump / flow switch

Output

- > Compressor operation
- > Summary alarm
- > Pump relay contact





EUWAC8FBZW1

Cooling only

| Capacity class | | | | 5 | 8 | 10 |
|-----------------------------------|------------------------------------|--------------------|---------------------|--|-----------------|-----------------|
| Cooling capacity | Nom. | kW | | 11.6 | 18.4 | 23.8 |
| Capacity steps | | % | | | 100-0 | |
| Power input | Cooling | Nom. | kW | 5.2 | 7.66 | 9.67 |
| EER | | | | 2.23 | 2.40 | 2.46 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,345x856x630 | 1,290x1,180x630 | 1,395x1,330x630 |
| Weight | Unit | kg | | 164 | 224 | 261 |
| | Operation weight | kg | | 166 | 228 | 266 |
| Water heat exchanger - evaporator | Type | | | Brazed plate, one per circuit | | |
| | Minimum water volume in the system | l | | 101 | 153 | 212 |
| | Water flow rate | Nom. | l/min | 33 | 53 | 68 |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 26 | 42 |
| | Model | Type | | AC70-24 | AC70-34 | AC70-40 |
| | | Quantity | | | 1 | |
| Air heat exchanger | Type | | | Cross fin coil/Hi-X tubes and PE coated waffle louvre fins | | |
| Fan | Air flow rate | Nom. | m ³ /min | 70.2 | 109.8 | 126 |
| Sound power level | Cooling | Nom. | dBA | 63 | 66 | 69 |
| Compressor | Type | | | Hermetically sealed scroll compressor | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | -10 (OPZL) ~ 21 | |
| | Air side | Cooling | Min.-Max. | °CDB | -10 ~ 43 | |
| Refrigerant | Type | | | R-407C | | |
| | Control | | | Thermostatic expansion valve | | |
| | Circuits | Quantity | | 1 | | |
| Refrigerant circuit | Charge | kg | | 2.1 | 3.9 | 4.7 |
| Piping connections | Evaporator water inlet/outlet | | | FBSP 1" | | |
| | Evaporator water drain | | | Field installation | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | | 3N~ / 50 / 400 | | |

STRENGTHS

- > Optimised for use with R-407C
- > Daikin scroll compressor
- > Reduced installation time thanks to integrated pump and and/or buffer tank
- > Possibility for a 200l buffer tank
- > Low operating sound level
- > Easy maintenance
- > Main switch
- > Water flow switch
- > 3 different design options available:
 - EUWAN chiller without integrated hydraulic module ;
 - EUWAP chiller with integrated hydraulic module (pump, expansion vessel, hydraulic components) ;
 - EUWAB chiller with integrated hydraulic module (buffer tank, pump, expansion vessel, hydraulic components)
- > $\mu\text{C}^2 \text{ SE}$ controller



$\mu\text{C}^2 \text{ SE}$



R-407C

OPTIONS (FACTORY MOUNTED)

- > Chilled water temperature down to - 5°C or -10°C
- > High ESP fans (50Pa)

ACCESSORIES (KIT)

- > Refrigerant pressure gauges (EKGAU5/8/10/12/16/20/24KA)
- > 200l buffer tank (EKBT, see EKBT page in this catalogue)
- > Soft starter kit (EKSS)
- > Address card for connection to BMS or remote user interface (EKAC10C)
- > Remote installed user interface (EKRUMCA)

* To install EKRUMCA -> EKAC10C needs to be installed on the unit

CONTROL

- > Water inlet temperature control

AVAILABLE INPUTS / OUTPUTS

Input

- > Remote ON/OFF
- > Pump contact

Output

- > Compressor operation
- > Summary alarm
- > Pump relay contact

HYDRAULIC CIRCUIT COMPONENTS





EUWA*16KBZW1

EUWAN:

- > Scroll compressor
- > Main isolator switch
- > Water flow switch
- > Filter
- > Condenser protection grille
- > All year operation

EUWAP = EUWAN +

- > Pump
- > Expansion vessel
- > Adjusting valve
- > Drain
- > Water pressure gauge
- > Pressure relief valve

EUWAB = EUWAP +

- > Buffer tank

Cooling only

| Capacity class | | | N5 | P5 | B5 | N8 | P8 | B8 | N10 | P10 | B10 | N12 | P12 | B12 | N16 | P16 | B16 | N20 | P20 | B20 | N24 | P24 | B24 | | | | | | | | | | | | | | | | |
|-----------------------|-----------------------------|--|----------------|--------|------------------|-----------------|-----|-----|-----|------|-----|-----------------|-----|------------------|-------|-----|-----|-----------------|-----|-----|-------|---------|-----|-----------------|------------------|-------|--|--|--|-------|--|--|--|--|--|--|--|--|--|
| Cooling capacity | Nom. | kW | | | | 11.3 | | | | 19.7 | | | | 22.5 | | | | 26.5 | | | | 34.6 | | | | 46.6 | | | | 55.3 | | | | | | | | | |
| Capacity steps | | % | | | | 0-100 | | | | | | | | | | | | 0-50-100 | | | | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | | | | 4.48 | | | | 7.27 | | | | 8.64 | | | | 11.50 | | | | 14.70 | | | | 17.90 | | | | 23.80 | | | | | | | | | |
| EER | | | | | | 2.53 | | | | 2.46 | | | | 2.60 | | | | 2.30 | | | | 2.35 | | | | 2.60 | | | | 2.32 | | | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | | | | 1,230x1,290x734 | | | | | | 1,450x1,290x734 | | | | | | 1,321x2,580x734 | | | | | | 1,541x2,580x734 | | | | | | | | | | | | | | | |
| Weight | Unit | kg | 150 | 168 | 180 | 215 | 229 | 241 | 245 | 259 | 271 | 248 | 262 | 274 | 430 | 448 | 460 | 490 | 508 | 520 | 496 | 514 | 526 | | | | | | | | | | | | | | | | |
| | Operation weight | kg | 152 | 171 | 239 | 218 | 232 | 300 | 248 | 262 | 330 | 251 | 265 | 335 | 436 | 457 | 525 | 496 | 518 | 545 | 503 | 524 | 592 | | | | | | | | | | | | | | | | |
| Water heat exchanger | Type | Brazed plate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Water volume | l | 1.14 | | | 1.615 | | | 1.9 | | | 2.375 | | | 2.964 | | | 3.9 | | | 4.524 | | | | | | | | | | | | | | | | | | |
| | Nominal water flow | Cooling | l/min | | | 32 | | | 51 | | | 64 | | | 76 | | | 99 | | | 134 | | | 158 | | | | | | | | | | | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 24 | | | 38 | | | 43 | | | 37 | | | | | | 22 | | | | | | | | | | | | | | | | | | | |
| Air heat exchanger | Type | Cross fin coil/Hi-X tubes and PE coated waffle louvre fins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydraulic components | Expansion vessel | Volume | l | - | 12 | - | 12 | - | 12 | - | 12 | - | 12 | - | 12 | - | 12 | - | 12 | - | 12 | | | | | | | | | | | | | | | | | | |
| Fan group | Air flow rate | Cooling | Nom. | m³/min | 160 (per 2 fans) | | | | | | | | | 170 (per 2 fans) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fan group 2 | Air flow rate | Cooling | Nom. | m³/min | | | | | | | | | | | | | | | | | | | | | 170 (per 2 fans) | | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 67 | | | 76 | | | 78 | | | 79 | | | 81 | | | | | | | | | | | | | | | | | | | | | | | |
| Compressor | Type | Hermetically sealed scroll compressor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | -10 (OPZL) ~ 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. | °CDB | -15 ~ 43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | R-407C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Control | Thermostatic expansion valve | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant circuit | Quantity | 1 | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | |
| Refrigerant circuit 2 | Charge | kg | 3.9 | | | 4.6 | | | 5.9 | | | 6.0 | | | 4.6 | | | 5.9 | | | 6.0 | | | | | | | | | | | | | | | | | | |
| Water circuit | Piping connections diameter | inch | G 1"1/4 (male) | | | | | | | | | | | | | | | | | | | 2" male | | | | | | | | | | | | | | | | | |
| | Piping | inch | 1-1/4" | | | | | | | | | | | | | | | | | | | - | | | | | | | | | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | 3N~ / 50 / 400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > Optimised for use with R-407C
- > Daikin scroll compressor
- > Reduced installation time thanks to integrated pump and/or buffer tank
- > Possibility for a 200l buffer tank
- > Low operating sound level
- > Easy maintenance
- > Main switch
- > Water flow switch
- > 3 different design options available:
 - EUWYN chiller without integrated hydraulic module;
 - EUWYP chiller with integrated hydraulic module (pump, expansion vessel, hydraulic components);
 - EUWYB chiller with integrated hydraulic module (buffer tank, pump, expansion vessel, hydraulic components)
- > $\mu\text{C}^2 \text{ SE}$ controller



$\mu\text{C}^2 \text{ SE}$



R-407C

OPTIONS (FACTORY MOUNTED)

- > Chilled water temperature down to -5°C or -10°C
- > High ESP fans (50Pa)

ACCESSORIES (KIT)

- > Refrigerant pressure gauges (EKGAU5/8/10/12/16/20/24KA)
- > 200l buffer tank (EKBT, see EKBT page in this catalogue)
- > Soft starter kit (EKSS)
- > Address card for connection to BMS or remote user interface (EKAC10C)
- > Remote installed user interface (EKRUMCA)

*To install EKRUMCA -> EKAC10C needs to be installed on the unit

CONTROL

- > Water inlet temperature control

AVAILABLE INPUTS / OUTPUTS

Input

- > Remote ON/OFF
- > Pump contact
- > Remote cool/heat selection

Output

- > Compressor operation
- > Summary alarm
- > Pump relay contact





EUWY*16KBZW1

EUWYN:

- Standard equipment
- > Scroll compressor
- > Main isolator switch
- > Water flow switch
- > Filter
- > Condenser protection grille.
- > All year operation

EUWYP = EUWYN +

- > Pump
- > Expansion vessel
- > Adjusting valve
- > Drain
- > Water pressure gauge
- > Pressure relief valve

EUWYB = EUWYP +

- > Buffer tank

Heating & Cooling

| Capacity class | | | N5 | P5 | B5 | N8 | P8 | B8 | N10 | P10 | B10 | N12 | P12 | B12 | N16 | P16 | B16 | N20 | P20 | B20 | N24 | P24 | B24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-----------------------------|--------------------|--|----------------|------------------|-----------------|------|-----|-------|-----|------|-----------------|----------|-----|-------|-----|------|-----------------|-----|-----|-------|-----|-----|-----------------|-----|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Cooling capacity | Nom. | | kW | | | 9.1 | 17.1 | | 21.0 | | 25.0 | | 34.2 | | 40 | | 50.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heating capacity | Nom. | | kW | | | 11.9 | 18.5 | | 24.0 | | 27.0 | | 37.0 | | 46 | | 54.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacity steps | % | | 0-100 | | | | | | | | | | 0-50-100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | | | 3.77 | 7.38 | | 8.49 | | 11.3 | | 14.8 | | 16.2 | | 22.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Heating | Nom. | kW | | | 4.56 | 7.01 | | 8.98 | | 10.7 | | 14.10 | | 17.3 | | 21.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EER | | | 2.41 | | | 2.32 | 2.47 | | 2.21 | | 2.3 | | 2.5 | | 2.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COP | | | 2.61 | | | 2.64 | 2.67 | | 2.52 | | 2.62 | | 2.66 | | 2.52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | | | 1,230x1,290x734 | | | | | | 1,450x1,290x734 | | | | | | 1,321x2,580x734 | | | | | | 1,541x2,580x734 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight | Unit | | kg | | | 163 | 181 | 193 | 227 | 241 | 253 | 258 | 272 | 284 | 258 | 272 | 284 | 455 | 473 | 485 | 516 | 534 | 546 | 516 | 534 | 546 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Operation weight | | kg | | | 165 | 184 | 252 | 230 | 244 | 312 | 261 | 275 | 343 | 261 | 275 | 343 | 461 | 482 | 550 | 522 | 544 | 612 | 522 | 544 | 612 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water heat exchanger | Type | | Brazed plate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Water volume | I | 1.140 | | | 1.615 | | | 1.900 | | | 2.375 | | | 2.964 | | | 3.900 | | | 4.524 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Nominal water flow | Cooling | I/min | 26 | | | 49 | | | 60 | | | 72 | | | 98 | | | 115 | | | 143 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Nominal water pressure drop | Heating | I/min | 34 | | | 53 | | | 69 | | | 77 | | | 106 | | | 132 | | | 155 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Cooling | Filter | kPa | 10 | | | 25 | | | 24 | | | 33 | | | 12 | | | 19 | | | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Heating | Filter | kPa | 17 | | | 29 | | | 31 | | | 38 | | | 14 | | | 16 | | | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air heat exchanger | Type | | Cross fin coil/Hi-X tubes and PE coated waffle louvre fins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydraulic components | Expansion vessel | Volume | I | - | | | 12 | | | - | | | 12 | | | - | | | 12 | | | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fan group | Air flow rate | Cooling | Nom. | m³/min | 160 (per 2 fans) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fan group 2 | Air flow rate | Cooling | Nom. | m³/min | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 67 | | | 76 | | | 78 | | | 79 | | | 81 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Compressor | Type | | Hermetically sealed scroll compressor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | -10(OPZL) ~ 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Heating | Min.-Max. | °CDB | | 35 ~ 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. | °CDB | -15 ~ 43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Heating | Min.-Max. | °CDB | | -10 ~ 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | | R-407C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Control | | Thermostatic expansion valve | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant circuit | Charge | | kg | 4.6 | 4.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant circuit 2 | Charge | | kg | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water circuit | Piping connections diameter | | inch | G 1"1/4 (male) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Piping | | inch | 1-1/4" | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | | Hz / V | 3N~ / 50 / 400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STRENGTHS

- › High efficiency chiller with leader-of-class ESEER (up to 4.75)
- › Minimal starting currents and short payback times
- › No buffertank required for standard applications
- › Naked or with factory mounted (standard/high-ESP) pump
- › Low sound thanks to inverter compressor / fans
- › EWAQ-BAWN: Naked
- › EWAQ-BAWP: With pump



BRC21A52

STANDARD AVAILABLE

- › Hydraulic package: filter, shut-off valves, drain/ fill valve, automatic air purge, flowswitch

OPTIONS

- › Additional hydraulic components: (high static) pump, expansion vessel, safety valve, pressure gauge
- › Heatertape
- › Low leaving water temperatures

scroll



R-410A

INVERTER

ACCESSORIES

- › Pressure gauges (BHGP26A1)
- › PCB with additional inputs/outputs (EKRP1AHTA)
- › External control adapter (DTA104A62)
- › Additional controller in parallel (EKRUUAHTB)





EWAQ-BA*

Cooling only

| Capacity class | | | | 016 | 021 | 025 | 032 | 040 | 050 | 064 |
|-----------------------------|-------------------------|---------------------------------------|-----------|-----------------|---------------------|------|-----------------|-----------------|------|-----------------|
| Cooling capacity | Nom. | | kW | 16.8 | 21.0 | 25.2 | 31.5 | 42.0 | 50.4 | 63.0 |
| Capacity control | Method | | | | Inverter controlled | | | | | |
| | Minimum capacity | | % | | | | 25 | | | |
| Power input | Cooling | Nom. | kW | 5.57 | 7.25 | 9.25 | 12.9 | 14.9 | 19.0 | 26.7 |
| EER | | | | 3.01 | 2.90 | 2.72 | 2.44 | 2.82 | 2.65 | 2.36 |
| ESEER | | | | 4.75 | 4.65 | 4.45 | 4.00 | 4.60 | 4.40 | 3.95 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,684x1,371x774 | | | 1,684x1,684x774 | 1,684x2,358x780 | | 1,684x2,980x780 |
| Weight | Unit | kg | | 264 | 317 | | 397 | 571 | | 730 |
| | Operation weight | kg | | 267 | 320 | | 401 | 577 | | 738 |
| Water heat exchanger | Type | Brazed plate | | | | | | | | |
| | Water volume | l | | 1 | | 2 | | 3 | | 5 |
| Nominal water flow | Cooling | l/min | | 48 | 60 | 72 | 90 | 120 | 144 | 181 |
| | Heating | l/min | | 48 | 60 | 72 | 90 | 120 | 144 | 181 |
| Nominal water pressure drop | Cooling | Total | kPa | 20 | 30 | 42 | 30 | 42 | 42 | 30 |
| Air heat exchanger | Type | Hi-XSS | | | | | | | | |
| Fan | Air flow rate | Cooling | Nom. | m³/min | 171 | 185 | 233 | 370 | | 466 |
| Sound power level | Cooling | Nom. | | dBA | 78 | 80 | 81 | | 83 | |
| Compressor | Type | Hermetically sealed scroll compressor | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | 5~20 | | | | | |
| | Air side | Cooling | Min.-Max. | °CDB | -5~43 | | | | | |
| Refrigerant | Type | R-410A | | | | | | | | |
| | Charge | kg | | | 7.6 | 9.6 | 15.2 | | 19.2 | |
| | Control | Electronic expansion valve | | | | | | | | |
| | Circuits | Quantity | | | | 1 | | | | |
| Water circuit | Piping | inch | | 1-1/4" | | | | 1-1/2" | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 3N~/50/400 | | | | | | |

STRENGTHS

- › High efficiency chiller with leader-of-class ESEER (up to 4.75)
- › Minimal starting currents and short payback times
- › No buffertank required for standard applications
- › Naked or with factory mounted (standard/high-ESP) pump
- › Low sound thanks to inverter compressor / fans
- › EWYQ-BAWN: Naked
- › EWYQ-BAWP: With pump



BRC21A52

STANDARD AVAILABLE

- › Hydraulic package: filter, shut-off valves, drain/ fill valve, automatic air purge, flowswitch

OPTIONS

- › Additional hydraulic components: (high static) pump, expansion vessel, safety valve, pressure gauge
- › Heatertape
- › Low leaving water temperatures

scroll



R-410A

INVERTER

ACCESSORIES

- › Pressure gauges (BHGP26A1)
- › PCB with additional inputs/outputs (EKRP1AHTA)
- › External control adapter (DTA104A62)
- › Additional controller in parallel (EKRUUAHTB)





EWYQ-BA*

Heating & Cooling

| Capacity class | | | 016 | 021 | 025 | 032 | 040 | 050 | 064 | |
|----------------------|-----------------------------|---------------------------------------|-----------|---------------------|--------|------|-----------------|-----------------|-------|-----------------|
| Cooling capacity | | | Nom. kW | 16.8 | 21.0 | 25.2 | 31.5 | 42.0 | 50.4 | 63.0 |
| Heating capacity | | | Nom. kW | 16.8 | 21.0 | 25.2 | 31.5 | 42.0 | 50.4 | 63.0 |
| Capacity control | | | Method | Inverter controlled | | | | | | |
| Minimum capacity | | | % | 25 | | | | | | |
| Power input | Cooling | Nom. | kW | 5.57 | 7.25 | 9.25 | 12.9 | 14.9 | 19.0 | 26.7 |
| | Heating | Nom. | kW | 5.51 | 7.09 | 8.87 | 10.5 | 14.2 | 17.8 | 21.0 |
| EER | | | | 3.01 | 2.90 | 2.72 | 2.44 | 2.82 | 2.65 | 2.36 |
| ESEER | | | | 4.75 | 4.65 | 4.45 | 4.00 | 4.60 | 4.40 | 3.95 |
| COP | | | | 3.05 | 2.96 | 2.84 | 3.00 | 2.96 | 2.83 | 3.00 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,684x1,371x774 | | | 1,684x1,684x774 | 1,684x2,358x780 | | 1,684x2,980x780 |
| Weight | Unit | kg | | 264 | 317 | | 397 | 571 | | 730 |
| | Operation weight | kg | | 267 | 320 | | 401 | 577 | | 738 |
| Water heat exchanger | Type | Brazed plate | | | | | | | | |
| | Water volume | l | | 1 | 2 | | 3 | 5 | | |
| | Nominal water flow | Cooling | l/min | 48 | 60 | 72 | 90 | 120 | 144 | 181 |
| | | Heating | l/min | 48 | 60 | 72 | 90 | 120 | 144 | 181 |
| | Nominal water pressure drop | Cooling | Total | kPa | 20 | 30 | 42 | 30 | 42 | 30 |
| Air heat exchanger | Type | Hi-XSS | | | | | | | | |
| Fan | Air flow rate | Cooling | Nom. | m³/min | 171 | 185 | 233 | 370 | 466.0 | |
| | | Heating | Nom. | m³/min | 171 | 185 | 233 | 370 | 466 | |
| Sound power level | Cooling | Nom. | dBA | | 78 | 80 | 81 | 83 | | |
| Compressor | Type | Hermetically sealed scroll compressor | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | 5~20 | | | | | |
| | | Heating | Min.-Max. | °CDB | 25~50 | | | | | |
| | Air side | Cooling | Min.-Max. | °CDB | -5~43 | | | | | |
| | | Heating | Min.-Max. | °CDB | -15~35 | | | | | |
| Refrigerant | Type | R-410A | | | | | | | | |
| | Charge | kg | | 7.6 | 9.6 | | 15.2 | 19.2 | | |
| | Control | Electronic expansion valve | | | | | | | | |
| | Circuits | Quantity | | | 1 | | | | | |
| Water circuit | Piping | inch | | 1-1/4" | | | | 1-1/2" | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 3N~/50/400 | | | | | | |

STRENGTHS

- > Optimised for use with R-410A refrigerant
- > Multiple compressors per circuit
- > Reliable and efficient scroll with high EER values
- > Anti-corrosion treated aluminium coils
- > Low operating sound level
- > Easy 'plug and play' installation
- > Fans protected against abnormal operation (4 - 8 fans depending on unit size)
- > Safety valves in each circuit
- > Electronic circuit breakers
- > Electronic expansion valve
- > True dual plate brazed plate heat exchanger
- > All hydraulics can be accessed easily from 3 sides (no surrounding cabinet)
- > Separate switchbox for easy access
- > Compressors and controls at unit side
- > Increased reliability via 2 independent refrigerant circuits (EWAQ130-260DAYN)
- > Double circuit heat exchanger (from >100 kW)
- > Non hermetic filter/dryer
- > Daikin Pcaso controller with user friendly and powerful LCD interface

OPTIONS (FACTORY MOUNTED)

- > Single pump contactor
- > Twin pump contactor
- > Single pump
- > Twin pump (1 pump casing, dual motor)
- > High ESP pump (single pump only)
- > Buffer tank
- > Inverter fans (not available with low noise option)
- > Glycol 0°C / -10°C
- > Evaporator heater tape
- > Option valves
- > A-meter / V-meter
- > Low Noise
- > Condenser protection grills
- > Dual pressure relief valve

ACCESSORIES (KIT)

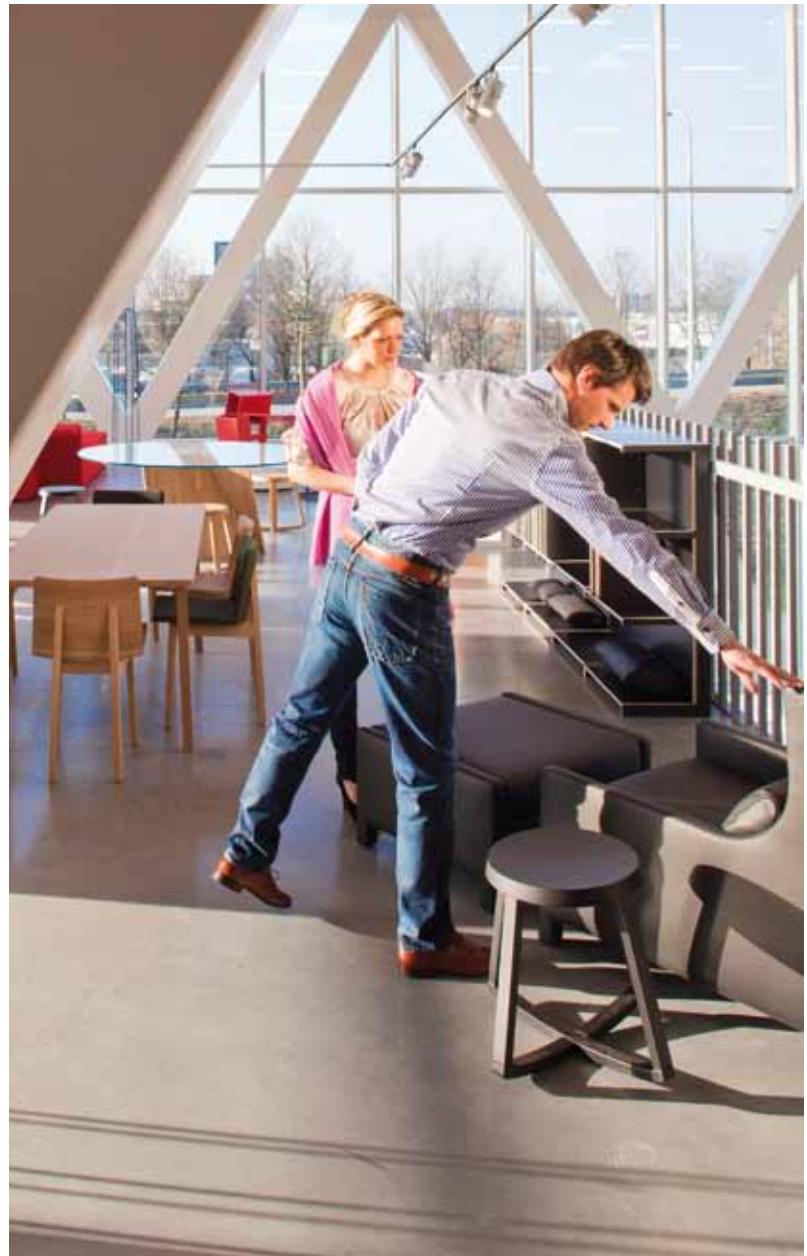
- > Gateway for LON (EKLONPG)
- > Gateway for BACNET (EKNPGL)
- > Address card (EKACPG)
- > Remote user interface (EKRUPG)
- > Waterpipe kit (EKN210 & EKN260)



PCASO



R-410A





EWAQ130,150DAYN

Cooling only

| Capacity class | | | EWAQ080DAYN | EWAQ100DAYN | EWAQ130DAYN | EWAQ150DAYN | EWAQ180DAYN | EWAQ210DAYN | EWAQ240DAYN | EWAQ260DAYN |
|-----------------------|-------------------------------------|--------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Cooling capacity | Nom. | kW | 79.4 ¹ / 81.0 ² | 104 ¹ / 106 ² | 130 ¹ / 133 ² | 151 ¹ / 154 ² | 181 ¹ / 184 ² | 208 ¹ / 211 ² | 234 ¹ / 238 ² | 252 ¹ / 256 ² |
| Capacity steps | % | | 0-50-100 | | 0-25-50-75-100 | | 21/29-43/50/57-71/79-100 | 0-25-50-75-100 | 22/28-40/50/56-72/78-100 | 0-25-50-75-100 |
| Power input | Cooling | Nom. | 27.0 ¹ / 27.6 ² | 36.9 ¹ / 37.2 ² | 47.4 ¹ / 48.1 ² | 57.2 ¹ / 57.8 ² | 65.6 ¹ / 66.5 ² | 75.9 ¹ / 76.6 ² | 84.4 ¹ / 84.5 ² | 95.8 ¹ / 95.8 ² |
| EER | | | 2.94 ¹ / 2.93 ² | 2.82 ¹ / 2.85 ² | 2.74 ¹ / 2.77 ² | 2.64 ¹ / 2.66 ² | 2.76 ¹ / 2.77 ² | 2.74 ¹ / 2.75 ² | 2.77 ¹ / 2.82 ² | 2.63 ¹ / 2.67 ² |
| ESEER | | | 3.88 ¹ / 3.82 ² | 3.79 ¹ / 3.83 ² | 4.03 ¹ / 3.97 ² | 3.95 ¹ / 3.96 ² | 4.04 ¹ / 4.02 ² | 4.00 ¹ / 4.02 ² | 3.89 ¹ / 4.00 ² | 3.73 ¹ / 3.84 ² |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,311x2,000x2,566 | | 2,311x2,000x2,631 | | 2,311x2,000x3,081 | | 2,311x2,000x4,850 |
| Weight | Unit | kg | 1,350 | 1,400 | 1,500 | 1,550 | 1,800 | 1,850 | 3,150 | 3,250 |
| | Operation weight | kg | 1,365 | 1,415 | 1,517 | 1,569 | 1,825 | 1,877 | 3,189 | 3,292 |
| Water heat exchanger | Type | | | | | Brazed plate | | | | |
| | Nominal water flow | Cooling | l/min | 229 | 301 | 377 | 436 | 522 | 599 | 677 |
| | Nominal water pressure drop | Cooling | Total | kPa | 59 | 58 | 52 | 49 | 52 | 51 |
| Air heat exchanger | Type | | | | | Cross fin coil/Hi-Xss tubes and poly ethylene coated waffle fins | | | | |
| Fan | Air flow rate | Nom. | m ³ /min | 780 | | 800 | 860 | 1,290 | | 1,600 |
| | Speed | | rpm | | 880 | 900 | | 970 | | 900 |
| Sound power level | Cooling | Nom. | dBA | 86 | | 88 | 89 | 90 | | 91 |
| Compressor | Type | | | | | Scroll compressor | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | -10~25 | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | -15~43 | | | | |
| Refrigerant | Type | | | | | R-410A | | | | |
| | Control | | | | | Electronic expansion valve | | | | |
| | Circuits | Quantity | | 1 | | | 2 | | | |
| Refrigerant circuit | Charge | kg | | 33 | | 19 | 23 | 31 | 30 | 40 |
| Refrigerant circuit 2 | Charge | kg | | - | | 19 | 23 | 31 | 30 | 40 |
| Piping connections | Water heat exchanger inlet / outlet | | | | | 3" OD | | | | 3" |
| | Water heat exchanger drain | | | | | | 1/2"G | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | |

(1) For -N models (standard)

(2) For -P models (with optional pump / +OPSP) and for -B models (with optional pump and buffertank / +OPSP +OPBT)

STRENGTHS

- > Optimised for use with R-410A refrigerant
- > Multiple compressors per circuit
- > Reliable and efficient scroll with high EER values
- > Anti-corrosion treated aluminium coils
- > Low operating sound level
- > Easy 'plug and play' installation
- > Fans protected against abnormal operation (4 - 8 fans depending on unit size)
- > Safety valves in each circuit
- > Electronic circuit breakers
- > Electronic expansion valve
- > True dual plate brazed plate heat exchanger
- > All hydraulics can be accessed easily from 3 sides (no surrounding cabinet)
- > Separate switchbox for easy access
- > Compressors and controls at unit side
- > Increased reliability via 2 independent refrigerant circuits (EWYQ130-250DAYN)
- > Double circuit heat exchanger (from >100 kW)
- > Non hermetic filter/dryer
- > Daikin Pcaso controller with user friendly and powerful LCD interface

OPTIONS (FACTORY MOUNTED)

- > Single pump contactor
- > Twin pump contactor
- > Single pump
- > Twin pump (1 pump casing, dual motor)
- > High ESP pump (single pump only)
- > Buffer tank
- > Inverter fans (not available with low noise option)
- > Glycol 0°C / -10°C
- > Dual pressure relief valve
- > Evaporator heater tape
- > Option valves (discharge, liquid line and suction stop valve)
- > A-meter / V-meter
- > Low Noise
- > Condenser protection grills

ACCESSORIES (KIT)

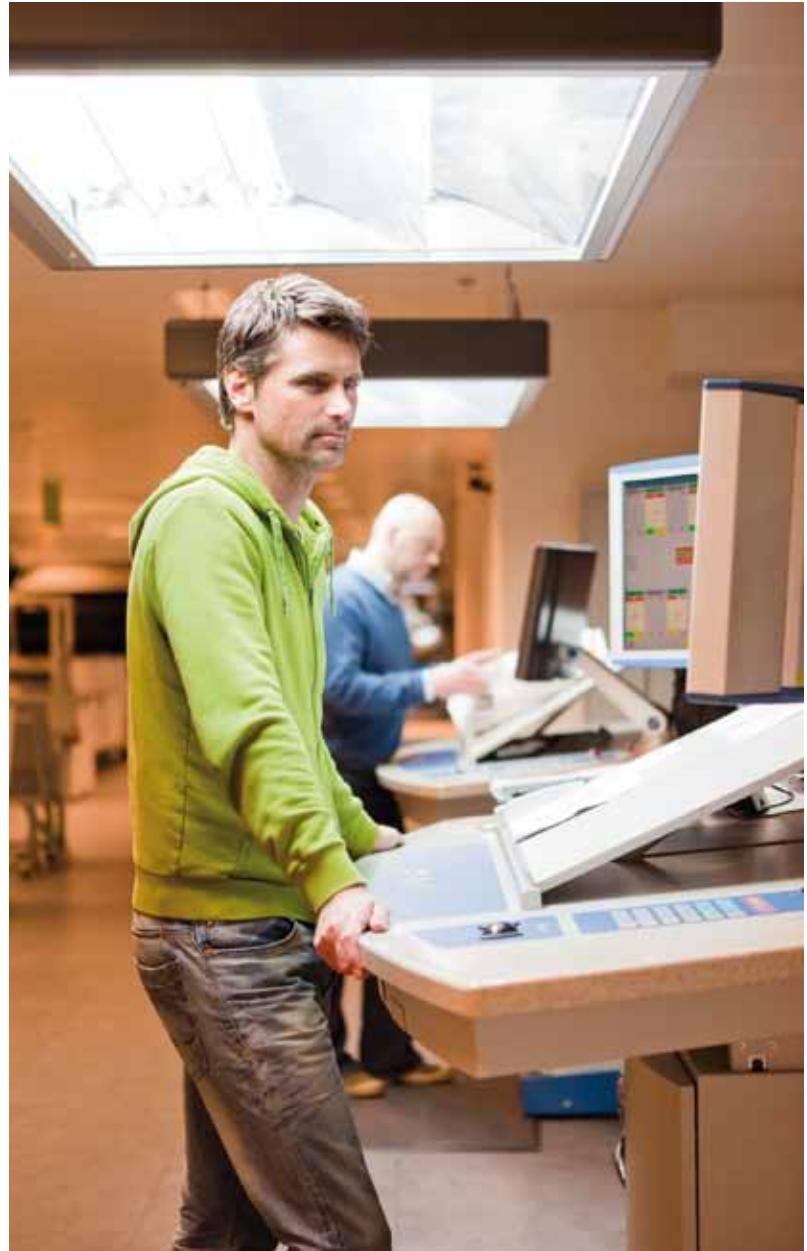
- > Gateway for LON (EKLONPG)
- > Gateway for BACNET (EKBNPG)
- > Address card (EKACPG)
- > Remote user interface (EKRUPG)
- > Waterpipe kit (EKGN210 & EKGN260)



PCASO



R-410A





EWYQ130,150DAYN

Heating & Cooling

| Capacity class | | | EWYQ080DAYN | EWYQ100DAYN | EWYQ130DAYN | EWYQ150DAYN | EWYQ180DAYN | EWYQ210DAYN | EWYQ230DAYN | EWYQ250DAYN |
|-----------------------|-------------------------------------|--------------------|---------------------------------------|---------------------------------------|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Cooling capacity | Nom. | kW | 76.6 ¹ / 78.1 ² | 100 ¹ / 101 ² | 135 ¹ / 138 ² | 144 ¹ / 147 ² | 182 ¹ / 185 ² | 210 ¹ / 213 ² | 229 ¹ / 233 ² | 251 ¹ / 254 ² |
| Heating capacity | Nom. | kW | 88.2 ¹ / 86.5 ² | 115 ¹ / 113 ² | 150 ¹ / 148 ² | 166 ¹ / 163 ² | 200 ¹ / 197 ² | 227 ¹ / 223 ² | 260 ¹ / 256 ² | 283 ¹ / 279 ² |
| Capacity steps | % | | 0-50-100 | | 0-25-50-75-100 | | 2129-4350-5771-79-100 | 0-25-50-75-100 | 2228-4450-5872-78-100 | 0-25-50-75-100 |
| Power input | Cooling | Nom. | kW | 26.8 ¹ / 27.5 ² | 36.7 ¹ / 37.1 ² | 48.4 ¹ / 49.0 ² | 56.5 ¹ / 57.1 ² | 64.8 ¹ / 65.7 ² | 76.5 ¹ / 77.2 ² | 83.6 ¹ / 83.8 ² |
| | Heating | Nom. | kW | 30.5 ¹ / 31.0 ² | 38.7 ¹ / 39.1 ² | 50.5 ¹ / 51.1 ² | 59.8 ¹ / 60.2 ² | 69.2 ¹ / 69.9 ² | 78.5 ¹ / 79.1 ² | 85.9 ¹ / 86.0 ² |
| EER | | | | 2.86 ¹ / 2.84 ² | 2.72 ¹ / 2.72 ² | 2.79 ¹ / 2.82 ² | 2.55 ¹ / 2.57 ² | 2.81 ¹ / 2.82 ² | 2.75 ¹ / 2.76 ² | 2.74 ¹ / 2.78 ² |
| ESEER | | | | 3.84 ¹ / 3.76 ² | 3.68 ¹ / 3.68 ² | 4.03 ¹ / 3.99 ² | 3.84 ¹ / 3.84 ² | 4.06 ¹ / 4.02 ² | 3.94 ¹ / 3.96 ² | 3.93 ¹ / 4.04 ² |
| COP | | | | 2.89 ¹ / 2.79 ² | 2.97 ¹ / 2.89 ² | 2.97 ¹ / 2.90 ² | 2.78 ¹ / 2.71 ² | 2.89 ¹ / 2.82 ² | 2.89 ¹ / 2.82 ² | 3.03 ¹ / 2.98 ² |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,311x2,000x2,566 | | 2,311x2,000x2,631 | | 2,311x2,000x3,081 | | 2,311x2,000x4,850 |
| Weight | Unit | kg | | 1,400 | 1,450 | 1,550 | 1,600 | 1,850 | 1,900 | 3,200 |
| | Operation weight | kg | | 1,415 | 1,465 | 1,567 | 1,619 | 1,875 | 1,927 | 3,239 |
| Water heat exchanger | Type | | | | | Brazed plate, one per unit | | | | |
| | Nominal water flow | Cooling | l/min | 221 | 287 | 390 | 416 | 525 | 605 | 662 |
| | | Heating | l/min | 251 | 327 | 427 | 473 | 570 | 645 | 740 |
| | Nominal water pressure drop | Cooling | Total | kPa | 36 | 43 | 38 | 41 | 44 | 39 |
| | | Heating | Total | kPa | 47 | 46 | 51 | 49 | 48 | 46 |
| Air heat exchanger | Type | | | | Cross fin coil/H-Xss tubes and poly ethylene coated waffle fins | | | | | |
| Fan | Air flow rate | Nom. | m ³ /min | 780 | 800 | 860 | 1,290 | | | 1,600 |
| | Speed | | rpm | 880 | 900 | | 970 | | | 900 |
| Sound power level | Cooling | Nom. | dBA | 86 | 88 | 89 | 90 | | | 91 |
| Compressor | Type | | | | Scroll compressor | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | -10~25 | | | | |
| | | Heating | Min.-Max. °CDB | | | 25~50 | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | -15~43 | | | | |
| | | Heating | Min.-Max. °CDB | | | -10~21 | | | | |
| Refrigerant | Type | | | | R-410A | | | | | |
| | Control | | | | Electronic expansion valve | | | | | |
| | Circuits | Quantity | | 1 | | 2 | | | | |
| Refrigerant circuit | Charge | kg | | 33 | 37 | 23 | 26 | 32 | | 43 |
| Refrigerant circuit 2 | Charge | kg | | - | | 23 | 26 | 32 | | 43 |
| Piping connections | Water heat exchanger inlet / outlet | | | | 3" OD | | | | | 3" |
| | Water heat exchanger drain | | | | | 1/2"G | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | 3~/50/400 | | | | |

(1) For -N models (standard)

(2) For -P models (with optional pump / +OPSP) and for -B models (with optional pump and buffertank / +OPSP +OPBT)

STRENGTHS

- > Reliable and efficient scroll with high EER values
- > A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced footprint, reduced weight, clearances around the unit
- > 1-2 truly independent refrigerant circuits
- > Reduced footprint thanks to the V-shaped frame
- > Large operation range: ambient temperatures up to 52°C and down to -18°C

STANDARD AVAILABLE

- > Direct on line starter (DOL)
- > Double setpoint
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Evaporator flow switch
- > Electronic expansion valve
- > Ambient outside temperature sensor and setpoint reset
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Water filter

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Brine version
- > Axial fans (250 Pa lift)
- > Condenser coil guards
- > Evaporator area guards
- > CuCu condenser coil
- > CuCuSn condenser coil
- > Alucoat fins coil
- > Discharge line shut-off valve
- > Suction line shut-off valve
- > High pressure side manometers
- > Low pressure side manometers
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pump (low lift)
- > Two centrifugal pump (high lift)
- > Double pressure relief valve with diverter
- > Soft starter
- > Compressor thermal overload relays
- > Phase monitor
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Speedtrol (fan speed control device ON/OFF up to 18°C)
- > Setpoint reset, demand limit and alarm from external device
- > Compressor circuit breakers
- > Fans circuit breakers
- > Fans speed regulation (+fan silent mode)
- > Ground fault relay
- > Rubber anti vibration mounts
- > Spring anti vibration mounts
- > External tank without cabinet (500 or 1000l)
- > External tank with cabinet (500 or 1000l)
- > Container kit
- > Transport kit



MicroTech III



R-410A





ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKMBACMSTP)
- › BACnet/IP communication module (EKMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity class | | | EWAQ-E-XS | | | | | | EWAQ-E-XL | | | | | | | |
|-----------------------------|------------------------------------|--------------------|----------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|--|
| Cooling capacity | Nom. | kW | 178 | 201 | 227 | 264 | 316 | 336 | 178 | 201 | 227 | 264 | 316 | 336 | | |
| Capacity control | Method | | Step | | | | | | Step | | | | | | | |
| | Minimum capacity | % | 50 | 43 | 50 | 33 | 27 | 33 | 50 | 43 | 50 | 33 | 27 | 33 | | |
| Power input | Cooling | Nom. | kW | 57.4 | 64.6 | 73.0 | 85.1 | 102 | 108 | 57.4 | 64.6 | 73.0 | 85.1 | 102 | 108 | |
| EER | | | 3.10 | | 3.11 | | 3.10 | | 3.10 | | 3.11 | | 3.10 | | | |
| ESEER | | | 4.14 | 4.24 | 4.03 | 4.31 | 4.30 | 4.27 | 4.14 | 4.24 | 4.03 | 4.31 | 4.30 | 4.27 | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,271x1,224x4,413 | 2,271x1,224x5,313 | 2,271x1,224x6,213 | 2,271x1,224x4,413 | 2,271x1,224x5,313 | 2,271x1,224x6,213 | 2,271x1,224x4,413 | 2,271x1,224x5,313 | 2,271x1,224x6,213 | 2,271x1,224x4,413 | 2,271x1,224x5,313 | 2,271x1,224x6,213 | |
| Weight | Unit | kg | kg | 1,722 | 1,807 | 1,871 | 2,173 | 2,304 | 2,492 | 1,876 | 1,965 | 2,032 | 2,370 | 2,507 | 2,705 | |
| | Operation weight | kg | kg | 1,734 | 1,819 | 1,885 | 2,188 | 2,318 | 2,507 | 1,889 | 1,978 | 2,047 | 2,385 | 2,522 | 2,719 | |
| Water heat exchanger | Type | | | Plate heat exchanger | | | | | | Plate heat exchanger | | | | | | |
| | Water volume | l | | 12 | | 14 | | 12 | | 14 | | 12 | | 14 | | |
| Nominal water flow | Cooling | l/s | | 8.5 | 9.6 | 10.8 | 12.6 | 15.1 | 16.0 | 8.5 | 9.6 | 10.8 | 12.6 | 15.1 | 16.0 | |
| Nominal water pressure drop | Cooling | Total | kPa | 27 | 34 | 35 | 47 | 54 | | 27 | 34 | 35 | 47 | 54 | | |
| Air heat exchanger | Type | | | High efficiency fin and tube type with integral subcooler | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 21,845 | 21,148 | 26,874 | 25,884 | 32,953 | 32,065 | 21,845 | 21,148 | 26,874 | 25,884 | 32,953 | 32,065 | |
| | Speed | | rpm | | | 900 | | | | | | 900 | | | | |
| Sound power level | Cooling | Nom. | dBA | 93 | 94 | 96 | 95 | 96 | 97 | 91 | 92 | 93 | 92 | 93 | 94 | |
| Sound pressure level | Cooling | Nom. | dBA | 75 | | 76 | | 77 | | | 73 | | | | 74 | |
| Compressor | Type | | | Scroll compressor | | | | | | Scroll compressor | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | -15~18 | | | | | | -15~18 | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | -18~52 | | | | | | -18~52 | | | | | |
| Refrigerant | Type | | | R-410A | | | | | | R-410A | | | | | | |
| | Circuits | Quantity | | 1 | | | | | | 1 | | | | | | |
| Refrigerant circuit | Charge | kg | | 15 | 18 | 16 | 21 | 26 | | 15 | 18 | 16 | 21 | 26 | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | 3" | | | | | | 3" | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 3~/50/400 | | | | | | 3~/50/400 | | | | | | |

STRENGTHS

- > Reliable and efficient scroll with high EER values
- > A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced footprint, reduced weight, clearances around the unit
- > 1-2 truly independent refrigerant circuits
- > Reduced footprint thanks to the V-shaped frame
- > Large operation range: ambient temperatures up to 52°C and down to -18°C



MicroTech III

STANDARD AVAILABLE

- > Direct on line starter (DOL)
- > Double setpoint
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Evaporator flow switch
- > Electronic expansion valve
- > Ambient outside temperature sensor and setpoint reset
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Water filter



OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Brine version
- > Axial fans (250 Pa lift)
- > Condenser coil guards
- > Evaporator area guards
- > CuCu condenser coil
- > CuCuSn condenser coil
- > Alucoat fins coil
- > Discharge line shut-off valve
- > Suction line shut-off valve
- > High pressure side manometers
- > Low pressure side manometers
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pump (low lift)
- > Two centrifugal pump (high lift)
- > Double pressure relief valve with diverter
- > Soft starter
- > Compressor thermal overload relays
- > Phase monitor
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Speedtrol (fan speed control device ON/OFF up to 18°C)
- > Setpoint reset, demand limit and alarm from external device
- > Compressor circuit breakers
- > Fans circuit breakers
- > Fans speed regulation (+fan silent mode)
- > Ground fault relay
- > Rubber anti vibration mounts
- > Spring anti vibration mounts
- > External tank without cabinet (500 or 1000l)
- > External tank with cabinet (500 or 1000l)
- > Container kit
- > Transport kit





ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKMBACMSTP)
- › BACnet/IP communication module (EKMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity class | | | EWAQ170E-XR | EWAQ190E-XR | EWAQ220E-XR | EWAQ260E-XR | EWAQ300E-XR | EWAQ320E-XR |
|-----------------------------|------------------------------------|--------------------|----------------|---|-------------------|-------------------|-------------|-------------|
| Cooling capacity | Nom. | kW | 173 | 194 | 220 | 255 | 303 | 323 |
| Capacity control | Method | | | | Step | | | |
| | Minimum capacity | % | 50 | 43 | 50 | 33 | 27 | 33 |
| Power input | Cooling | Nom. | 56.0 | 63.7 | 71.0 | 84.5 | 101 | 108 |
| EER | | | 3.09 | 3.04 | 3.09 | 3.01 | 3.00 | 2.99 |
| ESEER | | | 4.59 | 4.69 | 4.46 | 4.79 | 4.76 | 4.68 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,271x1,224x4,413 | 2,271x1,224x5,313 | 2,271x1,224x6,213 | | |
| Weight | Unit | kg | 1,970 | 2,064 | 2,134 | 2,489 | 2,632 | 2,840 |
| | Operation weight | kg | 1,982 | 2,076 | 2,148 | 2,503 | 2,647 | 2,855 |
| Water heat exchanger | Type | | | Plate heat exchanger | | | | |
| | Water volume | l | | 12 | | | 14 | |
| Nominal water flow | Cooling | l/s | 8.2 | 9.2 | 10.5 | 12.1 | 14.5 | 15.4 |
| Nominal water pressure drop | Cooling | Total | kPa | 26 | 32 | 33 | 44 | 50 |
| Air heat exchanger | Type | | | High efficiency fin and tube type with integral subcooler | | | | |
| Fan | Air flow rate | Nom. | l/s | 16,743 | 16,285 | 20,618 | 20,056 | 25,243 |
| | Speed | | rpm | | | 705 | | 24,604 |
| Sound power level | Cooling | Nom. | dBA | 85 | 86 | 87 | 86 | 88 |
| Sound pressure level | Cooling | Nom. | dBA | 66 | 67 | 68 | 67 | 69 |
| Compressor | Type | | | Scroll compressor | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | -15~18 | | |
| | Air side | Cooling | Min.-Max. °CDB | | | -18~52 | | |
| Refrigerant | Type | | | R-410A | | | | |
| | Circuits | Quantity | | | | 1 | | |
| Refrigerant circuit | Charge | kg | | 15 | 18 | 16 | 21 | 26 |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | | 3" | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | 3~/50/400 | | |

STRENGTHS

- > Reliable and efficient scroll with high EER values
- > A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced footprint, reduced weight, clearances around the unit
- > 1-2 truly independent refrigerant circuits
- > 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

STANDARD AVAILABLE

- > Direct on line starter (DOL)
- > Double setpoint
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Evaporator flow switch
- > Electronic expansion valve
- > Ambient outside temperature sensor and setpoint reset
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Water filter

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Brine version
- > Axial fans (250 Pa lift)
- > Condenser coil guards
- > Evaporator area guards
- > CuCu condenser coil
- > CuCuSn condenser coil
- > Alucoat fins coil
- > Discharge line shut-off valve
- > Suction line shut-off valve
- > High pressure side manometers
- > Low pressure side manometers
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pump (low lift)
- > Two centrifugal pump (high lift)
- > Double pressure relief valve with diverter
- > Soft starter
- > Compressor thermal overload relays
- > Phase monitor
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Speedtrol (fan speed control device ON/OFF up to 18°C)
- > Setpoint reset, demand limit and alarm from external device
- > Compressor circuit breakers
- > Fans circuit breakers
- > Fans speed regulation (+fan silent mode)
- > Ground fault relay
- > Rubber anti vibration mounts
- > Spring anti vibration mounts
- > External tank without cabinet (500 or 1000l)
- > External tank with cabinet (500 or 1000l)
- > Container kit
- > Transport kit



MicroTech III



ACCESSORIES

- > Serial Sequencing Panel (EKDSSI)
- > Digital Sequencing Panel (EKDD)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (E)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRL)



EWAQ-F-SS / SL

Cooling only

| Capacity class | | | EWAQ210F-SS | EWAQ230F-SS | EWAQ250F-SS | EWAQ280F-SS | EWAQ320F-SS | EWAQ350F-SS | EWAQ360F-SS | EWAQ400F-SS | EWAQ410F-SS | EWAQ480F-SS | EWAQ550F-SS | EWAQ610F-SS |
|----------------------|------------------------------------|--------------------|----------------|-------------------|-------------|-------------|---|-------------|-------------|-------------------------------------|-------------|-------------|-------------------------------------|-------------|
| Cooling capacity | Nom. | kW | 207 | 225 | 248 | 284 | 315 | 360 | 408 | 482 | 553 | 612 | | |
| Capacity control | Method | | | | | Step | | | | | | | | |
| | Minimum capacity | % | 25 | 22 | 25 | 23 | 25 | 21 | 25 | 17 | 14 | 17 | | |
| Power input | Cooling | Nom. | kW | 72.6 | 84.0 | 92.4 | 107 | 120 | 140 | 153 | 185 | 205 | 226 | |
| EER | | | | 2.85 | 2.68 | 2.69 | 2.65 | 2.63 | 2.57 | 2.67 | 2.60 | 2.70 | | |
| ESEER | | | | 3.91 | 3.89 | 3.93 | 3.86 | 3.90 | 3.85 | 4.14 | 3.90 | 4.16 | 4.26 | 4.18 4.21 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,271x1,224x4,413 | | | 2,271x1,224x5,313 | | | 2,271x1,224x6,213 2,221x2,258x3,210 | | | 2,397x2,258x3,210 2,221x2,258x4,110 | |
| Weight | 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 | |
| Water heat exchanger | Type | | | | | | Plate heat exchanger | | | | | | | |
| | Water volume | l | | 12 | | | 14 | | | 40 | | | 46 | |
| | Nominal water flow | Cooling | l/s | 9.9 | 10.7 | 11.8 | 13.6 | 15.0 | 17.2 | 19.5 | 23.0 | 26.4 | 29.2 | |
| | Nominal water pressure drop | Cooling | Total | kPa | 37 | 43 | 53 | 56 | 69 | 30 | 32 | 35 | 46 | 56 |
| Air heat exchanger | Type | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 21,845 | 21,148 | 27,306 | 26,435 | 32,767 | 32,513 | 43,690 | 54,612 | 52,870 | | |
| | Speed | | rpm | | | | | 900 | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 93 | 94 | | 95 | | | 97 | | | 99 | |
| Sound pressure level | Cooling | Nom. | dBA | | 75 | | 76 | | 77 | | 78 | | 79 | |
| Compressor | Type | | | | | | Scroll compressor | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | | -15~18 | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | | -18~52 | | | | | | |
| Refrigerant | Type | | | | | | R-410A | | | | | | | |
| | Circuits | Quantity | | | | | | 2 | | | | | | |
| Refrigerant circuit | Charge | kg | | 18 | | | 21 | | | 24 | | | 34 | 40 46 |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | | | 3" | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | | | | | |

| Capacity class | | | EWAQ210F-SL | EWAQ230F-SL | EWAQ250F-SL | EWAQ280F-SL | EWAQ320F-SL | EWAQ350F-SL | EWAQ360F-SL | EWAQ400F-SL | EWAQ410F-SL | EWAQ480F-SL | EWAQ550F-SL | EWAQ610F-SL |
|----------------------|------------------------------------|--------------------|----------------|-------------------|-------------|-------------|---|-------------|-------------|-------------------------------------|-------------|-------------|-------------------------------------|-------------|
| Cooling capacity | Nom. | kW | 207 | 225 | 248 | 284 | 315 | 360 | 408 | 482 | 553 | 612 | | |
| Capacity control | Method | | | | | Step | | | | | | | | |
| | Minimum capacity | % | 25 | 22 | 25 | 23 | 25 | 21 | 25 | 17 | 14 | 17 | | |
| Power input | Cooling | Nom. | kW | 72.6 | 84.0 | 92.4 | 107 | 120 | 140 | 153 | 185 | 205 | 226 | |
| EER | | | | 2.85 | 2.68 | 2.69 | 2.65 | 2.63 | 2.57 | 2.67 | 2.60 | 2.70 | | |
| ESEER | | | | 3.91 | 3.89 | 3.93 | 3.86 | 3.90 | 3.85 | 4.14 | 3.90 | 4.16 | 4.26 | 4.18 4.21 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,271x1,224x4,413 | | | 2,271x1,224x5,313 | | | 2,271x1,224x6,213 2,221x2,258x3,210 | | | 2,397x2,258x3,210 2,221x2,258x4,110 | |
| Weight | Unit | | kg | 2,297 | | | 2,373 | | | 2,449 | | | 2,666 2,766 | |
| | Operation weight | | kg | 2,309 | | | 2,385 | | | 2,463 | | | 2,549 2,781 | |
| Water heat exchanger | Type | | | | | | Plate heat exchanger | | | | | | 40 | |
| | Water volume | l | | 12 | | | 14 | | | 40 | | | 46 | |
| | Nominal water flow | Cooling | l/s | 9.9 | 10.7 | 11.8 | 13.6 | 15.0 | 17.2 | 19.5 | 23.0 | 26.4 | 29.2 | |
| | Nominal water pressure drop | Cooling | Total | kPa | 37 | 43 | 53 | 56 | 69 | 30 | 32 | 35 | 46 | 56 |
| Air heat exchanger | Type | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 21,845 | 21,148 | 27,306 | 26,435 | 32,767 | 32,513 | 43,690 | 54,612 | 52,870 | | |
| | Speed | | rpm | | | | | 900 | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 91 | 92 | | 93 | | | 94 | | 95 | | 96 |
| Sound pressure level | Cooling | Nom. | dBA | | 73 | | | | 74 | 75 | 74 | 75 | | 76 |
| Compressor | Type | | | | | | Scroll compressor | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | | -15~18 | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | | -18~52 | | | | | | |
| Refrigerant | Type | | | | | | R-410A | | | | | | | |
| | Circuits | Quantity | | | | | | 2 | | | | | | |
| Refrigerant circuit | Charge | kg | | 18 | | | 21 | | | 24 | | | 34 | 40 46 |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | | | 3" | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | | | | | |

STRENGTHS

- > Reliable and efficient scroll with high EER values
- > A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced footprint, reduced weight, clearances around the unit
- > 1-2 truly independent refrigerant circuits
- > Ideal solution for a broad range of comfort and process applications
- > The unit can be equipped with a built-in hydraulic module that houses the main hydraulic components and optimizes the hydraulic and electrical installation time, space and cost
- > MicroTech III controller

STANDARD AVAILABLE

- > Direct on line starter (DOL)
- > Double setpoint
- > Evaporator viatulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Evaporator flow switch
- > Electronic expansion valve
- > Ambient outside temperature sensor and setpoint reset
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Water filter

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Brine version
- > Axial fans (250 Pa lift)
- > Condenser coil guards
- > Evaporator area guards
- > CuCu condenser coil
- > CuCuSn condenser coil
- > Alucoat fins coil
- > Discharge line shut-off valve
- > Suction line shut-off valve
- > High pressure side manometers
- > Low pressure side manometers
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pump (low lift)
- > Two centrifugal pump (high lift)
- > Double pressure relief valve with diverter
- > Soft starter
- > Compressor thermal overload relays
- > Phase monitor
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Speedtrol (fan speed control device ON/OFF up to 18°C)
- > Setpoint reset, demand limit and alarm from external device
- > Compressor circuit breakers
- > Fans circuit breakers
- > Fans speed regulation (+fan silent mode)
- > Ground fault relay
- > Rubber anti vibration mounts
- > Spring anti vibration mounts
- > External tank without cabinet (500 or 1000l)
- > External tank with cabinet (500 or 1000l)
- > Container kit
- > Transport kit



MicroTech III



R-410A





EWAQ-F-SR

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| EWAQ-F-SR | | | | | | | | | | | | | | | |
|-----------------------------|------------------------------------|--------------------|----------------|---|------|--------|-------------------|--------|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|
| Capacity class | | | 200 | 220 | 240 | 270 | 300 | 330 | 340 | 370 | 380 | 460 | 530 | 580 | |
| Cooling capacity | Nom. | kW | 199 | 215 | 236 | 272 | 299 | 342 | | 384 | | 457 | 529 | 582 | |
| Capacity control | Method | | | | | | | Step | | | | | | | |
| | Minimum capacity | % | 25 | 22 | 25 | 23 | 25 | 21 | | 25 | | 17 | 14 | 17 | |
| Power input | Cooling | Nom. | kW | 72.7 | 85.1 | 94.6 | 109 | 123 | 143 | | 158 | 190 | 206 | 231 | |
| EER | | | | 2.73 | 2.52 | 2.49 | 2.42 | 2.39 | | 2.44 | | 2.41 | 2.56 | 2.53 | |
| ESEER | | | | 4.40 | 4.33 | 4.26 | 4.29 | 4.21 | 4.23 | 4.40 | 4.15 | 4.29 | 4.67 | 4.63 | 4.57 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,271x1,224x4,413 | | | 2,271x1,224x5,313 | | | 2,271x1,224 x6,213 | 2,221x2,258 x3,210 | 2,447x1,224 x6,213 | 2,397x2,258 x3,210 | 2,221x2,258 x4,110 | 2,221x2,258x5,010 |
| 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 | | | |
| Nominal water flow | Cooling | l/s | 9.5 | 10.2 | 11.3 | 13.0 | 14.3 | 16.3 | | 18.3 | 21.8 | 25.2 | 27.8 | | |
| Nominal water pressure drop | Cooling | Total | kPa | 34 | 40 | 48 | 51 | 63 | 27 | 29 | 31 | 42 | 51 | | |
| Air heat exchanger | Type | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | |
| Fan | 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 | | |
| Compressor | Type | | | Scroll compressor | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | -15~18 | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | -18~52 | | | | | | | | | | | |
| Refrigerant | Type | | | R-410A | | | | | | | | | | | |
| | Circuits | Quantity | | 2 | | | | | | | | | | | |
| Refrigerant circuit | Charge | | kg | 18 | | 21 | | 24 | | 34 | 40 | 46 | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | 3" | | | | | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 3~/50/400 | | | | | | | | | | | |

STRENGTHS

- > Reliable and efficient scroll with high EER values
- > A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced footprint, reduced weight, clearances around the unit
- > 1-2 truly independent refrigerant circuits
- > 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

STANDARD AVAILABLE

- > Direct on line starter (DOL)
- > Double setpoint
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Evaporator flow switch
- > Electronic expansion valve
- > Ambient outside temperature sensor and setpoint reset
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Water filter

OPTIONS (FACTORY MOUNTED)

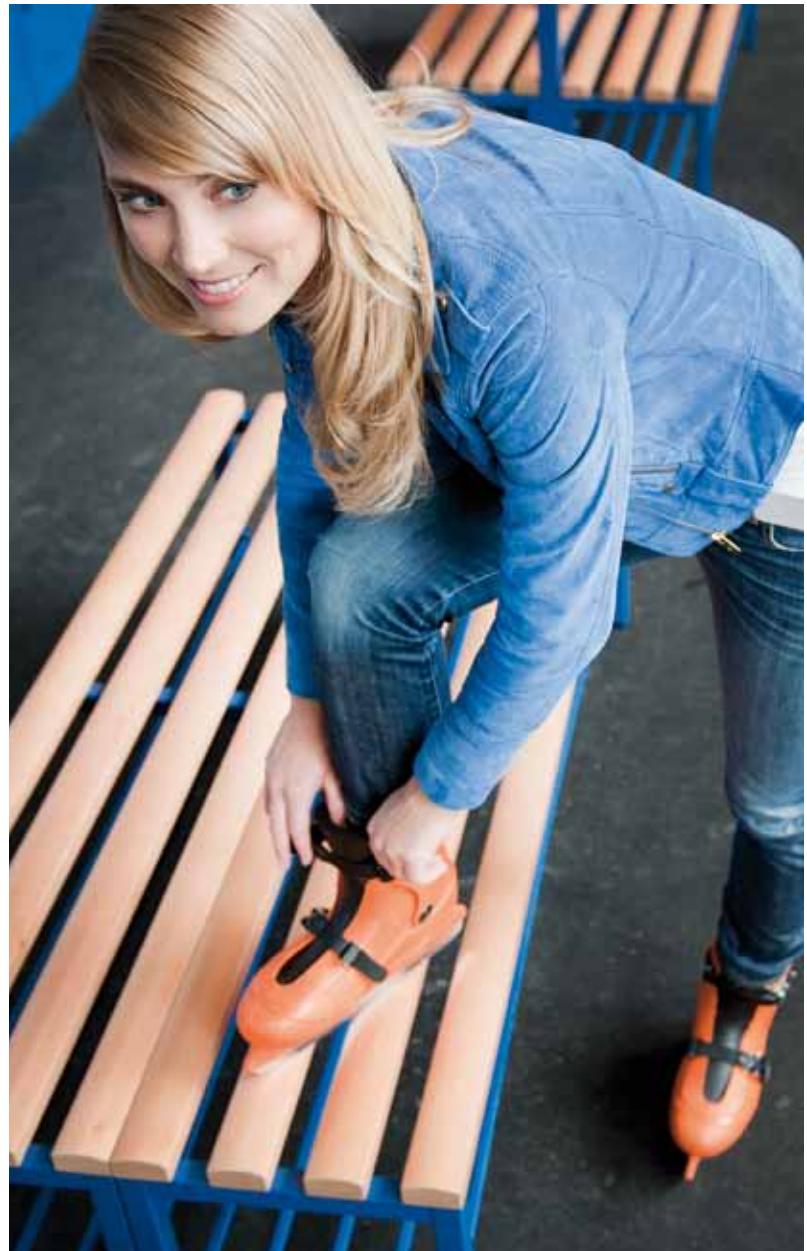
- > Total heat recovery
- > Partial heat recovery
- > Brine version
- > Axial fans (250 Pa lift)
- > Condenser coil guards
- > Evaporator area guards
- > CuCu condenser coil
- > CuCuSn condenser coil
- > Alucoat fins coil
- > Discharge line shut-off valve
- > Suction line shut-off valve
- > High pressure side manometers
- > Low pressure side manometers
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pump (low lift)
- > Two centrifugal pump (high lift)
- > Double pressure relief valve with diverter
- > Soft starter
- > Compressor thermal overload relays
- > Phase monitor
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Speedtrol (fan speed control device ON/OFF up to 18°C)
- > Setpoint reset, demand limit and alarm from external device
- > Compressor circuit breakers
- > Fans circuit breakers
- > Fans speed regulation (+fan silent mode)
- > Ground fault relay
- > Rubber anti vibration mounts
- > Spring anti vibration mounts
- > External tank without cabinet (500 or 1000l)
- > External tank with cabinet (500 or 1000l)
- > Container kit
- > Transport kit



MicroTech III



R-410A



ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)



EWAQ-F-XS / XL

Cooling only

| EWAQ-F-XS | | | | | | | | | | | | | | | | | | | |
|-----------------------------|------|------------------------------------|---|-----------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------|---|-------|--------|--|--|
| Capacity class | | | 170 | 200 | 220 | 250 | 310 | 320 | 350 | 360 | 400 | 430 | 450 | 520 | 610 | 680 | | | |
| Cooling capacity | Nom. | kW | 171 | 195 | 221 | 245 | 317 | | 357 | 404 | 429 | 458 | 529 | 609 | 675 | | | | |
| Capacity control | | Method | | | | | | | Step | | | | | | | | | | |
| Power input | | Minimum capacity | % | 25 | 21 | 25 | 22 | 23 | 25 | 21 | 20 | 25 | 17 | 14 | 17 | | | | |
| EER | | Cooling | Nom. | kW | 54.3 | 61.6 | 69.9 | 77.4 | 101 | 114 | 129 | 136 | 145 | 168 | 196 | 216 | | | |
| ESEER | | | | | 3.15 | 3.16 | 3.17 | | 3.12 | 3.12 | 3.13 | 3.15 | 3.14 | 3.11 | 3.12 | | | | |
| Dimensions | | Unit | HeightxWidthxDepth | mm | 2,271x1,224x4,413 | 2,271x1,224x5,313 | 2,271x1,224x6,213 | 2,271x1,224x6,210 | 2,271x1,224x6,213 | 2,271x1,224x6,210 | 2,221x2,258x4,110 | 2,221x2,258x5,010 | 2,221x2,258x5,910 | | | | | | |
| Weight | | 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 | | | |
| Type | | | | | | | | | | | | | | | | | | | |
| Water heat exchanger | | Water volume | l | 12 | | | 14 | | 40 | | 46 | | 60 | | | | | | |
| Nominal water flow | | Cooling | 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 | | | | |
| Nominal water pressure drop | | Cooling | Total | kPa | 25 | 27 | 34 | 42 | 22 | 23 | 31 | 29 | 30 | 41 | 44 | 55 | | | |
| Air heat exchanger | | | | | | | | | | | | | | | | | | | |
| Fan | | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | High efficiency fin and tube type with integral subcooler | | | | |
| Speed | | l/s | 21,845 | 21,148 | 26,874 | 25,204 | 31,722 | | 30,245 | 42,296 | 40,326 | | 50,408 | | 60,489 | | | | |
| Sound power level | | Air flow rate | Nom. | | | | | | | 900 | | | | | | | | | |
| Sound pressure level | | Cooling | Nom. | dBA | 91 | 93 | 94 | 95 | | 96 | 97 | | 98 | | 99 | 100 | | | |
| Compressor | | Type | | | | | | | | | | | | | Scroll compressor | | | | |
| Operation range | | Water side | Cooling | Min.-Max. | °CDB | | | | | | | | | | | | | | |
| Air side | | Cooling | Min.-Max. | °CDB | | | | | | | | | | | | | -15~18 | | |
| Refrigerant | | Type | | | | | | | | | | | | | -18~52 | | | | |
| Circuits | | Quantity | | | | | | | | | | | | | R-410A | | | | |
| Refrigerant circuit | | Charge | kg | 14 | 18 | 21 | | 24 | | 35 | | 40 | | 46 | | | | | |
| Piping connections | | Evaporator water inlet/outlet (OD) | | | | | | | 3" | | | | | | | | | | |
| Power supply | | Phase/Frequency/Voltage | Hz/V | | | | | | | 3~/50/400 | | | | | | | | | |

| EWAQ-F-XL | | | | | | | | | | | | | | | | | | | |
|-----------------------------|------|------------------------------------|--------------------|-----------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------|----------------------|-------|-------|--|--|
| Capacity class | | | 170 | 200 | 220 | 250 | 310 | 320 | 350 | 360 | 400 | 430 | 450 | 520 | 610 | 680 | | | |
| Cooling capacity | Nom. | kW | 171 | 195 | 221 | 245 | 317 | | 357 | 404 | 429 | 458 | 529 | 609 | 675 | | | | |
| Capacity control | | Method | | | | | | | Step | | | | | | | | | | |
| Power input | | Minimwum capacity | % | 25 | 21 | 25 | 22 | 23 | 25 | 21 | 20 | 25 | 17 | 14 | 17 | | | | |
| EER | | Cooling | Nom. | kW | 54.3 | 61.6 | 69.9 | 77.4 | 101 | 114 | 129 | 136 | 145 | 168 | 196 | 216 | | | |
| ESEER | | | | | 3.15 | 3.16 | 3.17 | | 3.12 | 3.13 | 3.15 | 3.14 | 3.11 | 3.12 | | | | | |
| Dimensions | | Unit | HeightxWidthxDepth | mm | 2,271x1,224x4,413 | 2,271x1,224x5,313 | 2,271x1,224x6,213 | 2,271x1,224x6,210 | 2,271x1,224x6,213 | 2,271x1,224x6,210 | 2,221x2,258x4,110 | 2,221x2,258x5,010 | 2,221x2,258x5,910 | | | | | | |
| Weight | | 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 | | | |
| Type | | | | | | | | | | | | | | | | | | | |
| Water heat exchanger | | Water volume | l | 12 | | | 14 | | 40 | | 46 | | 60 | | | | | | |
| Nominal water flow | | Cooling | 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 | | | | |
| Nominal water pressure drop | | Cooling | Total | kPa | 25 | 27 | 34 | 42 | 22 | 23 | 31 | 29 | 30 | 41 | 44 | 55 | | | |
| Air heat exchanger | | Type | | | | | | | | | | | | | Plate heat exchanger | | | | |
| Fan | | 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 | | | | 900 | | | | | | | | |
| Sound power level | | Cooling | Nom. | dBA | 90 | 91 | 92 | | 93 | | 95 | | 96 | | 97 | | | | |
| Sound pressure level | | Cooling | Nom. | dBA | 71 | | 73 | | 74 | | 75 | | | | 76 | | | | |
| Compressor | | Type | | | | | | | | | | | | | Scroll compressor | | | | |
| Operation range | | Water side | Cooling | Min.-Max. | °CDB | | | | | | | | | | | | | | |
| | | Air side | Cooling | Min.-Max. | °CDB | | | | | | | | | | | | | | |
| Refrigerant | | Type | | | | | | | | | | | | | R-410A | | | | |
| Circuits | | Quantity | | | | | | | | | | | | | 2 | | | | |
| Refrigerant circuit | | Charge | kg | 14 | 18 | 21 | | 24 | | 35 | | 40 | | 46 | | | | | |
| Piping connections | | Evaporator water inlet/outlet (OD) | | | | | | | 3" | | | | | | | | | | |
| Power supply | | Phase/Frequency/Voltage | Hz/V | | | | | | 3~/50/400 | | | | | | | | | | |

STRENGTHS

- > Reliable and efficient scroll with high EER values
- > A series of advantages thanks to the use of large-capacity scroll compressors: increased competitiveness, reduced footprint, reduced weight, clearances around the unit
- > 1-2 truly independent refrigerant circuits
- > 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

STANDARD AVAILABLE

- > Direct on line starter (DOL)
- > Double setpoint
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Evaporator flow switch
- > Electronic expansion valve
- > Ambient outside temperature sensor and setpoint reset
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Water filter

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Brine version
- > Axial fans (250 Pa lift)
- > Condenser coil guards
- > Evaporator area guards
- > CuCu condenser coil
- > CuCuSn condenser coil
- > Alucoat fins coil
- > Discharge line shut-off valve
- > Suction line shut-off valve
- > High pressure side manometers
- > Low pressure side manometers
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pump (low lift)
- > Two centrifugal pump (high lift)
- > Double pressure relief valve with diverter
- > Soft starter
- > Compressor thermal overload relays
- > Phase monitor
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Speedtrol (fan speed control device ON/OFF up to 18°C)
- > Setpoint reset, demand limit and alarm from external device
- > Compressor circuit breakers
- > Fans circuit breakers
- > Fans speed regulation (+fan silent mode)
- > Ground fault relay
- > Rubber anti vibration mounts
- > Spring anti vibration mounts
- > External tank without cabinet (500 or 1000l)
- > External tank with cabinet (500 or 1000l)
- > Container kit
- > Transport kit



MicroTech III



R-410A





EWAQ-F-XR

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity class | | | 170 | 190 | 210 | 240 | 300 | 310 | 330 | 340 | 390 | 410 | 430 | 500 | 580 | 650 | | | | | |
|----------------------|------|--------------------|------------------------------------|----------|---|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|--------|--------|-------------------|-----------------------|-------|-------|------|--|--|--|
| Cooling capacity | | | Nom. | kW | 166 | 188 | 212 | 237 | 305 | 341 | 341 | 386 | 408 | 434 | 504 | 581 | 648 | | | | |
| Capacity control | | | Method | | | | | Step | | | | | | | | | | | | | |
| | | | Minimum capacity | % | 25 | 21 | 25 | 22 | 23 | 25 | 21 | 20 | 25 | 17 | 14 | 17 | | | | | |
| Power input | | | Cooling | Nom. | kW | 52.5 | 60.6 | 68.0 | 76.4 | 101 | 116 | 116 | 127 | 135 | 145 | 168 | 198 | 216 | | | |
| EER | | | | | 3.16 | 3.11 | 3.12 | 3.10 | 3.03 | 2.94 | 2.94 | 3.04 | 3.02 | 2.99 | 3.00 | 2.94 | 3.00 | | | | |
| ESEER | | | | | 4.67 | 4.78 | 4.65 | 4.74 | 4.67 | 4.82 | 4.58 | 4.77 | 4.82 | 4.78 | 4.68 | 4.97 | 4.84 | 4.79 | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | | 2,271x1,224x4,413 | 2,271x1,224x5,313 | 2,271x1,224 x6,213 | 2,221x2,258 x3,210 | 2,271x1,224 x6,213 | 2,221x2,258 x3,210 | 2,221x2,258x4,110 | | | 2,221x2,258x5,010 | 2,221x2,258 x5,910 | | | | | | |
| Weight | | | 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 | | | | |
| | | | 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 | | | | | | |
| | | | Nominal water flow | Cooling | 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 | | | | |
| | | | Nominal water pressure drop | Cooling | Total | 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 | | | | | | | | | | | | | | | | |
| Fan | | | 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 | | | | |
| Compressor | | | Type | | Scroll compressor | | | | | | | | | | | | | | | | |
| Operation range | | | Water side | Cooling | Min.-Max. °CDB | -15~18 | | | | | | | | | | | | | | | |
| | | | Air side | Cooling | Min.-Max. °CDB | -18~52 | | | | | | | | | | | | | | | |
| Refrigerant | | | Type | | R-410A | | | | | | | | | | | | | | | | |
| | | | Circuits | Quantity | 2 | | | | | | | | | | | | | | | | |
| Refrigerant circuit | | | Charge | | kg | 14 | 18 | 21 | 24 | 24 | 35 | 40 | 46 | | | | | | | | |
| Piping connections | | | Evaporator water inlet/outlet (OD) | | | 3" | | | | | | | | | | | | | | | |
| Power supply | | | Phase/Frequency/Voltage | | Hz/V | 3~/50/400 | | | | | | | | | | | | | | | |

STRENGTHS

- > Wide capacity range: 10 sizes to cover a range from 101 to 413 kW
- > 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
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communication

STANDARD AVAILABLE

- > Wye delta starter (y - d)
- > Double setpoint
- > Fans circuit breakers with thermal overload relays
- > Phase monitor
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Low pressure side manometers
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fans circuit breakers
- > Main switch interlock

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under/Over voltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > 20 mm evaporator insulation
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (low or high lift)
- > Two centrifugal pump (low or high lift) - (Not available on sizes 100 and 120)
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > External tank with or without (500 and 1000 l)
- > Fans speed regulation (+fan silent mode)
- > Transport kit



MicroTech III



R-134a





EWAD100-210E-SS

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity class | | | 100 | 120 | 140 | 160 | 180 | 210 | 260 | 310 | 360 | 410 | | | | | | |
|----------------------|-------------------------------|---|----------------|-------------------|-------------------|-------------------|-------------------|--------|--------|--------|--------|-------|-------|--|--|--|--|--|
| Cooling capacity | Nom. | kW | 101 | 121 | 138 | 163 | 183 | 214 | 256 | 307 | 360 | 413 | | | | | | |
| Capacity control | Method | | | Stepless | | | | | | | | | | | | | | |
| | Minimum capacity | | | 25 | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 38.7 | 46.9 | 53.4 | 60.3 | 68.5 | 71.7 | 86.7 | 111 | 133 | 146 | | | | | |
| EER | | | | 2.61 | 2.57 | 2.58 | 2.70 | 2.67 | 2.98 | 2.95 | 2.77 | 2.71 | 2.84 | | | | | |
| ESEER | | | | 2.93 | 2.75 | 2.93 | 2.81 | 3.02 | 3.18 | 3.05 | 3.23 | 3.34 | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,273x1,292x2,165 | 2,273x1,292x3,065 | 2,273x1,292x3,965 | 2,223x2,236x3,070 | | | | | | | | | | | |
| Weight | Unit | kg | | 1,684 | 1,861 | 2,086 | 2,919 | | | | | | | | | | | |
| | Operation weight | | | 1,699 | 1,881 | 2,116 | 2,963 | | | | | | | | | | | |
| Water heat exchanger | Type | Plate to plate | | | | | | | | | | | | | | | | |
| | Water volume | l | | 12 | 15 | 17 | 20 | 24 | 30 | 25 | 30 | 36 | 44 | | | | | |
| | Nominal water flow | Cooling | l/s | 4.83 | 5.76 | 6.58 | 7.77 | 8.74 | 10.22 | 12.22 | 14.65 | 17.21 | 19.74 | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 24 | 25 | 24 | 22 | 21 | 48 | | | 45 | | | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 10,922 | 10,575 | 16,383 | 15,863 | 21,844 | 21,150 | 32,767 | 31,725 | | | | | | | |
| | Speed | rpm | | 920 | | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 91.5 | | 92.3 | | 93.0 | 94.2 | 94.5 | | 95.2 | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 73.5 | | 73.7 | | 73.9 | 75.1 | 75.0 | 75.3 | | 76.0 | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | -15~15 | | | | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | -18~48 | | | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | |
| | Charge | kg | | 18 | 21 | 23 | 28 | 30 | 33 | 46 | 56 | 60 | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | | 3" | | | | | | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | | Hz / V | 3~/50 / 400 | | | | | | | | | | | | | | |

STRENGTHS

- > Wide capacity range: 10 sizes to cover a range from 97.9 kW to 398 kW
- > One refrigerant circuit with single screw compressor
- > Low operating sound level
- > Compact design with brazed plate heat exchanger
- > Large operation range (ambient temperature down to -18°C)
- > Water supply down to -15°C
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communication



MicroTech III

STANDARD AVAILABLE

- > Wye delta starter (y - d)
- > Double setpoint
- > Phase monitor
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fans circuit breakers
- > Main switch interlock



R-134a

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under/Over voltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > 20 mm evaporator insulation
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (low or high lift)
- > Two centrifugal pump (low or high lift) - (Not available on sizes 100 and 120)
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fan speed regulation
- > External tank with or without (500 and 1000 l)
- > Low pressure side manometers
- > Transport kit





EWAD100-210E-SL

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKMBACMSTP)
- › BACnet/IP communication module (EKMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity class | | | 100 | 120 | 130 | 160 | 180 | 210 | 250 | 300 | 350 | 400 | | |
|----------------------|-------------------------------|--------------------|----------------|-------------------|---|-------------------|-------------------|--------|--------|--------|--------|-------|-------|--|
| Cooling capacity | Nom. | kW | 97.9 | 116 | 134 | 157 | 177 | 209 | 249 | 296 | 345 | 398 | | |
| Capacity control | Method | | | | Stepless | | | | | | | | | |
| | Minimum capacity | % | | | | 25 | | | | | | | | |
| Power input | Cooling | Nom. | kW | 38.8 | 47.9 | 53.0 | 60.6 | 67.8 | 72.1 | 84.5 | 110 | 134 | 150 | |
| EER | | | | 2.52 | 2.42 | 2.53 | 2.60 | 2.61 | 2.89 | 2.95 | 2.69 | 2.58 | 2.65 | |
| ESEER | | | | 3.01 | 2.97 | 2.85 | 3.00 | 3.07 | 3.32 | 3.55 | 3.41 | 3.34 | 3.45 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,273x1,292x2,165 | 2,273x1,292x3,065 | 2,273x1,292x3,965 | 2,223x2,236x3,070 | | | | | | | |
| 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 to plate | | | | | | | | | |
| | Water volume | l | | 12 | 15 | 17 | 20 | 24 | 30 | 25 | 30 | 36 | 44 | |
| | Nominal water flow | Cooling | l/s | 4.68 | 5.54 | 6.40 | 7.51 | 8.47 | 9.97 | 11.90 | 14.15 | 16.50 | 19.01 | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 23 | | | 21 | 20 | 46 | 45 | 44 | 42 | |
| Air heat exchanger | Type | | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 8,372 | 8,144 | 12,558 | 12,217 | 16,744 | 16,289 | 25,117 | 24,433 | | | |
| | Speed | | rpm | | | | 715 | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 89.0 | | 89.8 | | 90.5 | 91.7 | 92.0 | 92.7 | | | |
| Sound pressure level | Cooling | Nom. | dBA | 71.0 | | 71.2 | | 71.4 | 72.6 | 72.5 | 72.8 | | | |
| Compressor | Type | | | | Semi-hermetic single screw compressor | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | -15~15 | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | -18~48 | | | | | | | |
| Refrigerant | Type | | | | R-134a | | | | | | | | | |
| | Charge | kg | | 18 | 21 | 23 | 28 | 30 | 33 | 46 | 56 | 60 | | |
| Piping connections | Evaporator water inlet/outlet | | | | | | 3" | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | | | | | 3~/50/400 | | | | | | | |

STRENGTHS

- > Standard efficiency level
- > Standard sound level configuration:
condenser fan rotating at 920 rpm, rubber
antivibration under compressor
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > MicroTech III controller for superior control logic
and an easy interface with LonWorks, Bacnet,
Ethernet TCP/IP or Modbus communication
- > Large operation range (ambient
temperature down to -18°C)

STANDARD AVAILABLE

- > Wye delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and
alarm from external device
- > Fans circuit breakers
- > Main switch interlock

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery 1 circuit
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > 20 mm evaporator insulation
- > Fan silent mode
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pumps (low lift)
- > Two centrifugal pumps (high lift)
- > External tank without cabinet (500 l)
- > External tank without cabinet (1000 l)
- > External tank (500 l) with cabinet
- > External tank (1000 l) with cabinet
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fan speed regulation
- > Axial fans (250 PA lift)
- > Low pressure side manometers
- > Evaporator right water connections
- > Inverter compressor starter
- > Transport kit



MicroTech III



R-134a





EWAD390D-SS

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity Class | | | 390 | 440 | 470 | 510 | 530 | 560 | 580 | | | |
|----------------------|-------------------------------|---|----------------|-------------------|-------------------|--------|--------|-------|--------|--|--|--|
| Cooling capacity | Nom. | kW | 389 | 436 | 466 | 502 | 532 | 556 | 578 | | | |
| Capacity control | Method | | | Stepless | | | 12.5 | | | | | |
| Power input | Cooling | Nom. | kW | 152 | 164 | 167 | 184 | 194 | 205 | | | |
| EER | 2.56 | | | 2.66 | 2.79 | 2.73 | 2.74 | 2.72 | 2.93 | | | |
| ESEER | 3.36 | | | 3.54 | 3.55 | 3.52 | | | 3.56 | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,223x2,234x3,139 | 2,223x2,234x4,040 | | | | | | | |
| 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 | | | |
| | Nominal water flow | Cooling | l/s | 18.60 | 20.80 | 22.20 | 24.00 | 25.40 | 26.50 | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 45.6 | 37.9 | 66.5 | 47.1 | 52.1 | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 32,772 | | 43,455 | 43,694 | | 42,300 | | | |
| | Speed | rpm | | 920 | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 95.8 | 96.7 | 96 | 96.7 | 98.2 | 98.7 | | | |
| Sound pressure level | Cooling | Nom. | dBA | 76.5 | 77.0 | | | 78.5 | 79.0 | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | -15~15 | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | -18~48 | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | |
| | Circuits | Quantity | | 2 | | | | | | | | |
| Refrigerant circuit | Charge | kg | 56 | 60 | 70 | 76 | 82 | 87 | 92 | | | |
| Piping connections | Evaporator water inlet/outlet | | | 139.7mm | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | | 3 / 50 / 400 | | | | | | | | |

STRENGTHS

- > Standard efficiency level
- > Low sound level configuration: condenser fan rotating at 715/900 rpm, rubber antivibration under compressor, compressor sound enclosure
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communication
- > Large operation range (ambient temperature down to -18°C)

STANDARD AVAILABLE

- > Wye delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fans circuit breakers
- > Main switch interlock
- > 20mm evaporator insulation
- > Water pressure differential switch on evaporator

OPTIONS (FACTORY MOUNTED)

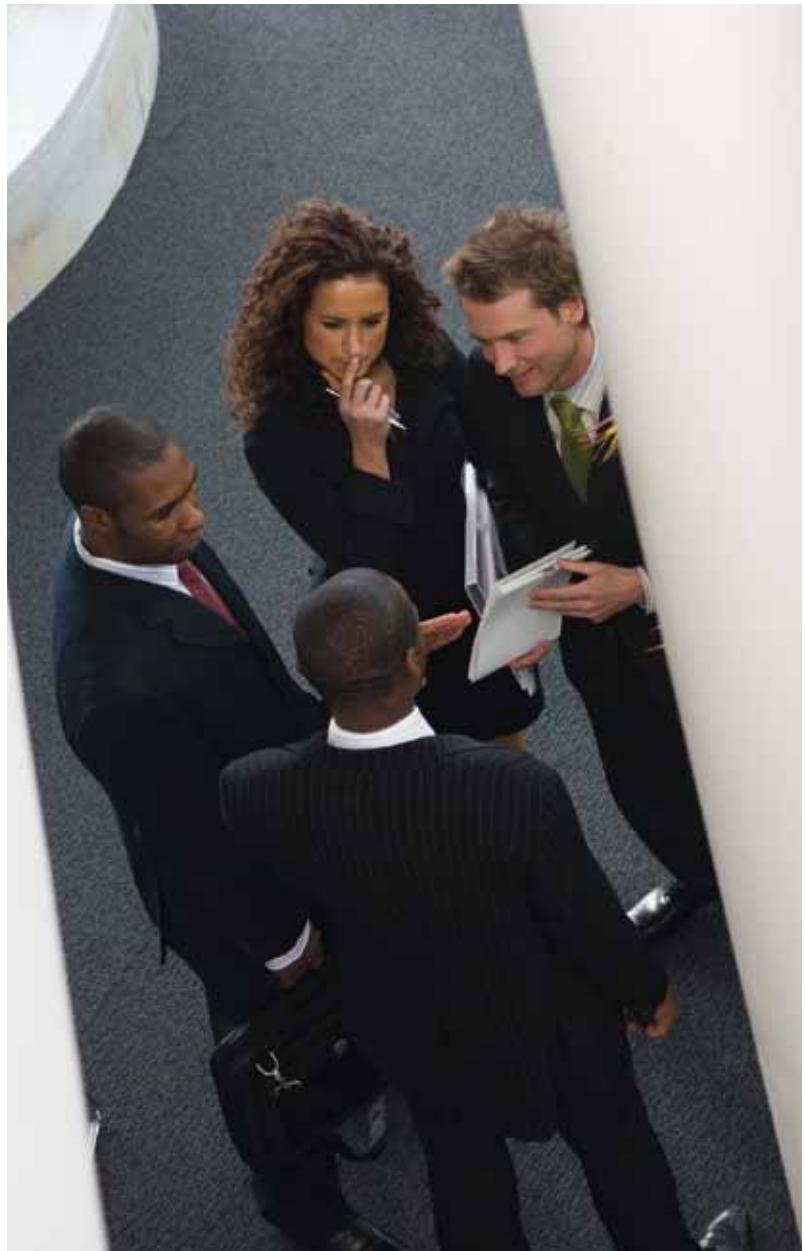
- > Total heat recovery (1 circuit)
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > Fan silent mode
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (10 different models)
- > Two centrifugal pumps (10 different models)
- > External tank without cabinet (500 l)
- > External tank without cabinet (1000 l)
- > External tank (500 l) with cabinet
- > External tank (1000 l) with cabinet
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fan speed regulation
- > Low pressure side manometers
- > Inverter compressor starter
- > Transport kit
- > Axial fans (250 PA lift)



MicroTech III



R-134a





EWAD400-530D-SL

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity Class | | | 180 | 200 | 230 | 250 | 260 | 280 | 300 | 320 | 370 | 400 | 440 | 480 | 510 | 530 | | | | | | | | | | | | | | | | | | | |
|----------------------|-------------------------------|---|----------------|-------------------|--------------------------|--------|-------------------|--------|--------|-------------------|-------|--------|-------------------|-------|--------|-------|-------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Cooling capacity | Nom. | kW | 184 | 198 | 225 | 245 | 261 | 275 | 298 | 321 | 370 | 404 | 440 | 477 | 505 | 533 | | | | | | | | | | | | | | | | | | | |
| Capacity control | Method | | | | Stepless | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Minimum capacity | % | | | | 12.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 81.4 | 79.7 | 84.5 | 93.4 | 101 | 108 | 119 | 123 | 133 | 169 | 170 | 186 | 203 | 195 | | | | | | | | | | | | | | | | | | |
| EER | | | | 2.26 | 2.48 | 2.66 | 2.62 | 2.58 | 2.54 | 2.50 | 2.60 | 2.78 | 2.39 | 2.59 | 2.57 | 2.49 | 2.73 | | | | | | | | | | | | | | | | | | |
| ESEER | | | | 3.00 | 3.12 | 3.31 | 3.21 | 3.26 | 3.23 | 3.20 | 3.24 | 3.41 | 3.65 | 3.67 | 3.57 | 3.67 | 3.77 | | | | | | | | | | | | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,355x2,234x2,239 | | | 2,355x2,234x3,139 | | | 2,223x2,234x3,139 | | | 2,223x2,234x4,040 | | | | | | | | | | | | | | | | | | | | | | |
| Weight | Unit | kg | kg | 2,475 | 2,470 | | | | 2,860 | | | 2,960 | | | 4,029 | 4,224 | 4,229 | 4,234 | | | | | | | | | | | | | | | | | |
| | Operation weight | kg | | | | 2,500 | | | 2,960 | | | 3,090 | | | 4,194 | 4,394 | | | | | | | | | | | | | | | | | | | |
| Water heat exchanger | Type | Plate to plate | | | Single pass shell & tube | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Water volume | l | 25 | 30 | 100 | | | 130 | | | 165 | | | 170 | | | 165 | 160 | | | | | | | | | | | | | | | | | |
| | Nominal water flow | Cooling | l/s | 8.80 | 9.40 | 10.70 | 11.70 | 12.50 | 13.10 | 14.20 | 15.30 | 17.70 | 19.30 | 21.00 | 22.80 | 24.10 | 25.40 | | | | | | | | | | | | | | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 28.9 | 21.8 | 57.8 | 49.0 | 53.9 | 58.9 | 59.5 | 55.2 | 67.4 | 47.5 | 62.1 | 54.0 | 48.4 | 43.4 | | | | | | | | | | | | | | | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 15,300 | 14,900 | 22,900 | 22,600 | 22,300 | 24,428 | | | 33,489 | | | 32,572 | | | | | | | | | | | | | | | | | | | | |
| | Speed | | | | 900 | | | | | | | | | | | 715 | | | | | | | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 93.7 | | | 94.3 | | | 94.7 | | | 94.2 | | | 95.7 | 96.2 | | | | | | | | | | | | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | | | | 75.0 | | | 77.5 | | | 74.5 | | | 76.0 | 76.5 | | | | | | | | | | | | | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | -15~15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. | °CDB | -18~48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant circuit | Charge | kg | 36 | 42 | 48 | 50 | 54 | 58 | | | 66 | | | 70 | 76 | 82 | 84 | 86 | | | | | | | | | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | | 88.9 | | | 114.3 | | | 139.7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz/V | 3 / 50 / 400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > Standard efficiency level
- > Reduced sound level configuration: condenser fan rotating at 680/715 rpm, rubber antivibration under compressor, compressor sound enclosure
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communication
- > Large operation range (ambient temperature down to -18°C)

STANDARD AVAILABLE

- > Wye delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fans circuit breakers
- > Main switch interlock
- > 20mm evaporator insulation
- > Water pressure differential switch on evaporator

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery (1 circuit)
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > 20 mm evaporator insulation
- > Fan silent mode
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (10 different models)
- > Two centrifugal pumps (10 different models)
- > External tank without cabinet (500 l)
- > External tank without cabinet (1000 l)
- > External tank (500 l) with cabinet
- > External tank (1000 l) with cabinet
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fan speed regulation
- > Axial fans (250 PA lift)
- > Evaporator right water connections
- > Inverter compressor starter
- > Transport kit
- > Low pressure side manometers



MicroTech III



R-134a





EWAD400-530D-SR

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity Class | | | 180 | 190 | 220 | 240 | 250 | 270 | 280 | 310 | 370 | 400 | 440 | 480 | 510 | 530 | | | | | |
|----------------------|-------------------------------|---|----------------|-------------------|--------------------------|--------|-------------------|--------|--------|-------------------|-------|-------|-------------------|-------|-------|--------|-------|------|--|--|--|
| Cooling capacity | Norm. | kW | 177 | 190 | 219 | 238 | 252 | 265 | 278 | 312 | 366 | 404 | 440 | 477 | 505 | 533 | | | | | |
| Capacity control | Method | | | Stepless | | | | | | | | | | | | | | | | | |
| | Minimum capacity | | | 12.5 | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 84.0 | 82.7 | 85.2 | 94.7 | 103 | 111 | 122 | 125 | 138 | 169 | 170 | 186 | 203 | 195 | | | | |
| EER | | | | 2.11 | 2.30 | 2.57 | 2.51 | 2.44 | 2.38 | 2.28 | 2.49 | 2.65 | 2.39 | 2.59 | 2.57 | 2.49 | 2.73 | | | | |
| ESEER | | | | 2.89 | 3.00 | 3.34 | 3.21 | 3.23 | 3.16 | 3.13 | 3.25 | 3.42 | 3.65 | 3.67 | 3.57 | 3.67 | 3.77 | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,355x2,234x2,239 | | | 2,355x2,234x3,139 | | | 2,223x2,234x3,139 | | | 2,223x2,234x4,040 | | | | | | | | |
| Weight | Unit | kg | | 2,620 | | | 2,890 | | | 3,110 | | | 4,040 | | | 4,240 | | | | | |
| | Operation weight | kg | | 2,650 | | | 3,100 | | | 3,240 | | | 4,342 | | | 4,542 | | | | | |
| Water heat exchanger | Type | Plate to plate | | | Single pass shell & tube | | | | | | | | | | | | | | | | |
| | Water volume | I | | 25 | 30 | 100 | | | 130 | | | 165 | 170 | | | 165 | 160 | | | | |
| | Nominal water flow | Cooling | l/s | 8.50 | 9.10 | 10.40 | 11.30 | 12.00 | 12.60 | 13.30 | 14.90 | 17.40 | 19.30 | 21.00 | 22.80 | 24.10 | 25.40 | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 26.9 | 20.1 | 55.1 | 46.6 | 50.8 | 55.2 | | 52.7 | 65.1 | 47.5 | 62.1 | 54.0 | 48.4 | 43.4 | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 15,300 | 14,900 | 22,900 | 22,600 | 22,300 | 24,428 | | | | 33,489 | | | 32,572 | | | | | |
| | Speed | | rpm | 680 | | | 715 | | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 88.7 | | | 89.3 | | | 89.7 | 92.2 | 90.7 | | | 92.2 | 92.7 | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | | | | 70.0 | | | 72.5 | 71.0 | | | 72.5 | 73.0 | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | -15~15 | | | | | | | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | -18~48 | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | | | |
| | Charge | | kg | 36 | 42 | 48 | 50 | 54 | 58 | | 66 | 70 | 76 | 82 | 84 | 86 | | | | | |
| | Circuits | Quantity | | 2 | | | | | | | | | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | | 88.9 | | | 114.3 | | | 139.7 | | | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | | 3 / 50 / 400 | | | | | | | | | | | | | | | | | |

STRENGTHS

- > Standard efficiency level
- > Extra low sound level configuration:
condenser fan rotating at 500 rpm, rubber
antivibration under compressor, compressor
and evaporator sound enclosure
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > MicroTech III controller for superior control logic
and an easy interface with LonWorks, Bacnet,
Ethernet TCP/IP or Modbus communication
- > Large operation range (ambient
temperature down to -18°C)

STANDARD AVAILABLE

- > Wye delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and
alarm from external device
- > Fans circuit breakers
- > Main switch interlock
- > Fans speed regulation (+ fan silent mode)

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery 1 circuit
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > 20 mm evaporator insulation
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pumps (low lift)
- > Two centrifugal pumps (high lift)
- > External tank without cabinet (500 l)
- > External tank without cabinet (1000 l)
- > External tank (500 l) with cabinet
- > External tank (1000 l) with cabinet
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Transport kit
- > Water pressure differential switch on evaporator
- > Inverter compressor starter
- > Low pressure side manometers
- > Axial fans (250 PA lift)



MicroTech III



R-134a





EWAD230-410D-SX

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKCLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity Class | | | 210 | 230 | 250 | 270 | 290 | 300 | 310 | 370 | 410 | 450 | 490 | | | | | | | | | | | | | | | | |
|----------------------|-------------------------------|---|----------------|-------------------|--------|--------|-------|-------|--------|-------|-------|--------|--------|-------------------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Cooling capacity | Nom. | kW | 203 | 231 | 253 | 271 | 286 | 299 | 309 | 370 | 413 | 451 | 492 | | | | | | | | | | | | | | | | |
| Capacity control | Method | | | Stepless | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Minimum capacity | | | 12.5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 79.9 | 85.2 | 93.5 | 104 | 114 | 126 | 136 | 148 | 169 | 173 | 187 | | | | | | | | | | | | | | | |
| EER | | | | 2.54 | 2.71 | 2.70 | 2.59 | 2.50 | 2.37 | 2.27 | 2.49 | 2.44 | 2.60 | 2.63 | | | | | | | | | | | | | | | |
| ESEER | | | | 3.39 | 3.63 | 3.52 | 3.55 | 3.44 | 3.39 | 3.25 | 3.24 | 3.49 | 3.61 | 3.58 | | | | | | | | | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,420x2,234x3,139 | | | | | | | | | | 2,420x2,234x4,940 | | | | | | | | | | | | | | | |
| Weight | Unit | kg | 3,110 | 3,475 | | | 3,425 | 3,430 | | | 3,560 | 4,302 | 4,506 | 4,581 | | | | | | | | | | | | | | | |
| | Operation weight | | | 3,200 | | | 3,590 | | | 3,735 | | | 4,472 | 4,676 | 4,746 | | | | | | | | | | | | | | |
| Water heat exchanger | Type | Single pass shell & tube | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Water volume | | | I | 90 | 115 | | 165 | 160 | | | 175 | 170 | | 165 | | | | | | | | | | | | | | |
| | Nominal water flow | Cooling | I/s | 9.70 | 11.00 | 12.10 | 12.90 | 13.70 | 14.30 | 14.70 | 17.70 | 19.70 | 21.50 | 23.50 | | | | | | | | | | | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 44.7 | 33.8 | 38 | 38.3 | 34.9 | 37.7 | 40.5 | 44.5 | 43.9 | 50 | 44.8 | | | | | | | | | | | | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | I/s | 12,900 | 17,900 | 17,200 | | | 26,495 | | | 25,933 | 28,625 | 33,116 | | | | | | | | | | | | | | | |
| | Speed | | | 500 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 84.3 | 84.7 | | | | | | | | | | | | | | | | | | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 65.0 | | | | | | | | | | 65.5 | 66.0 | | | | | | | | | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | -15~15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | -18~48 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant circuit | Charge | kg | 56 | 60 | | | 65 | | | 70 | 76 | 82 | | | | | | | | | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | | 114.3 | | | 139.7 | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | 3 / 50 / 400 | | | | | | | | | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > High efficiency
- > Standard sound level configuration:
condenser fan rotating at 900/920 rpm,
rubber antivibration under compressor
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > MicroTech III controller for superior control logic
and an easy interface with LonWorks, Bacnet,
Ethernet TCP/IP or Modbus communication
- > Large operation range (ambient
temperature down to -18°C)



MicroTech III

STANDARD AVAILABLE

- > Wye delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and
alarm from external device
- > Fans circuit breakers
- > Main switch interlock



R-134a

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery 1 circuit
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors cosfi 0.9
- > Current limit - display
- > Evaporator flange kit
- > 20 mm evaporator insulation
- > Fan silent mode
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (10 different models)
- > Two centrifugal pumps (10 different models)
- > External tank without cabinet (500 l)
- > External tank without cabinet (1000 l)
- > External tank (500 l) with cabinet
- > External tank (1000 l) with cabinet
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fan speed regulation
- > Axial fans (250 PA lift)
- > Low pressure side manometers
- > Evaporator right water connections
- > Inverter compressor starter
- > Water pressure differential switch on evaporator
- > Transport kit





EWAD250D-XS

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKCLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity Class | | | 250 | 280 | 300 | 330 | 350 | 380 | 400 | 470 | 520 | 580 | 620 | | | | | | | | | |
|----------------------|-------------------------------|---|----------------|-------------------|----------|--------|-------------------|------|--------|-------------------|--------|--------|-------------------|--------|--|--|--|--|--|--|--|--|
| Cooling capacity | Nom. | kW | 247 | 275 | 302 | 327 | 351 | 376 | 401 | 469 | 524 | 575 | 622 | | | | | | | | | |
| Capacity control | Method | | | | Stepless | | | | | | | | | | | | | | | | | |
| | Minimum capacity | % | | | | 12.5 | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 79.1 | 87.1 | 94.1 | 104 | 113 | 120 | 127 | 150 | 166 | 181 | 194 | | | | | | | | |
| EER | | | | 3.12 | 3.16 | 3.20 | 3.15 | 3.12 | 3.14 | 3.16 | 3.12 | 3.15 | 3.18 | 3.20 | | | | | | | | |
| ESEER | | | | 3.56 | 3.60 | 3.62 | 3.85 | 3.67 | 3.58 | 3.59 | 3.84 | 4.00 | 4.01 | 3.88 | | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,355x2,234x3,138 | | | 2,355x2,234x4,040 | | | 2,223x2,234x4,040 | | | 2,223x2,234x4,940 | | | | | | | | | |
| Weight | Unit | kg | kg | 2,905 | | | 3,285 | | | 3,235 | | | 3,510 | | | | | | | | | |
| | Operation weight | kg | kg | 3,000 | | | 3,400 | | | 3,780 | | | 4,940 | | | | | | | | | |
| Water heat exchanger | Type | Single pass shell & tube | | | | | | | | | | | | | | | | | | | | |
| | Water volume | l | l | 95 | | | 115 | | | 165 | | | 160 | | | | | | | | | |
| | Nominal water flow | Cooling | l/s | 11.80 | | | 13.10 | | | 14.40 | | | 15.60 | | | | | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 48.1 | | | 44.9 | | | 48.8 | | | 46.1 | | | | | | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 22,300 | 30,600 | 29,700 | | | 44,000 | | | 43,000 | | | | | | | | | | |
| | Speed | rpm | | | 900 | | | | | | 43,695 | | | 54,616 | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 96.8 | 97.2 | | | 98.7 | | | 99.2 | | | 920 | | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | | | | 77.5 | | | | | | 79.0 | | | | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | | | | -15~15 | | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | | | | -18~48 | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | 2 | | | | | | | | | | | | | | | | | | | |
| Refrigerant circuit | Charge | kg | kg | 58 | 66 | 76 | | | 73 | | | 76 | | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | | | | | 114.3 | | | | | | 168.3 | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | 3 / 50 / 400 | | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > High efficiency
- > Reduced sound level configuration: condenser fan rotating at 680/715 rpm, rubber antivibration under compressor, compressor sound enclosure
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communication
- > Large operation range (ambient temperature down to -18°C)

STANDARD AVAILABLE

- > Wye delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fans circuit breakers
- > Main switch interlock

OPTIONS (FACTORY MOUNTED)

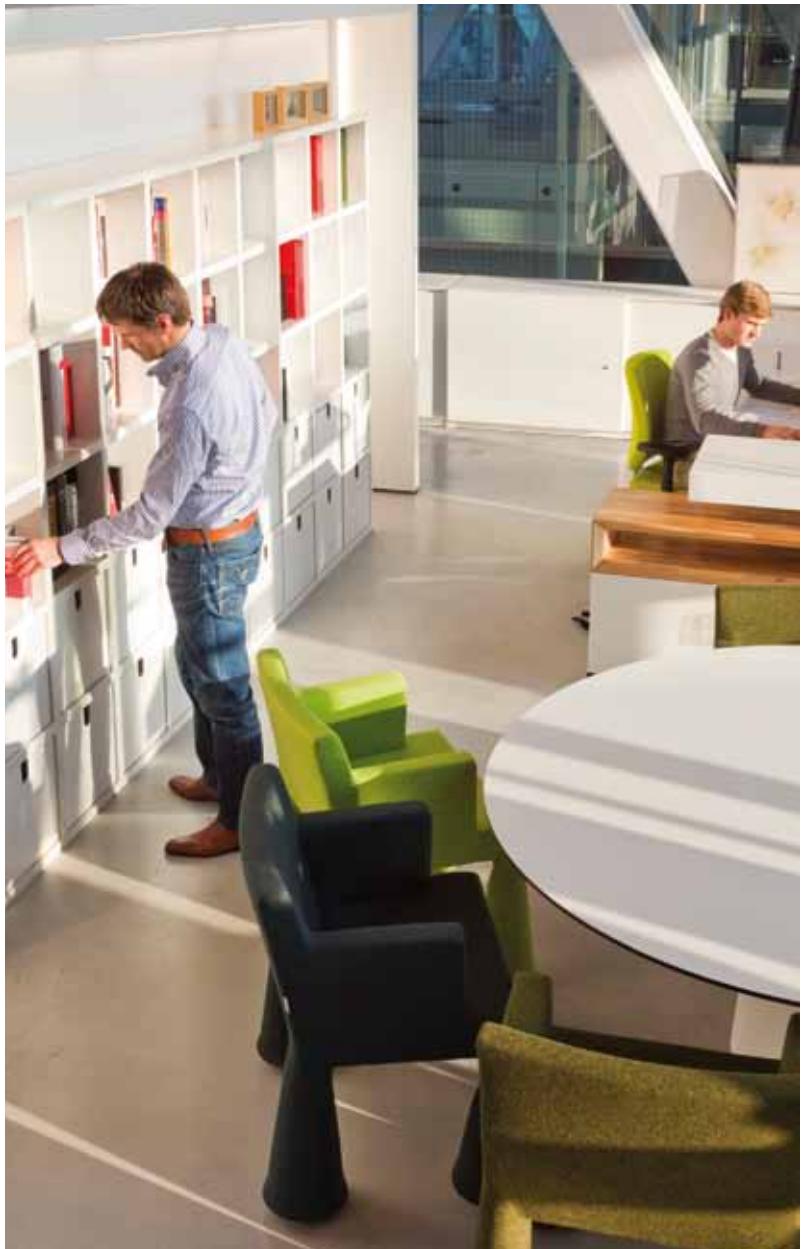
- > Total heat recovery (1 circuit)
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > 20 mm evaporator insulation
- > Fan silent mode
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (10 different models)
- > Two centrifugal pumps (10 different models)
- > External tank without cabinet (500 l)
- > External tank without cabinet (1000 l)
- > External tank (500 l) with cabinet
- > External tank (1000 l) with cabinet
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fan speed regulation
- > Axial fans (250 PA lift)
- > Evaporator right water connections
- > Inverter compressor starter
- > Water pressure differential switch on evaporator
- > Transport kit



MicroTech III



R-134a





EWAD270-390D-XR

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity Class | | | 240 | 270 | 300 | 320 | 350 | 370 | 390 | 460 | 510 | 560 | 600 | | | | | | | | | |
|----------------------|-------------------------------|---|----------------|-------------------|-------------------|-------|--------|-------|-------|-------------------|--------|--------|-------------------|-------|------|--|--|--|--|--|--|--|
| Cooling capacity | Nom. | kW | 243 | 272 | 296 | 322 | 345 | 370 | 394 | 455 | 512 | 561 | 600 | | | | | | | | | |
| Capacity control | Method | | | | Stepless | | | | | | | | | | | | | | | | | |
| | Minimum capacity | % | | | | 12.5 | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 80.6 | 87.0 | 95.1 | 106 | 115 | 119 | 127 | 152 | 167 | 183 | 198 | | | | | | | | |
| EER | | | | 3.01 | 3.12 | 3.11 | 3.05 | 2.99 | 3.12 | 3.10 | 2.99 | 3.07 | | 3.03 | | | | | | | | |
| ESEER | | | | 3.63 | 3.70 | 3.69 | 3.82 | 3.71 | 4.01 | 3.82 | 3.89 | 4.11 | | 3.93 | | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,355x2,234x3,138 | 2,355x2,234x4,040 | | | | | 2,223x2,234x4,040 | | | 2,223x2,234x4,940 | | | | | | | | | |
| 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 | | | | | | | | | | | | 255 | | | | | | | | |
| | Water volume | l | 95 | 115 | | | 165 | 160 | | | 270 | | | 255 | | | | | | | | |
| | Nominal water flow | Cooling | l/s | 11.60 | 13.00 | 14.10 | 15.40 | 16.40 | 17.70 | 18.80 | 21.70 | 24.40 | 26.80 | 28.60 | | | | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 46.7 | 44.0 | 47.5 | 44.7 | 49.2 | 56.2 | 55.6 | 44.8 | 60.4 | 53.7 | 36.1 | | | | | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | | | | 12,500 | | | | 33,488 | 41,861 | 41,864 | | | | | | | | | |
| | Speed | | | | rpm | | | | 680 | | | | 715 | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 91.8 | 92.2 | | | 93.2 | | | 93.7 | | | | | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | | | | 72.5 | | | | 73.5 | | | | | | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | -15~15 | | | | | | | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. | °CDB | -18~48 | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | 2 | | | | | | | | | | | | | | | | | | | |
| Refrigerant circuit | Charge | kg | 60 | 68 | 80 | | | | | | 104 | | | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | | | | | 114.3 | | | | 168.3 | | | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz/V | 3 / 50 / 400 | | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > High ambient
- > Standard sound level configuration:
condenser fan rotating at 900/920 rpm,
rubber antivibration under compressor
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > MicroTech III controller for superior control logic
and an easy interface with LonWorks, Bacnet,
Ethernet TCP/IP or Modbus communications
- > Large operation range (ambient
temperature down to -18°C)



MicroTech III

STANDARD AVAILABLE

- > Wye delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and
alarm from external device
- > Fans circuit breakers
- > Main switch interlock
- > 20mm evaporator insulation
- > Water pressure differential switch on evaporator



R-134a

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery (1 circuit)
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > Fan silent mode
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (10 different models)
- > Two centrifugal pumps (10 different models)
- > External tank without cabinet (500 l)
- > External tank without cabinet (1000 l)
- > External tank (500 l) with cabinet
- > External tank (1000 l) with cabinet
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fan speed regulation
- > Axial fans (250 PA lift)
- > Evaporator right water connections
- > Low pressure side manometers
- > Inverter compressor starter
- > Transport kit





EWAD340-450D-HS

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity Class | | | | 200 | 210 | 230 | 260 | 270 | 290 | 310 | 340 | 380 | 420 | 450 | 480 | 510 | 550 | 590 | |
|----------------------|-------------------------------|--------------------|----------------|-------------------|---|--------|-------------------|--------------------------|-------|-------------------|--------|--------|-------------------|--------|-------|-------|-------|-------|------|
| Cooling capacity | Nom. | kW | | 195 | 208 | 234 | 256 | 274 | 289 | 306 | 336 | 381 | 415 | 448 | 478 | 514 | 547 | 587 | |
| Capacity control | Method | | | | | | Stepless | | | | | | | | | | | | |
| | Minimum capacity | % | | | | | 12.5 | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 77.2 | 75.5 | 83.0 | 91.0 | 97.7 | 104 | 112 | 120 | 127 | 141 | 150 | 162 | 175 | 182 | 191 | |
| EER | | | | 2.52 | 2.76 | | 2.81 | | 2.80 | 2.78 | 2.73 | 2.80 | 3.00 | 2.94 | 2.98 | 2.95 | 2.94 | 3.00 | 3.07 |
| ESEER | | | | 3.11 | 3.26 | | 3.34 | 3.21 | 3.30 | 3.28 | 3.27 | 3.25 | 3.57 | 3.61 | 3.68 | 3.66 | 3.71 | 3.79 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,223x2,234x2,239 | | | 2,223x2,234x3,339 | | | 2,223x2,234x4,040 | | | 2,223x2,234x4,940 | | | | | | |
| Weight | Unit | kg | 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 to plate | | | | | | Single pass shell & tube | | | | | | | | | | | |
| | Water volume | I | | 25 | 30 | | 95 | | 90 | | 115 | | 170 | | 165 | | 160 | | |
| | Nominal water flow | Cooling | I/s | 9.30 | 9.90 | 11.10 | 12.20 | 13.10 | 13.80 | 14.60 | 16.00 | 18.20 | 19.80 | 21.40 | 22.80 | 24.50 | 26.10 | 28.00 | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 31.5 | 23.7 | 46.1 | 52.1 | 53.7 | 59.3 | 64.4 | 58.3 | 69.9 | 45.8 | 52.5 | 58.0 | 50.9 | 55.7 | 52.6 |
| Air heat exchanger | Type | | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | I/s | 23,900 | 22,800 | 35,900 | 35,000 | 34,100 | | 47,900 | 43,694 | 42,300 | | 54,616 | | | | | |
| Fan motor | Speed | Cooling | Nom. | rpm | | | | | 900 | | | | | | 920 | | | | |
| Sound power level | Cooling | Nom. | dBA | | 95.7 | | | | 96.3 | | 96.7 | 98.7 | 96.7 | | 97.7 | | 99.2 | 99.7 | |
| Sound pressure level | Cooling | Nom. | dBA | | | | | 77.0 | | | 79.0 | 77.0 | | 77.5 | | 79.0 | 79.5 | | |
| Compressor | Type | | | | Semi-hermetic single screw compressor | | | | | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | | | | -15~15 | | | | | | | | | | | |
| | Air side | Cooling | Min.-Max. | °CDB | | | | -18~48 | | | | | | | | | | | |
| Refrigerant | Type | | | | R-134a | | | | | | | | | | | | | | |
| | Circuits | Quantity | | | | | | 2 | | | | | | | | | | | |
| Refrigerant circuit | Charge | kg | | 36 | 42 | 44 | 55 | 56 | 58 | 66 | 70 | 90 | 95 | | 100 | | | | |
| Piping connections | Evaporator water inlet/outlet | | | | 88.9 | | | | 114.3 | | | | | | 139.7 | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | | | | | 3 / 50 / 400 | | | | | | | | | | | | |

STRENGTHS

- > ESEER up to 4.70
- > All models are PED pressure vessel approved
- > Inverter stepless single-screw compressor
- > Optimised for use with R-134a
- > Cooling range: 329-515kW
- > 2 truly independent refrigerant circuits
- > DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
- > The ability to vary the output power in direct relation to the cooling requirements of the system allows to achieve building comfort conditions much faster at start-up
- > Standard electronic expansion valve
- > Partial and total heat recovery option available
- > Power factor over 0.95
- > Standard operation range down to -10°C

STANDARD AVAILABLE

- > Double setpoint
- > Fans circuit breakers with thermal overload relays
- > Phase monitor
- > Inverter compressor starter
- > Evaporator victaulic kit
- > Fan silent mode
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Fan speed regulation
- > Ambient outside temperature sensor and setpoint reset

OPTIONS

- > Total heat recovery (1 circuit)
- > Partial heat recovery
- > Brine version
- > Under/overvoltage control
- > Energy meter
- > Current limit / display
- > 20mm evaporator insulation
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti-vibration mount
- > Spring anti-vibration mount
- > One centrifugal pump (low or high lifting)
- > Two centrifugal pumps (low or high lifting)
- > External tank with or without cabinet (500 or 1000l)
- > Set point reset, demand limit and alarm
- > Double pressure relief valve with diverter
- > Low pressure side manometers
- > Evaporator water right connections
- > Transport kit



PCO²



R-134a

INVERTER





EWAD330,360BZ

ACCESSORIES

- > Address card RS485 (EKAC200J)
- > Ethernet card BACnet (EKACBAC)
- > Serial card LON (EKACLONP)
- > Converter RS485 to RS232 (EKCON)
- > Converter RS485 to USB (EKCONUSB)
- > Fixed modem (EKMODEM)
- > GSM modem (EKGSMOD)
- > Remote user interface (EKRUPCJ)
- > Serial sequencing panel (EKDSSP)
- > Digital sequencing panel (EKDDSP)
- > PlantWatchPRO monitoring system (EKPWPRO)
- > PlantWatchPRO monitoring system (modem & webserver included) (EKPWPROM)
- > Serial card RS232 Modem Interface (single unit only) (EKACRS232)
- > Web server card (EKACWEB)
- > Serial card BACnet MSTP (EKACBACMSTP)
- > PlantWatchPro I/O extension module for hardwiring and retrofit (EKPWPROEXT)
- > Gateway web (Ethernet LAN SNMP) (EKGWWEB)
- > Gateway for modem (EKGWMODEM)

Cooling only

| | | | EWAD-BZSS | | | | | | | EWAD-BZSL | | | | | | | | |
|----------------------|------------------------------------|---|----------------|-------------------|-------------------|--------|-------------------|--------|---|-------------------|-------------------|---------|-------------------|--------|-------|-------|-------|----|
| Capacity class | | | 330 | 360 | 400 | 420 | 460 | 490 | 520 | 330 | 360 | 400 | 420 | 460 | 490 | 520 | | |
| Cooling capacity | Nom. | kW | 329 | 358 | 395 | 423 | 459 | 488 | 515 | 329 | 358 | 395 | 423 | 459 | 488 | 515 | | |
| Capacity control | Method | | Stepless | | | | | | | Stepless | | | | | | | | |
| | Minimum capacity | | 13.5 | | | | | | | 13.5 | | | | | | | | |
| Power input | Cooling | Nom. | kW | 120.0 | 136 | 147 | 159 | 168 | 181 | 193 | 120.0 | 136 | 147 | 159 | 168 | 181 | 193 | |
| EER | | | | 2.74 | 2.63 | 2.69 | 2.66 | 2.73 | 2.70 | 2.67 | 2.74 | 2.63 | 2.69 | 2.66 | 2.73 | 2.70 | 2.67 | |
| ESEER | | | | 4.59 | 4.60 | 4.55 | 4.59 | 4.57 | 4.70 | 4.60 | 4.59 | 4.60 | 4.55 | 4.59 | 4.57 | 4.70 | 4.60 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,355x2,234x4,381 | 2,355x2,234x5,281 | | 2,355x2,234x6,181 | | | 2,355x2,234x4,381 | 2,355x2,234x5,281 | | 2,355x2,234x6,181 | | | | | |
| Weight | Unit | | kg | 4,190 | | 4,590 | | 4,990 | | 4,340 | | 4,740 | | 5,140 | | | | |
| | Operation weight | | kg | 4,440 | | 4,840 | | 5,240 | | 4,590 | | 4,990 | | 5,390 | | | | |
| Water heat exchanger | Type | Single pass shell & tube | | | | | | | Single pass shell & tube | | | | | | | | | |
| | Water volume | l | 271 | 264 | 256 | 248 | | | 271 | 264 | 256 | 248 | | | | | | |
| | Nominal water flow | Cooling | l/s | 15.72 | 17.10 | 18.87 | 20.21 | 21.93 | 23.32 | 24.61 | 15.72 | 17.10 | 18.87 | 20.21 | 21.93 | 23.32 | 24.61 | |
| Air heat exchanger | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 60 | 61 | 72 | 67 | 78 | 69 | 76 | 60 | 61 | 72 | 67 | 78 | 69 | 76 |
| | Type | High efficiency fin and tube type with integral subcooler | | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 32,667 | | 40,833 | | 49,000 | | 32,667 | | 40,833 | | 49,000 | | | | |
| | Speed | | rpm | | 700 | | | | | | | 700 | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 102.8 | | 103.2 | | 103.6 | | 96.9 | | 97.3 | | 98.2 | | | | |
| Sound pressure level | Cooling | Nom. | dBA | | 83.0 | | | | | | | 77.0 | | 77.5 | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | Semi-hermetic single screw compressor | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | -9.5~15 | | | | | | | -9.5~15 | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | -12~45 | | | | | | | -12~45 | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | R-134a | | | | | | | | | |
| | Charge | kg | 73 | 99 | 105 | 114 | 118 | 121 | 73 | 99 | 105 | 114 | 118 | 121 | | 2 | | |
| | Circuits | Quantity | | | 2 | | | | | | | 2 | | | | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | 168.3mm | | | | | | | 168.3mm | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 3~/50/400 | | | | | | | 3~/50/400 | | | | | | | |

EWAD-BZXS/XL/XR

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

STRENGTHS

- > High seasonal efficiency (ESEER up to 5.01)
- > All models are PED pressure vessel approved
- > Inverter stepless single-screw compressor
- > Optimised for use with R-134a
- > Cooling range: 329-515kW
- > 2 truly independent refrigerant circuits
- > DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
- > The ability to vary the output power in direct relation to the cooling requirements of the system allows to achieve building comfort conditions much faster at start-up
- > Standard electronic expansion valve
- > Partial and total heat recovery option available
- > Power factor over 0.95
- > Standard operation range down to -10°C

STANDARD AVAILABLE

- > Double setpoint
- > Fans circuit breakers
- > Phase monitor
- > Inverter compressor starter
- > Evaporator victaulic kit
- > Fan silent mode
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Fan speed regulation
- > Ambient outside temperature sensor and setpoint reset

OPTIONS

- > Total heat recovery (1 circuit)
- > Partial heat recovery
- > Brine version
- > Under/overvoltage control
- > Energy meter
- > Current limit - display
- > 20mm evaporator insulation
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti-vibration mount
- > Spring anti-vibration mount
- > One centrifugal pump (low or high lifting)
- > Two centrifugal pumps (low or high lifting)
- > External tank with or without cabinet (500 or 1000l)
- > Set point reset, demand limit and alarm
- > Double pressure relief valve with diverter
- > Low pressure side manometers
- > Evaporator right water connections
- > Ambient outside temperature sensor and setpoint reset
- > Transport kit



PCO²



R-134a

INVERTER





EWAD330,360BZ

ACCESSORIES

- › Address card RS485 (EKAC200J)
- › Ethernet card BACnet (EKACBAC)
- › Serial card LON (EKACLONP)
- › Converter RS485 to RS232 (EKCON)
- › Converter RS485 to USB (EKCONUSB)
- › Fixed modem (EKMODEM)
- › GSM modem (EKGSMOD)
- › Remote user interface (EKRUPCJ)
- › Serial sequencing panel (EKDSSP)
- › Digital sequencing panel (EKDDSP)

- › PlantWatchPRO monitoring system (EKPWPRO)
- › PlantWatchPRO monitoring system (modem & webserver included) (EKPWPROM)
- › Serial card RS232 Modem Interface (single unit only) (EKACRS232)
- › Web server card (EKACWEB)
- › Serial card BACnet MSTP (EKACBACMSTP)
- › PlantWatchPro I/O extension module for hardwiring and retrofit (EKPWPROEXT)
- › Gateway web (Ethernet LAN SNMP) (EKGWWEB)
- › Gateway for modem (EKGWMODEM)

Cooling only

| Capacity class | | | EWAD-BZXS | | | | | | EWAD-BZXL | | | | | | EWAD-BZXR | | | | | | | | | | |
|-----------------------------|------------------------------------|--------------------|----------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|
| Cooling capacity | Nom. | kW | 330 | 360 | 400 | 420 | 460 | 490 | 520 | 330 | 360 | 400 | 420 | 460 | 490 | 520 | 330 | 360 | 400 | 420 | 460 | 490 | 520 | | |
| Capacity control | Method | | Stepless | | | | | | Stepless | | | | | | Stepless | | | | | | | | | | |
| | Minimum capacity | % | 13 | | | | | | 13 | | | | | | 13 | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 118.0 | 135 | 145 | 157 | 165 | 178 | 190 | 118.0 | 135 | 145 | 157 | 165 | 178 | 190 | 118.0 | 135 | 145 | 157 | 165 | 178 | 190 | |
| EER | | | | 2.79 | 2.65 | 2.72 | 2.69 | 2.78 | 2.74 | 2.71 | 2.79 | 2.65 | 2.72 | 2.69 | 2.78 | 2.74 | 2.71 | 2.79 | 2.65 | 2.72 | 2.69 | 2.78 | 2.74 | 2.71 | |
| ESEER | | | | 4.79 | 4.82 | 4.78 | 4.84 | 4.81 | 5.01 | 4.84 | 4.79 | 4.82 | 4.78 | 4.84 | 4.81 | 5.01 | 4.84 | 4.79 | 4.82 | 4.78 | 4.84 | 4.81 | 5.01 | 4.84 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,355x2,234x4,381 | 2,355x2,234x5,281 | 2,355x2,234x6,181 | 2,355x2,234x4,381 | 2,355x2,234x5,281 | 2,355x2,234x6,181 | 2,355x2,234x4,381 | 2,355x2,234x5,281 | 2,355x2,234x6,181 | 2,355x2,234x4,381 | 2,355x2,234x5,281 | 2,355x2,234x6,181 | 2,355x2,234x4,381 | 2,355x2,234x5,281 | 2,355x2,234x6,181 | 2,355x2,234x4,381 | 2,355x2,234x5,281 | 2,355x2,234x6,181 | 2,355x2,234x4,381 | 2,355x2,234x5,281 | 2,355x2,234x6,181 | |
| Weight | Unit | kg | | 4,190 | 4,590 | 4,990 | | | | 4,340 | 4,740 | 5,140 | | | | 4,390 | 4,790 | 5,190 | | | | | | | |
| | Operation weight | kg | | 4,440 | 4,840 | 5,240 | | | | 4,590 | 4,990 | 5,390 | | | | 4,640 | 5,040 | 5,440 | | | | | | | |
| Water heat exchanger | Type | | | Single pass shell & tube | | | | | | Single pass shell & tube | | | | | | Single pass shell & tube | | | | | | | | | |
| | Water volume | l | | 271 | 264 | 256 | 248 | | | 271 | 264 | 256 | 248 | | | 271 | 264 | 256 | 248 | | | | | | |
| Nominal water flow | Cooling | l/s | | 15.72 | 17.10 | 18.87 | 20.21 | 21.93 | 23.32 | 24.61 | 15.72 | 17.10 | 18.87 | 20.21 | 21.93 | 23.32 | 24.61 | 15.72 | 17.10 | 18.87 | 20.21 | 21.93 | 23.32 | 24.61 | |
| Nominal water pressure drop | Cooling | Heat exchanger | kPa | 60 | 61 | 72 | 67 | 78 | 69 | 76 | 60 | 61 | 72 | 67 | 78 | 69 | 76 | 60 | 61 | 72 | 67 | 78 | 69 | 76 | |
| Air heat exchanger | Type | | | High efficiency fin and tube type with integral subcooler | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 32,667 | 40,833 | 49,000 | | | | 32,667 | 40,833 | 49,000 | | | | 32,667 | 40,833 | 49,000 | | | | | | | |
| | Speed | | rpm | | | 700 | | | | | | 700 | | | | | | | | | 700 | | | | |
| Sound power level | Cooling | Nom. | dBA | 102.8 | 103.2 | 103.6 | | | | 96.9 | 97.3 | 98.2 | | | | 92.9 | 93.3 | 94.2 | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | | 83.0 | 83.5 | | | | 77.0 | 77.5 | | | | | 73.0 | 73.5 | | | | | | | | |
| Compressor | Type | | | Semi-hermetic single screw compressor | | | | | | Semi-hermetic single screw compressor | | | | | | Semi-hermetic single screw compressor | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | -9.5~15 | | | | | | -9.5~15 | | | | | | -9.5~15 | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | -12~45 | | | | | | -12~45 | | | | | | -12~45 | | | | | | | | |
| Refrigerant | Type | | | R-134a | | | | | | R-134a | | | | | | R-134a | | | | | | | | | |
| | Charge | | kg | 73 | 99 | 105 | 114 | 118 | 121 | 73 | 99 | 105 | 114 | 118 | 121 | 73 | 99 | 105 | 114 | 118 | 121 | 73 | 99 | 105 | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | 168.3 | | | | | | 168.3 | | | | | | 168.3 | | | | | | 2 | | | |
| Power supply | Phase/Frequency/Voltage | | | 3~/50/400 | | | | | | 3~/50/400 | | | | | | 3~/50/400 | | | | | | 3~/50/400 | | | |

STRENGTHS

- > Optimised for use with R-134a
- > Cooling range: 254-583kW
- > Heating range: 270-615kW
- > EER range up to 2.83
- > Standard electronic expansion valve
- > DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
- > Low starting current
- > No gas boiler required
- > Optimised defrost cycles
- > Optimum ESEER values
- > Partial and total heat recovery option available
- > PID microprocessor control
- > Power factor up to 0.95
- > 2-3 truly independent refrigerant circuits
- > Standard operation range down to -12°C



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STANDARD AVAILABLE

- > Double set point
- > Fans circuit breakers
- > Ambient outside temperature sensor and setpoint reset
- > Phase monitor
- > Inverter compressor starter
- > Evaporator vacuum kit
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Low pressure side manometers
- > General fault contactor
- > Hour run meter

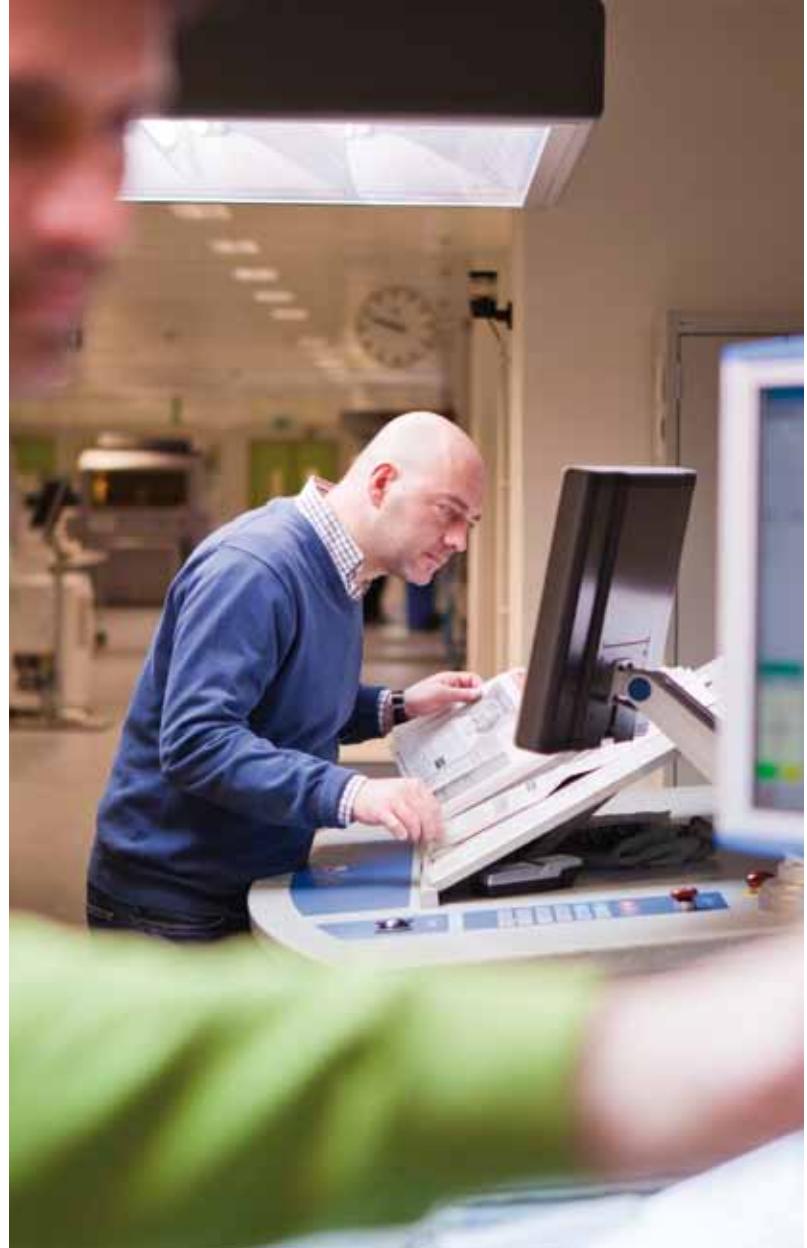


R-134a

INVERTER

OPTIONS

- > Partial heat recovery
- > Brine version
- > Under/ overvoltage control
- > Current limit - display
- > 20 mm evaporator insulation
- > Fan speed control device (phase cut on fan)
- > Condenser coil guards
- > Cu-cu condensing coils
- > Cu-Cu-Sn condensing coils
- > Alucoat fins coils
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pumps (low lift)
- > Two centrifugal pumps (high lift)
- > Double pressure relief valve with diverter
- > External tank with or without cabinet (500 or 1000 l)
- > Fans speed regulation (+ fan silent mode)
- > Nordic kit
- > Transport kit
- > Setpoint reset, demand limit and alarm from external device
- > Energy meter
- > Evaporator right water connections





EWYD250-290BZ

ACCESSORIES

- › Address card RS485 (EKAC200J)
- › Ethernet card BACnet (EKACBAC)
- › Serial card LON (EKAACLNP)
- › Converter RS485 to RS232 (EKCON)
- › Converter RS485 to USB (EKCONUSB)
- › Fixed modem (EKMODEM)
- › GSM modem (EKGSMOD)
- › Remote user interface (EKRUPCJ)
- › Serial sequencing panel (EKDSSP)
- › Digital sequencing panel (EKDDSP)
- › PlantWatchPRO monitoring system (EKPWPRO)
- › PlantWatchPRO monitoring system (modem & webserver included) (EKPWPROM)
- › Serial card RS232 Modem Interface (single unit only) (EKACRS232)
- › Web server card (EKACWEB)
- › Serial card BACnet MSTP (EKACBACMSTP)
- › PlantWatchPro I/O extension module for hardwiring and retrofit (EKPWPROEXT)
- › Gateway web (Ethernet LAN SNMP) (EKGWWEB)
- › Gateway for modem (EKGWMODEM)

Heating & Cooling

| Capacity class | | | EWYD-BZSS | | | | | | | | | | | | |
|----------------------|------------------------------------|--------------------|--------------------|-------------------|--------|-------|-------------------|-------|--------|-------------------|-------|--------|-------------------|-------|---------------------------------------|
| | | | 250 | 270 | 290 | 320 | 340 | 370 | 380 | 410 | 440 | 460 | 510 | 520 | 580 |
| Cooling capacity | Nom. | kW | 254 | 273 | 292 | 324 | 339 | 365 | 382 | 413 | 436 | 457 | 505 | 522 | 583 |
| Heating capacity | Nom. | kW | 270 | 297 | 324 | 333 | 349 | 379 | 410 | 443 | 463 | 475 | 530 | 558 | 615 |
| Capacity control | Method | | | | | | | | | | | | | | |
| | Minimum capacity | % | | | | | | | | | | | | | 9 |
| Power input | Cooling | Nom. | kW | 90.3 | 100 | 109 | 116 | 124 | 134 | 142 | 152 | 163 | 161 | 178 | 186 |
| | Heating | Nom. | kW | 90.4 | 99 | 107 | 117 | 124 | 132 | 141 | 155 | 165 | 164 | 176 | 205 |
| EER | | | | 2.81 | 2.74 | 2.69 | 2.79 | 2.74 | 2.73 | 2.68 | 2.72 | 2.68 | 2.83 | 2.81 | 2.71 |
| ESEER | | | | 4.05 | 4.04 | 4.01 | 4.07 | 4.01 | 4.02 | 3.94 | 4.03 | 4.01 | 4.31 | 4.13 | 4.05 |
| COP | | | | 2.98 | 2.99 | 3.03 | 2.84 | 2.80 | 2.87 | 2.90 | 2.85 | 2.81 | 2.90 | 3.02 | 3.04 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,335x2,254x3,547 | | | 2,335x2,254x4,381 | | | 2,335x2,254x5,281 | | | 2,335x2,254x6,583 | | |
| 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 volume | l | | | | | 138 | | 133 | | 128 | | 240 | | 229 |
| | Nominal water flow | Cooling | l/s | 12.12 | 13.03 | 13.94 | 15.46 | 16.21 | 17.42 | 18.25 | 19.72 | 20.81 | 21.83 | 24.11 | 24.92 |
| | Heating | l/s | | 12.89 | 14.18 | 15.49 | 15.89 | 16.66 | 18.11 | 19.57 | 21.15 | 22.14 | 22.68 | 25.33 | 26.65 |
| | Nominal water pressure drop | Cooling | Heat exchanger kPa | 37 | 42 | 48 | 53 | 58 | 53 | 57 | 46 | 51 | 61 | 50 | 53 |
| Air heat exchanger | Heating | Heat exchanger kPa | | 42 | 49 | 58 | 55 | 60 | 57 | 65 | 52 | 57 | 66 | 55 | 60 |
| | Type | | | | | | | | | | | | | | 71 |
| Fan | Air flow rate | Nom. | l/s | | 31,728 | | | | 42,304 | | | 52,880 | | | 63,456 |
| | Speed | | rpm | | | | 920 | | | | | | | | 920 |
| | Sound power level | Cooling | Nom. | dBA | 100.5 | | | | 101.2 | | | 101.8 | | | 103.6 |
| Sound pressure level | Heating | Nom. | dBA | | 100.5 | | | | 101.2 | | | 101.8 | | | 103.6 |
| | Cooling | Nom. | dBA | | 82.1 | | | | 82.3 | | | 82.5 | | | 83.7 |
| Compressor | Heating | Nom. | dBA | | 82.1 | | | | 82.3 | | | 82.5 | | | 83.7 |
| | Type | | | | | | | | | | | | | | Semi-hermetic single screw compressor |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | | | | | | -8~15 | | | |
| | Heating | Min.-Max. °CDB | | | | | | | | | | 35~55 | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | | | | | | -12~45 | | | |
| | Heating | Min.-Max. °CDB | | | | | | | | | | -12~20 | | | |
| Refrigerant | Type | | | | | | | | | | | R-134a | | | |
| | Charge | | kg | 88 | 94 | 100 | 118 | 121.0 | 124 | 148 | 177 | 183 | | | 186 |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | | | 2 | | | | | | | | 3 |
| | | | | | | | 139.7mm | | | | | | | | 219.1mm |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | | | | | | | | | |

STRENGTHS

- > Optimised for use with R-134a
- > Cooling range: 248-567kW
- > Heating range: 270-615kW
- > EER range up to 2.87
- > Standard electronic expansion valve
- > DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
- > Low operating sound level
- > Low starting current
- > No gas boiler required
- > Optimised defrost cycles
- > Optimum ESEER values
- > Partial and total heat recovery option available
- > PID microprocessor control
- > Power factor up to 0.95
- > 2-3 truly independent refrigerant circuits
- > Standard operation range down to -12°C

STANDARD AVAILABLE

- > Double set point
- > Phase monitor
- > Inverter compressor starter
- > Evaporator victaulic kit
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > General fault contactor
- > Hour run meter
- > Ambient outside temperature sensor and setpoint reset
- > Fans circuit breakers
- > Fans speed regulation (+fan silent mode)

OPTIONS

- > Partial heat recovery
- > Brine version
- > Under/ overvoltage control
- > Current limit - display
- > 20 mm evaporator insulation
- > Condenser coil guards
- > Cu-cu condensing coils
- > Cu-Cu-Sn condensing coils
- > Alucoat fins coil
- > Evaporator flow switch
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (low lift)
- > One centrifugal pump (high lift)
- > Two centrifugal pumps (low lift)
- > Two centrifugal pumps (high lift)
- > Double pressure relief valve with diverter
- > External tank with or without cabinet (500 or 1000 l)
- > Evaporator right water connections
- > Energy meter
- > Setpoint reset, demand limit and alarm from external device
- > Nordic kit
- > Transport kit



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R-134a

INVERTER





EWYD250-290BZ

ACCESSORIES

- › Address card RS485 (EKAC200J)
- › Ethernet card BACnet (EKACBAC)
- › Serial card LON (EKAACLONP)
- › Converter RS485 to RS232 (EKCON)
- › Converter RS485 to USB (EKCONUSB)
- › Fixed modem (EKMODEM)
- › GSM modem (EKGSMOD)
- › Remote user interface (EKRUPCJ)
- › Serial sequencing panel (EKDSSP)
- › Digital sequencing panel (EKDDSP)
- › PlantWatchPRO monitoring system (EKPWPRO)
- › PlantWatchPRO monitoring system (modem & webserver included) (EKPWPROM)
- › Serial card RS232 Modem Interface (single unit only) (EKACRS232)
- › Web server card (EKACWEB)
- › Serial card BACnet MSTP (EKACBACMSTP)
- › PlantWatchPro I/O extension module for hardwiring and retrofit (EKPWPROEXT)
- › Gateway web (Ethernet LAN SNMP) (EKGWEB)
- › Gateway for modem (EKGWMODEM)

Heating & Cooling

| | | | EWYD-BZSL | | | | | | | | | | | | | | | | | | | | |
|----------------------|------------------------------------|---------------------------------------|---|--------------------------|--------|-------|-------|-------------------|-------|-------|--------|-------------------|-------|----------|-------------------|-------|-----|--|--|--|--|--|--|
| Capacity class | | | 250 | 270 | 290 | 320 | 330 | 360 | 370 | 400 | 430 | 450 | 490 | 510 | 570 | | | | | | | | |
| Cooling capacity | Nom. | kW | 248 | 266 | 291 | 316 | 331 | 355 | 372 | 403 | 425 | 448 | 493 | 510 | 567 | | | | | | | | |
| Heating capacity | Nom. | kW | 270 | 297 | 324 | 333 | 349 | 379 | 410 | 443 | 463 | 475 | 530 | 558 | 615 | | | | | | | | |
| Capacity control | Method | | | | | | | | | | | | | Stepless | | | | | | | | | |
| | Minimum capacity | | % | 13 | | | | | | | | 9 | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 88.5 | 98 | 109 | 113 | 122 | 132 | 142 | 149 | 161 | 156 | 174 | 183 | 214 | | | | | | | |
| | Heating | Nom. | kW | 90.4 | 99 | 107 | 117 | 124 | 132 | 141 | 155 | 165 | 164 | 176 | 184 | 205 | | | | | | | |
| EER | 2.80 | | | | | | | | | | | | | 2.64 | | | | | | | | | |
| ESEER | 4.18 | | | | | | | | | | | | | 2.87 | | | | | | | | | |
| COP | 2.98 | | | | | | | | | | | | | 2.83 | | | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,335x2,254x3,547 | | | | 2,335x2,254x4,381 | | | | 2,335x2,254x5,281 | | | 2,335x2,254x6,583 | | | | | | | | |
| Weight | Unit | kg | 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 | | | | | | | | | | | 218 | | | | | | | | |
| | Water volume | | l | 138 | | | | 133 | | | | 128 | | | 240 | 229 | 218 | | | | | | |
| | Nominal water flow | Cooling | l/s | 11.83 | 12.70 | 13.89 | 15.12 | 15.83 | 16.98 | 17.77 | 19.28 | 20.30 | 21.39 | 23.56 | 24.34 | 27.11 | | | | | | | |
| | Nominal water pressure drop | Heating | l/s | 12.89 | 14.18 | 15.49 | 15.89 | 16.66 | 18.11 | 19.57 | 21.15 | 22.14 | 22.68 | 25.33 | 26.65 | 29.39 | | | | | | | |
| Air heat exchanger | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 36 | 40 | 48 | 51 | 55 | 50 | 55 | 44 | 48 | 59 | 48 | 51 | 62 | | | | | | |
| | Heating | Heat exchanger | kPa | 42 | 49 | 58 | 55 | 60 | 57 | 65 | 52 | 57 | 66 | 55 | 60 | 71 | | | | | | | |
| Type | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | 48,864 | | | | | | | | |
| Fan | Air flow rate | Cooling | Nom. | l/s | 24,432 | | | 32,576 | | | 40,720 | | | 48,864 | | | | | | | | | |
| | | Heating | Nom. | l/s | 31,728 | | | 42,304 | | | 52,880 | | | 63,456 | | | | | | | | | |
| Fan motor | Speed | Cooling | Nom. | rpm | 715 | | | | | | | | | | | 920 | | | | | | | |
| | | Heating | Nom. | rpm | 920 | | | | | | | | | | | 920 | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | | 94.0 | | | 94.7 | | | 95.3 | | | 97.0 | | | | | | | | | |
| | Heating | Nom. | dBA | | 94.9 | | | 96.1 | | | 96.7 | | | 98.4 | | | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | | 75.6 | | | 75.8 | | | 76.0 | | | 77.2 | | | | | | | | | |
| | Heating | Nom. | dBA | | 76.5 | | | 77.2 | | | 77.4 | | | 78.6 | | | | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | 97.0 | | | | | | | | |
| | Water side | Cooling | Min.-Max. | °CDB | -8~15 | | | | | | | | | | | 98.4 | | | | | | | |
| | | Heating | Min.-Max. | °CDB | 35~55 | | | | | | | | | | | 97.0 | | | | | | | |
| | Air side | Cooling | Min.-Max. | °CDB | -12~45 | | | | | | | | | | | 96.7 | | | | | | | |
| Refrigerant | | Heating | Min.-Max. | °CDB | -12~20 | | | | | | | | | | | 95.3 | | | | | | | |
| | Type | R-134a | | | | | | | | | | | | | 94.9 | | | | | | | | |
| Piping connections | Charge | kg | | 88 | 94 | 100 | 118 | 121 | 124 | 148 | 177 | 183 | 186 | | | 3 | | | | | | | |
| | Evaporator water inlet/outlet (OD) | 139.7mm | | | | | | | | | | | | | 219.1mm | | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | 3~/50/400 | | | | | | | | | | | | | 186 | | | | | | | |

STRENGTHS

- > Wide capacity range: 15 sizes to cover a range from 647 to 1,922 kW
- > Stepless single-screw compressor
- > Large operation range (ambient temperature down to -18°C and up to 46°C)
- > All models are PED pressure vessel approved
- > Optimised for use with R-134a
- > 2-3 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye-delta starter (y-d)
- > Double setpoint
- > Fans thermal relays
- > Phase monitor
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm
- > Fan circuit breakers
- > Main switch interlock
- > Emergency stop

OPTIONS

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal relays
- > Under / overvoltage control
- > Ampere volt meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (3 models)
- > Two centrifugal pumps (4 models)
- > Compressor circuit breakers
- > Double pressure relief valve with diverter
- > Fans speed regulation
- > Refrigerant recovery tank
- > Evaporator right water connection
- > Ground fault relay
- > Low pressure side manometers
- > Rapid restart
- > Transport kit

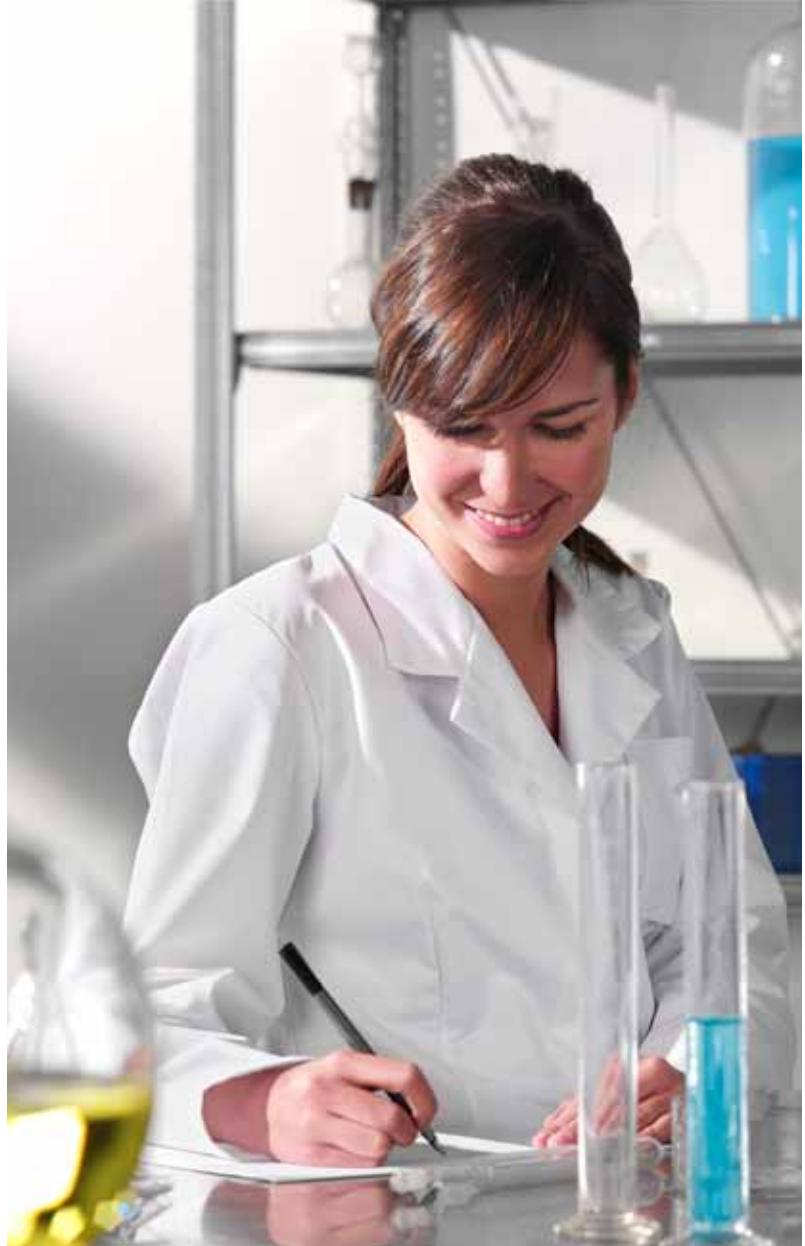


MicroTech III

SCREW



R-134a





ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)

EWAD-C-

Cooling only

| EWAD-C-SS | | | | | | | | | | | | | | | | | | | |
|----------------------|------------------------------------|--------------------|----------------|-------|---------|-------------------|--------|-------|-----------------------|-----------------------|-------------------|------------------------|--------------------|--------------------|--------|---|---------|------|----|
| Capacity class | | 650 | 740 | 830 | 910 | 970 | C11 | C12 | C13 | H14 | C15 | C16 | C17 | C18 | C19 | C20 | | | |
| Cooling capacity | Nom. | kW | 647 | 744 | 832 | 912 | 967 | 1,064 | 1,152 | 1,319 | 1,418 | 1,538 | 1,622 | 1,714 | 1,802 | 1,875 | 1,922 | | |
| Capacity control | Method | | | | | | | | | | | | | | | | | | |
| | Minimum capacity | % | | | | | 12.5 | | | | | | | | | 7 | | | |
| Power input | Cooling | Nom. | kW | 221 | 262 | 299 | 318 | 350 | 377 | 403 | 441 | 474 | 551 | 579 | 619 | 665 | 682 | 716 | |
| EER | | | | 2.93 | 2.84 | 2.78 | 2.87 | 2.76 | 2.82 | 2.86 | 2.99 | 2.79 | 2.8 | 2.77 | 2.71 | 2.75 | 2.69 | | |
| ESEER | | | | 3.95 | 3.87 | 3.89 | 3.84 | 3.80 | 3.88 | 3.84 | 4.06 | 4.05 | 3.90 | 3.87 | 3.78 | 3.79 | 3.76 | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | | | 2,540x2,285x6,185 | | | 2,540x2,285 x7,085 | 2,540x2,285 x7,985 | 2,540x2,285x8,885 | 2,540x2,285 x10,185 | 2,540x2,285x11,085 | 2,540x2,285x11,985 | | | | | |
| Weight | Unit | | kg | 5,630 | 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 | 5,910 | 5,990 | 6,010 | 6,530 | 6,810 | 7,250 | 7,520 | 8,280 | 10,730 | 11,110 | 11,260 | 12,110 | 12,480 | | | |
| Water heat exchanger | Type | | | | | | | | | | | | | | | Single pass shell & tube | | | |
| | Water volume | l | | 266 | | 251 | | 243 | | 386 | | 408 | | 474 | | 850 | | | |
| | Nominal water flow | Cooling | 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 | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 47 | 54 | 53 | 62 | 69 | 64 | 74 | 54 | 58 | 62 | 68 | 75 | 36 | 39 | 40 |
| Air heat exchanger | Type | | | | | | | | | | | | | | | High efficiency fin and tube type with integral subcooler | | | |
| Fan | 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 | Cooling | Nom. | dBA | 99.5 | | 100.0 | | 100.9 | 101.1 | 101.5 | 101.7 | 101.9 | 103.0 | 103.2 | 103.3 | 103.5 | 103.7 | | |
| Sound pressure level | Cooling | Nom. | dBA | 79.0 | | 79.5 | | 80.4 | | 80.6 | | 80.7 | 81.1 | 81.2 | 81.5 | 81.9 | | | |
| Compressor | Type | | | | | | | | | | | | | | | Asymm single screw | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | | | | | | | | | | | | -8~15 | | | |
| | Air side | Cooling | Min.-Max. | °CDB | | | | | | | | | | | | -18~52 | | | |
| Refrigerant | Type | | | | | | | | | | | | | | | R-134a | | | |
| Circuits | Quantity | | | | | | | | | | | | | | | 3 | | | |
| Refrigerant circuit | Charge | kg | | 128 | | 146 | 144 | 162 | 178 | 196 | 260 | 261 | 275 | 305 | | | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | 168.3mm | | | | | | 219.1mm | | | | 273mm | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | | | | | 3~/50/400 | | | | | | | | |

| EWAD-C-SL | | | | | | | | | | | | | | | | | | | |
|----------------------|------------------------------------|--------------------|----------------|-------|---------|-------------------|--------|-------|-----------------------|-----------------------|-------------------|------------------------|--------------------|--------------------|--------|---|---------|-------|----|
| Capacity class | | 650 | 740 | 830 | 910 | 970 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C18 | C19 | C20 | | | |
| Cooling capacity | Nom. | kW | 647 | 744 | 832 | 912 | 967 | 1,064 | 1,152 | 1,319 | 1,418 | 1,538 | 1,622 | 1,714 | 1,802 | 1,875 | 1,922 | | |
| Capacity control | Method | | | | | | | | | | | | | | | Stepless | | | |
| | Minimum capacity | % | | | | | 12.5 | | | | | | | | | 7 | | | |
| Power input | Cooling | Nom. | kW | 221 | 262 | 299 | 318 | 350 | 377 | 403 | 441 | 474 | 551 | 579 | 619 | 665 | 682 | 714 | |
| EER | | | | 2.93 | 2.84 | 2.78 | 2.87 | 2.76 | 2.82 | 2.86 | 2.99 | 2.79 | 2.80 | 2.77 | 2.71 | 2.75 | 2.69 | | |
| ESEER | | | | 3.95 | 3.87 | 3.89 | 3.84 | 3.80 | 3.88 | 3.84 | 4.08 | 4.05 | 3.90 | 3.87 | 3.78 | 3.79 | 3.77 | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | | | 2,540x2,285x6,185 | | | 2,540x2,285 x7,085 | 2,540x2,285 x7,985 | 2,540x2,285x8,885 | 2,540x2,285 x10,185 | 2,540x2,285x11,085 | 2,540x2,285x11,985 | | | | | |
| Weight | 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 volume | l | | 266 | | 251 | | 243 | | 386 | | 408 | | 474 | | 850 | | | |
| | Nominal water flow | Cooling | 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 | 91.70 | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 47 | 54 | 53 | 62 | 69 | 64 | 74 | 54 | 58 | 62 | 68 | 75 | 36 | 39 | 40 |
| Air heat exchanger | Type | | | | | | | | | | | | | | | High efficiency fin and tube type with integral subcooler | | | |
| Fan | Air flow rate | Nom. | l/s | | 53,442 | | 64,131 | | 74,819 | 85,508 | 96,199 | 106,885 | 117,573 | | | | 128,262 | | |
| | Speed | | rpm | | | | | | | | 900 | | | | | | 920 | | |
| Sound power level | Cooling | Nom. | dBA | 96.0 | | 96.1 | | 97.5 | 97.1 | 97.6 | 98.1 | 98.2 | 99.1 | 99.5 | 99.9 | 101.0 | | | |
| Sound pressure level | Cooling | Nom. | dBA | 75.5 | | 75.6 | | 76.5 | 76.6 | 76.8 | 76.9 | 77 | 77.2 | 77.3 | 77.4 | 77.9 | 78.0 | | |
| Compressor | Type | | | | | | | | | | | | | | | Semi-hermetic single screw compressor | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | | | | | | | | | | | | Asymm single screw | | | |
| | Air side | Cooling | Min.-Max. | °CDB | | | | | | | | | | | | Screw compressor | | | |
| Refrigerant | Type | | | | | | | | | | | | | | | Asymm single screw | | | |
| Circuits | Quantity | | | | | | | | | | | | | | | Semi-hermetic single screw | | | |
| Refrigerant circuit | Charge | kg | | 128 | | 146 | 144 | 162 | 178 | 196 | 260 | 261 | 275 | 305 | | | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | 168.3mm | | | | | | 219.1mm | | | | 273mm | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | | | | | 3~/50/400 | | | | | | | | |

STRENGTHS

- > Reduced sound version
- > Stepless single-screw compressor
- > Large operation range (ambient temperature down to -18°C and up to 46°C)
- > All models are PED pressure vessel approved
- > Optimised for use with R-134a
- > 2-3 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye-delta starter (y-d)
- > Double setpoint
- > Fans thermal relays
- > Phase monitor
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm
- > Double pressure relief valve with diverter
- > Fan circuit breakers
- > Main switch interlock
- > Emergency stop

OPTIONS

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overloadrelays
- > Under / overvoltage control
- > Ampere volt meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (3 models)
- > Two centrifugal pumps (4 models)
- > Compressor circuit breakers
- > Double pressure relief valve with diverter
- > Fans speed regulation
- > Refrigerant recovery tank
- > Evaporator right water connection
- > Ground fault relay
- > Low pressure side manometers
- > Rapid restart
- > Transport kit



MicroTech III

screw



R-134a



ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)



EWAD-C-

Cooling only

| Capacity class | | | EWAD620C-SR | EWAD720C-SR | EWAD790C-SR | EWAD880C-SR | EWAD920C-SR | EWADC10C-SR | EWADC11C-SR | EWADC12C-SR |
|----------------------|------------------------------------|--------------------|----------------|-------------|-------------|---|-------------|-------------|-------------|-------------|
| Cooling capacity | Nom. | kW | 619 | 715 | 789 | 876 | 922 | 1,020 | 1,112 | 1,270 |
| Capacity control | Method | | | | | | Stepless | | | |
| | Minimum capacity | % | | | | | 12.5 | | | |
| Power input | Cooling | Nom. | kW | 223 | 273 | 314 | 331 | 369 | 394 | 416 |
| EER | | | | 2.77 | 2.62 | 2.51 | 2.65 | 2.50 | 2.59 | 2.67 |
| ESEER | | | | 4.08 | 3.96 | 3.98 | 3.99 | 4.00 | | 4.10 |
| Dimensions | Unit | HeightxWidthxDepth | mm | | | 2,540x2,285x6,185 | | | | |
| Weight | Unit | | kg | 5,920 | 6,030 | 6,050 | 6,570 | 6,850 | 7,300 | 7,570 |
| | Operation weight | | kg | 6,200 | 6,280 | 6,300 | 6,820 | 7,100 | 7,540 | 7,810 |
| Water heat exchanger | Type | | | | | Single pass shell & tube | | | | |
| | Water volume | l | | | 266 | | 251 | | 243 | 386 |
| | Nominal water flow | Cooling | l/s | 29.5 | 34.1 | 37.6 | 41.8 | 44.0 | 48.7 | 53.1 |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 43 | 50 | 48 | 58 | 63 | 69 |
| Air heat exchanger | Type | | | | | High efficiency fin and tube type with integral subcooler | | | | |
| Fan | Air flow rate | Nom. | l/s | | 41,007 | | 49,209 | | 57,410 | 65,611 |
| | Speed | | rpm | | | | 700 | | | 73,813 |
| Sound power level | Cooling | Nom. | dBA | 91.5 | | 92.0 | 92.5 | 93.0 | 93.5 | 93.8 |
| Sound pressure level | Cooling | Nom. | dBA | 71.0 | | 71.5 | 72.0 | 72.5 | 72.6 | 72.7 |
| Compressor | Type | | | | | Asymm single screw | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | | | -8~15 | | | |
| | Air side | Cooling | Min.-Max. | °CDB | | | -18~52 | | | |
| Refrigerant | Type | | | | | R-134a | | | | |
| | Circuits | Quantity | | | | 2 | | | | |
| Refrigerant circuit | Charge | kg | | | 128 | | 146 | 144 | 162 | 178 |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | | 168.3mm | | | | 219.1mm |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | |

| Capacity class | | | EWADH14C-SR | EWADC13C-SR | EWADC14C-SR | EWADC15C-SR | EWADC16C-SR | EWADC17C-SR | EWADC18C-SR | EWADC19C-SR |
|----------------------|------------------------------------|--------------------|----------------|-------------------|--------------------|---|--------------------|-------------|-------------|--------------------|
| Cooling capacity | Nom. | kW | 1,321 | 1,367 | 1,471 | 1,556 | 1,623 | 1,714 | 1,795 | 1,833 |
| Capacity control | Method | | | | | Stepless | | | | |
| | Minimum capacity | % | 12.5 | | | | 7.0 | | | |
| Power input | Cooling | Nom. | kW | 495 | 518 | 577 | 603 | 647 | 702 | 718 |
| EER | | | | 2.67 | 2.64 | 2.55 | 2.58 | 2.51 | 2.44 | 2.50 |
| ESEER | | | | 3.98 | 3.90 | 3.87 | 3.90 | 3.83 | 3.78 | 3.81 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,540x2,285x8,885 | 2,540x2,285x10,185 | | 2,540x2,285x11,085 | | | 2,540x2,285x11,985 |
| Weight | Unit | | kg | 8,190 | 10,750 | 10,770 | 11,150 | 11,210 | 11,680 | 12,040 |
| | Operation weight | | kg | 8,570 | | 11,170 | 11,550 | 11,700 | 12,560 | 12,920 |
| Water heat exchanger | Type | | | | | Single pass shell & tube | | | | |
| | Water volume | l | | 386 | 421 | | 408 | 474 | | 850 |
| | Nominal water flow | Cooling | l/s | 63.0 | 65.2 | 70.2 | 74.2 | 77.4 | 81.8 | 85.6 |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 54 | 45 | 57 | 63 | 69 | 37 |
| Air heat exchanger | Type | | | | | High efficiency fin and tube type with integral subcooler | | | | |
| Fan | Air flow rate | Nom. | l/s | 73,813 | | 82,014 | | 90,216 | | 98,417 |
| | Speed | | rpm | | | | 700 | | | |
| Sound power level | Cooling | Nom. | dBA | 94.0 | 94.8 | 94.9 | 95.1 | 95.2 | 95.7 | 95.8 |
| Sound pressure level | Cooling | Nom. | dBA | | 72.9 | | 73.0 | 73.1 | 73.6 | 73.7 |
| Compressor | Type | | | | | Asymm single screw | | | | |
| Operation range | Water side | Cooling | Min.-Max. | °CDB | | | -8~15 | | | |
| | Air side | Cooling | Min.-Max. | °CDB | | | -18~52 | | | |
| Refrigerant | Type | | | | | R-134a | | | | |
| | Circuits | Quantity | | 2 | | | 3 | | | |
| Refrigerant circuit | Charge | kg | | 196 | | 260 | | 261 | 275 | 305 |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | | 219.1mm | | | 273mm | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | |

STRENGTHS

- > High efficiency version
- > Wide capacity range: 17 sizes to cover a range from 756 to 2,008 kW
- > Stepless single-screw compressor
- > Large operation range (ambient temperature down to -18°C and up to 50°C)
- > All models are PED pressure vessel approved
- > Optimised for use with R-134a
- > 2-3 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye-delta starter (y-d)
- > Double setpoint
- > Fans thermal relays
- > Phase monitor
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion device
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm
- > Fan circuit breakers
- > Main switch interlock
- > Emergency stop

OPTIONS

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Ampere volt meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (3 models)
- > Two centrifugal pumps (4 models)
- > Compressor circuit breakers
- > Double pressure relief valve with diverter
- > Fans speed regulation
- > Refrigerant recovery tank
- > Evaporator right water connection
- > Ground fault relay
- > Rapid restart
- > Transport kit
- > Low pressure side manometers



MicroTech III

screw



R-134a



ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)



EAUD-C-

Cooling only

| EAUD-C-XS | | | | | | | | | | | | | | | | | | | | |
|----------------------|------------------------------------|--------------------|----------------|-----------------------|-------------------|-------------------|--------|---------|-------|-----------|-------|-------|-------|---|------------------------|------------------------|--------------------|---------|-------|------|
| Capacity class | Nom. | kW | 760 | 830 | 890 | 990 | C10 | C11 | C12 | C13 | H14 | H15 | C16 | C17 | C18 | C19 | C20 | C21 | C22 | |
| Cooling capacity | Nom. | kW | 756 | 830 | 889 | 1,001 | 1,074 | 1,196 | 1,280 | 1,349 | 1,415 | 1,525 | 1,596 | 1,685 | 1,768 | 1,858 | 1,901 | 1,953 | 2,008 | |
| Capacity control | Method | | | | | | | | | | | | | | | | | | | |
| | Minimum capacity | % | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 233 | 253 | 278 | 307 | 338 | 364 | 400 | 410 | 443 | 475 | 503 | 533 | 561 | 590 | 614 | 643 | 672 |
| EER | | | | 3.25 | 3.28 | 3.20 | 3.26 | 3.18 | 3.29 | 3.2 | 3.29 | 3.19 | 3.21 | 3.17 | 3.16 | 3.15 | 3.09 | 3.04 | 2.99 | |
| ESEER | | | | 4.02 | 4.11 | 4.02 | 4.11 | 4.05 | 4.14 | 4.02 | 4.28 | 4.30 | 4.33 | 4.17 | 4.16 | 4.13 | 4.11 | 4.02 | 3.99 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,540x2,285 x6,185 | 2,540x2,285x7,085 | 2,540x2,285x7,985 | | | | | | | | 2,540x2,285 x1,985 | 2,540x2,285 x12,885 | 2,540x2,285 x13,785 | 2,540x2,285x14,685 | | | |
| Weight | Unit | | kg | 5,990 | 6,340 | 6,360 | 7,190 | 7,470 | 8,220 | 8,240 | | | | 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 | | | | 12,430 | 12,760 | 13,140 | | 13,470 | | |
| Water heat exchanger | Type | | | | | | | | | | | | | Single pass shell & tube | | | | | | |
| | Water volume | l | 251 | 243 | | 403 | | 386 | | 979 | | | | 850 | 871 | | 850 | | | |
| | Nominal water flow | Cooling | 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 |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 81 | 57 | 64 | 61 | 69 | 45 | 51 | 68 | 77 | 84 | 62 | 68 | 74 | 39 | 41 | 43 |
| Air heat exchanger | Type | | | | | | | | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | |
| Fan | 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 | Cooling | Nom. | dBA | 100.2 | 100.5 | 101.4 | 101.9 | 102.4 | | 102.5 | | | | 103.2 | 103.5 | 103.7 | | 103.9 | | |
| Sound pressure level | Cooling | Nom. | dBA | 79.7 | | 80.2 | 80.7 | 80.3 | | 80.4 | | | | 80.9 | 80.8 | | | 81.0 | | |
| Compressor | Type | | | | | | | | | | | | | Asymm single screw | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | | | | | | | | ~8~15 | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | | | | | | | | -18~-52 | | | | | | |
| Refrigerant | Type | | | | | | | | | | | | | R-134a | | | | | | |
| | Circuits | Quantity | | | | | | | | 2 | | | | | | 3 | | | | |
| Refrigerant circuit | Charge | | kg | 146 | 162 | | 182 | 214 | | 225 | 248 | | | 297 | 312 | 328 | | 343 | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | 168.3mm | | | 219.1mm | | | | | | 273mm | | | | | | |
| Power supply | Phase/Frequency/Voltage | | Hz/V | | | | | | | 3~/50/400 | | | | | | | | | | |

| EAUD-C-XL | | | | | | | | | | | | | | | | | | | | |
|----------------------|------------------------------------|--------------------|----------------|-----------------------|-------------------|-------------------|--------|---------|-------|-----------|-------|--------|-------|---|------------------------|------------------------|--------------------|---------|-------|------|
| Capacity class | Nom. | kW | 760 | 830 | 890 | 990 | C10 | C11 | C12 | C13 | H14 | H15 | C16 | C17 | C18 | C19 | C20 | C21 | C22 | |
| Cooling capacity | Nom. | kW | 756 | 830 | 889 | 1,001 | 1,074 | 1,196 | 1,280 | 1,349 | 1,415 | 1,525 | 1,596 | 1,685 | 1,768 | 1,858 | 1,901 | 1,953 | 2,008 | |
| Capacity control | Method | | | | | | | | | | | | | | | | | | | |
| | Minimum capacity | % | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 233 | 253 | 278 | 307 | 338 | 364 | 400 | 410 | 443 | 475 | 503 | 533 | 561 | 590 | 614 | 643 | 672 |
| EER | | | | 3.25 | 3.28 | 3.20 | 3.26 | 3.18 | 3.29 | 3.2 | 3.29 | 3.19 | 3.21 | 3.17 | 3.16 | 3.15 | 3.09 | 3.04 | 2.99 | |
| ESEER | | | | 4.02 | 4.11 | 4.02 | 4.11 | 4.05 | 4.14 | 4.02 | 4.28 | 4.30 | 4.33 | 4.17 | 4.16 | 4.13 | 4.11 | 4.02 | 3.99 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,540x2,285 x6,185 | 2,540x2,285x7,085 | 2,540x2,285x7,985 | | | | | | | | 2,540x2,285 x1,985 | 2,540x2,285 x12,885 | 2,540x2,285 x13,785 | 2,540x2,285x14,685 | | | |
| 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 volume | l | 251 | 243 | | 403 | | 386 | | 979 | | | | 850 | 871 | | 850 | | | |
| | Nominal water flow | Cooling | 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 |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 81 | 57 | 64 | 61 | 69 | 45 | 51 | 68 | 77 | 84 | 62 | 68 | 74 | 39 | 41 | 43 |
| Air heat exchanger | Type | | | | | | | | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | |
| Fan | 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 | Cooling | Nom. | dBA | 96.8 | | 97.4 | 98.0 | 98.2 | 98.8 | | 98.9 | | | 99.6 | 100.0 | 100.2 | | 100.4 | | |
| Sound pressure level | Cooling | Nom. | dBA | 76.3 | | 76.5 | 76.9 | 77.1 | 76.7 | | 76.8 | | | 77.3 | 77.4 | | | 77.5 | | |
| Compressor | Type | | | | | | | | | | | | | Asymm single screw | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | | | | | | | | ~8~15 | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | | | | | | | | -18~-52 | | | | | | |
| Refrigerant | Type | | | | | | | | | | | | | R-134a | | | | | | |
| | Circuits | Quantity | | | | | | 2 | | | | | | | 3 | | | | | |
| Refrigerant circuit | Charge | | kg | 146 | 162 | | 182 | 214 | | 225 | 248 | | | 297 | 312 | 328 | | 343 | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | 168.3mm | | | 219.1mm | | | | | | 273mm | | | | | | |
| Power supply | Phase/Frequency/Voltage | | Hz/V | | | | | | | 3~/50/400 | | | | | | | | | | |

STRENGTHS

- > High efficiency and reduced sound version
- > Wide capacity range: 17 sizes to cover a range from 736 to 1,959 kW
- > Stepless single-screw compressor
- > Large operation range (ambient temperature down to -18°C and up to 50°C)
- > All models are PED pressure vessel approved
- > Optimised for use with R-134a
- > 2-3 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye-delta starter (y-d)
- > Double setpoint
- > Fans thermal relays
- > Phase monitor
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm
- > Fan circuit breakers
- > Main switch interlock
- > Emergency stop

OPTIONS

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Ampere volt meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (3 models)
- > Two centrifugal pumps (4 models)
- > Compressor circuit breakers
- > Double pressure relief valve with diverter
- > Fans speed regulation
- > Refrigerant recovery tank
- > Evaporator right water connection
- > Ground fault relay
- > Low pressure side manometers
- > Rapid restart
- > Transport kit



MicroTech III

screw



R-134a



ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)



EWAD-C-

Cooling only

| Capacity class | | | EWAD740C-XR | EWAD810C-XR | EWAD870C-XR | EWAD970C-XR | EWADC10C-XR | EWADC11C-XR | EWADC12C-XR | EWADC13C-XR | EWADH14C-XR | EWADH15C-XR | | |
|----------------------|------------------------------------|--------------------|----------------|-------------------|---|-------------------|-------------|-------------|-------------|-------------------|-------------|-------------|------|----|
| Cooling capacity | Nom. | kW | 736 | 811 | 866 | 974 | 1,041 | 1,168 | 1,247 | 1,302 | 1,367 | 1,468 | | |
| Capacity control | Method | | | | Stepless | | | 12.5 | | | | | | |
| Power input | Cooling | Nom. | kW | 234 | 253 | 281 | 309 | 344 | 365 | 405 | 415 | 454 | 491 | |
| EER | | | | 3.14 | 3.20 | 3.08 | 3.15 | 3.03 | 3.20 | 3.08 | 3.14 | 3.01 | 2.99 | |
| ESEER | | | | 4.28 | 4.36 | 4.23 | 4.34 | 4.24 | 4.38 | 4.25 | 4.33 | 4.36 | 4.40 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,540x2,285x6,185 | 2,540x2,285x7,085 | 2,540x2,285x7,985 | | | | 2,540x2,285x9,785 | | | | |
| Weight | Unit | | kg | 6,280 | 6,630 | 6,650 | 7,480 | 7,760 | 8,510 | 8,530 | | 9,190 | | |
| | Operation weight | | kg | 6,520 | 6,870 | 6,890 | 7,880 | 8,160 | 8,900 | 8,920 | | 10,180 | | |
| Water heat exchanger | Type | | | | Single pass shell & tube | | | | | | | | | |
| | Water volume | l | | 251 | 243 | | 403 | 386 | | | | 979 | | |
| | Nominal water flow | Cooling | l/s | 35.1 | 38.7 | 41.3 | 46.5 | 49.7 | 55.7 | 59.5 | 62.1 | 65.2 | 70.0 | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 77 | 54 | 61 | 58 | 65 | 43 | 49 | 64 | 73 | 79 |
| Air heat exchanger | Type | | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 49,209 | 57,410 | | 65,611 | | | | 82,014 | | | |
| | Speed | | rpm | | | | 700 | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 92.0 | 92.3 | | 93.5 | 93.7 | 94.3 | 94.5 | | 94.6 | | |
| Sound pressure level | Cooling | Nom. | dBA | | 71.5 | | 72.3 | 72.5 | 72.2 | 72.3 | | 72.5 | | |
| Compressor | Type | | | | Asymm single screw | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | -8~15 | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | -18~52 | | | | | | | |
| Refrigerant | Type | | | | R-134a | | | | | | | | | |
| | Circuits | Quantity | | | | | 2 | | | | | | | |
| Refrigerant circuit | Charge | kg | | 146 | 162 | | 182 | | 214 | 225 | | 248 | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | 168.3mm | | | 219.1mm | | | 273mm | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | | | | | |

| Capacity class | | | EWADC16C-XR | EWADC17C-XR | EWADC18C-XR | EWADC19C-XR | EWADC20C-XR | EWADC21C-XR | EWADC22C-XR | | |
|----------------------|------------------------------------|--------------------|----------------|--------------------|---|--------------------|-------------|--------------------|-------------|------|------|
| Cooling capacity | Nom. | kW | 1,550 | 1,639 | 1,722 | 1,813 | 1,854 | 1,902 | 1,952 | | |
| Capacity control | Method | | | | Stepless | | | | | | |
| Power input | Cooling | Nom. | kW | 512 | 541 | 566 | 596 | 624 | 657 | 691 | |
| EER | | | | 3.03 | 4.20 | 4.21 | 4.20 | 2.97 | 2.89 | 2.83 | |
| ESEER | | | | | 4.20 | 4.21 | 4.20 | 4.18 | 4.09 | 4.06 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,540x2,285x11,985 | 2,540x2,285x12,885 | 2,540x2,285x13,785 | | 2,540x2,285x14,685 | | | |
| Weight | Unit | | kg | 12,010 | 12,350 | 12,700 | | 13,040 | | | |
| | Operation weight | | kg | 12,870 | 13,200 | 13,580 | | 13,910 | | | |
| Water heat exchanger | Type | | | | Single pass shell & tube | | | 850 | | | |
| | Water volume | l | | 850 | | 871 | | | | | |
| | Nominal water flow | Cooling | l/s | 74.0 | 78.2 | 82.2 | 86.5 | 88.5 | 90.7 | 93.1 | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 59 | 65 | 71 | 37 | 39 | 41 | |
| Air heat exchanger | Type | | | | High efficiency fin and tube type with integral subcooler | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 98,417 | 106,619 | 114,820 | | 123,021 | | | |
| | Speed | | rpm | | | | 700 | | | | |
| Sound power level | Cooling | Nom. | dBA | 95.3 | 95.6 | 95.7 | 95.9 | 96.2 | | 96.6 | |
| Sound pressure level | Cooling | Nom. | dBA | | 72.9 | | 73.0 | | 73.3 | | 73.7 |
| Compressor | Type | | | | Asymm single screw | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | -8~15 | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | -18~52 | | | | |
| Refrigerant | Type | | | | R-134a | | | 3 | | | |
| Refrigerant circuit | Charge | kg | | 297 | 312 | 328 | | 343 | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | | | 273mm | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | | |

STRENGTHS

- > Premium efficiency version
- > Wide capacity range: 9 sizes to cover a range from 821 to 1,562 kW
- > Stepless single-screw compressor
- > Large operation range (ambient temperature down to -18°C and up to 52°C)
- > All models are PED pressure vessel approved
- > Optimised for use with R-134a
- > 2 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye-delta starter (y-d)
- > Double setpoint
- > Fans thermal relays
- > Phase monitor
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fan speed regulation (+ fan silent mode)
- > Main switch interlock
- > Emergency stop

OPTIONS

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Ampere volt meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (3 models)
- > Two centrifugal pumps (4 models)
- > Compressor circuit breakers
- > Fans speed regulation (+ fan silent mode)
- > Double pressure relief valve with diverter
- > Refrigerant recovery tank
- > Evaporator right water connection
- > Ground fault relay
- > Low pressure side manometers
- > Fans circuit breakers
- > Transport kit



MicroTech III

screw



R-134a





EWAD-C-

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKMBACMSTP)
- > BACnet/IP communication module (EKMBACIP)
- > Local/remote Display HMI (EKRUPCS)

Cooling only

| | | | | EWAD-C-PS | | | | | | | | EWAD-C-PL | | | | | | | | | |
|-----------------------------|------------------------------------|--------------------|----------------|---|-------|-------|-------|-------------------|-------|--------|-------|---|-------|-------|-------|-------------------|--------|-------|-------|-------------------|-------|
| Capacity class | | | | 820 | 890 | 980 | C11 | C12 | C13 | C14 | C15 | C16 | 820 | 890 | 980 | C11 | C12 | C13 | C14 | C15 | C16 |
| Cooling capacity | Nom. | kW | | 821 | 890 | 975 | 1,074 | 1,158 | 1,279 | 1,390 | 1,474 | 1,562 | 821 | 890 | 975 | 1,074 | 1,158 | 1,279 | 1,390 | 1,474 | 1,562 |
| Capacity control | Method | | | Stepless | | | | | | | | Stepless | | | | | | | | | |
| | Minimum capacity | % | | 12.5 | | | | | | | | 12.5 | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 226 | 249 | 274 | 302 | 330 | 363 | 396 | 424 | 453 | 226 | 249 | 274 | 302 | 330 | 363 | 396 | 424 | 453 |
| EER | | | | 3.64 | 3.58 | 3.56 | 3.51 | 3.52 | 3.51 | 3.48 | 3.45 | 3.64 | 3.58 | 3.56 | 3.51 | 3.52 | 3.51 | 3.48 | 3.45 | | |
| ESEER | | | | 4.44 | 4.50 | 4.41 | 4.53 | 4.39 | 4.44 | 4.31 | 4.33 | 4.30 | 4.44 | 4.50 | 4.41 | 4.53 | 4.39 | 4.44 | 4.31 | 4.33 | 4.30 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,540x2,285x8,885 | | | | 2,540x2,285x9,785 | | | | 2,540x2,285x11,985 | | | | 2,540x2,285x8,885 | | | | 2,540x2,285x9,785 | |
| | | | | | | | | | | | | | | | | | | | | x1,085 | |
| Weight | Unit | | kg | 7,530 | 7,660 | 8,290 | 8,550 | 9,390 | | 9,730 | | | 7,820 | 7,950 | 8,580 | 8,840 | 10,380 | | | 10,720 | |
| | Operation weight | kg | | 8,130 | 8,700 | 9,330 | 9,590 | 10,380 | | 10,720 | | | 8,420 | 8,990 | 9,620 | 9,880 | 10,670 | | | 11,010 | |
| Water heat exchanger | Type | | | Single pass shell & tube | | | | | | | | Single pass shell & tube | | | | | | | | | |
| | Water volume | l | | 599 | 1,043 | 1,027 | 995 | | 979 | | | | 599 | 1,043 | 1,027 | 995 | | 979 | | | |
| Nominal water flow | Cooling | l/s | | 39.2 | 42.5 | 46.5 | 51.2 | 55.2 | 61.0 | 66.3 | 70.3 | 74.5 | 39.2 | 42.5 | 46.5 | 51.2 | 55.2 | 61.0 | 66.3 | 70.3 | 74.5 |
| Nominal water pressure drop | Cooling | Heat exchanger | kPa | 58 | 67 | 31 | 61 | 70 | 60 | 70 | 81 | 88 | 58 | 67 | 31 | 61 | 70 | 60 | 70 | 81 | 88 |
| Air heat exchanger | Type | | | High efficiency fin and tube type with integral subcooler | | | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 96,196 | | | | 106,885 | | | | 117,573 | | | | 96,196 | | | | 128,262 | |
| | Speed | rpm | | | | | | 900 | | | | | | | | | | | | 900 | |
| Sound power level | Cooling | Nom. | dBA | 101 | | 101.8 | 102.3 | 102.6 | 102.9 | 103.2 | 103.5 | | 98.4 | | 98.8 | 99.9 | 99.3 | 99.6 | 99.9 | 100.2 | |
| Sound pressure level | Cooling | Nom. | dBA | 79.5 | | 80.0 | 80.5 | 80.4 | 80.5 | 80.8 | 81.1 | | 76.9 | | 77.0 | 77.1 | 77.2 | 77.5 | 77.8 | | |
| Compressor | Type | | | Asymm single screw | | | | | | | | Asymm single screw | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | -8~15 | | | | | | | | -8~15 | | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | -18~52 | | | | | | | | -18~52 | | | | | | | | | |
| Refrigerant | Type | | | R-134a | | | | | | | | R-134a | | | | | | | | | |
| | Charge | kg | | 204 | 202 | 204 | 220 | 252 | | 254 | | 204 | 202 | 204 | 220 | 252 | | 254 | | | |
| | Circuits | Quantity | | 2 | | | | | | | | 2 | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | 219.1mm | | | | 273mm | | | | 219.1mm | | | | 273mm | | | | | |
| Power supply | Phase/Frequency/Voltage | | | Hz/V | | | | 3~/50/400 | | | | | | | | 3~/50/400 | | | | | |

STRENGTHS

- > Premium efficiency and reduced sound version
- > Wide capacity range: 9 sizes to cover a range from 809 to 1,521 kW
- > Stepless single-screw compressor
- > Large operation range (ambient temperature down to -18°C and up to 52°C)
- > All models are PED pressure vessel approved
- > Optimised for use with R-134a
- > 2 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye-delta starter (y-d)
- > Double setpoint
- > Fans thermal relays
- > Phase monitor
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm
- > Fan circuit breakers
- > Main switch interlock
- > Emergency stop

OPTIONS

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal relays
- > Under / overvoltage control
- > Ampere volt meter
- > Capacitors for power factor correction
- > Current limit - display
- > Evaporator flange kit
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (3 models)
- > Two centrifugal pumps (4 models)
- > Compressor circuit breakers
- > Double pressure relief valve with diverter
- > Fans speed regulation
- > Refrigerant recovery tank
- > Evaporator right water connection
- > Ground fault relay
- > Low pressure side manometers
- > Transport kit
- > Rapid restart

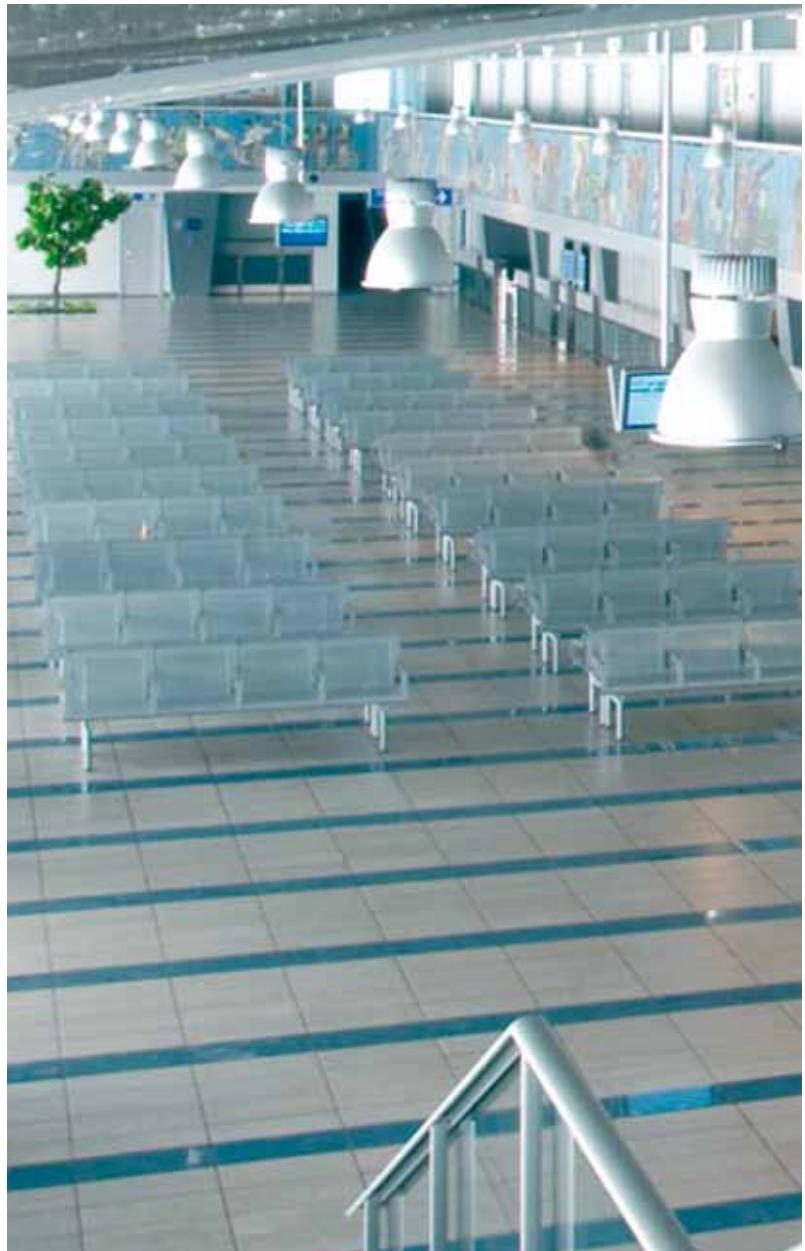


MicroTech III

SCREW



R-134a





EWAD-C-

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity class | | | EWAD810C-PR | EWAD880C-PR | EWAD960C-PR | EWADC10C-PR | EWADC11C-PR | EWADC13C-PR | EWADC14C-PR | EWADC15C-PR | EWADC16C-PR |
|-----------------------------|------------------------------------|--------------------|----------------|-------------------|-------------|-------------|-------------------|--------------------|--------------------|-------------|-------------|
| Cooling capacity | Nom. | kW | 809 | 875 | 956 | 1,053 | 1,132 | 1,251 | 1,359 | 1,439 | 1,521 |
| Capacity control | Method | | | | | | 12.5 | | | | |
| | Minimum capacity | % | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 219 | 244 | 272 | 299 | 330 | 364 | 396 | 425 |
| EER | | | | 3.70 | 3.58 | 3.51 | 3.52 | 3.43 | 3.44 | 3.43 | 3.39 |
| ESEER | | | | 4.63 | 4.59 | 4.54 | 4.59 | 4.50 | 4.53 | 4.51 | 4.49 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,540x2,285x8,885 | | | 2,540x2,285x9,785 | 2,540x2,285x11,085 | 2,540x2,285x11,985 | | |
| 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 | | | | | | | | | | |
| | Water volume | l | | 599 | | 1,043 | 1,027 | 995 | | 979 | |
| Nominal water flow | Cooling | l/s | | 38.6 | 41.7 | 45.6 | 50.2 | 54.0 | 59.7 | 64.8 | 68.7 |
| Nominal water pressure drop | Cooling | Heat exchanger | kPa | 56 | 65 | 30 | 59 | 67 | 58 | 67 | 77 |
| Air heat exchanger | Type | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 73,813 | | | 82,014 | 90,216 | 98,417 | | |
| | Speed | | rpm | | | | 700 | | | | |
| Sound power level | Cooling | Nom. | dBA | 92.7 | | | 93.4 | 93.8 | 94.1 | 94.4 | 94.7 |
| Sound pressure level | Cooling | Nom. | dBA | 71.2 | | | 71.7 | | 72.0 | 72.3 | 72.6 |
| Compressor | Type | | | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | -8~15 | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | -18~52 | | | | |
| Refrigerant | Type | | | | | | | | | | |
| Refrigerant circuit | Circuits | Quantity | | | | | 2 | | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | kg | 204 | 202 | 204 | 220 | 252 | | 254 | |
| | | | | 219.1mm | | | 273mm | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | | |

STRENGTHS

- > Wide capacity range
- > Lower starting current and optimum power factor
- > Wide range of operating conditions
- > MicroTech III controller for superior control logic
- > and an easy interface with LonWorks, Bacnet,
- > Ethernet TCP/IP or Modbus communications
- > Single screw compressor
- > Highest part load performances in its class

STANDARD AVAILABLE

- > Double setpoint
- > Compressor thermal overload relays
- > Phase monitor
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fan circuit breakers
- > Main switch interlock
- > Emergency stop
- > Inverter compressor starter

OPTIONS

- > Total heat recovery
- > Partial heat recovery
- > Brine version
- > Under / overvoltage control
- > Ampere volt meter
- > Current limit - display
- > Evaporator flange kit
- > Fan silent mode
- > Fans speed control device
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (3 different models)
- > Two centrifugal pumps (4 different models)
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fans speed regulation
- > Refrigerant recovery tank
- > Evaporator right water connection
- > Ground fault relay
- > Low pressure side manometers
- > Rapid restart
- > Transport kit



MicroTech III

screw



R-134a

INVERTER





EWAD670-C18CZXS/XL

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity class | | | 670 | 740 | 830 | 900 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C18 | | | | |
|---------------------------|--|--|-------------------------------|--------------------|----------------|---|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------|--------|--------|--------|-------|----|
| Cooling capacity | | | Nom. | kW | 672 | 738 | 832 | 902 | 1037 | 1095 | 1236 | 1308 | 1450 | 1545 | 1622 | 1709 | 1802 | | |
| Capacity control | | | Method | | | Stepless | | | | | | | | | | | | | |
| Power input | | | Minimum capacity | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 13 | 13 | | | |
| EER | | | Nom. | | | 2.74 | 3.14 | 3.13 | 2.96 | 3.06 | 2.92 | 3.09 | 2.96 | 2.97 | 2.91 | 2.91 | | | |
| ESEER | | | kw | | | 5.07 | 5.13 | 5.20 | 5.22 | 5.24 | 5.03 | 4.93 | 4.74 | 5.02 | 5.17 | 5.51 | 5.33 | 5.19 | |
| Dimensions | | | Unit | HeightxWidthxDepth | mm | 2540x2285x6725 | 2540x2285x7625 | 2540x2285x8525 | 2540x2285x10325 | 2540x2285x11625 | 2540x2285x12525 | 2540x2285x13425 | 2540x2285x14325 | | | | | | |
| Weight | | | Unit (XS) | kg | 5880 | 6000 | 6620 | 6870 | 7440 | 7440 | 8570 | 8970 | 9600 | 9940 | 11370 | 12190 | 12920 | | |
| Weight | | | Operation weight (XS) | | | 6140 | 6250 | 6860 | 7110 | 7880 | 7880 | 8960 | 9360 | 9980 | 10320 | 12220 | 13040 | 13790 | |
| Weight | | | Unit (XL) | kg | 6170 | 6280 | 6900 | 7150 | 7720 | 7720 | 8850 | 9250 | 9880 | 10220 | 11790 | 12610 | 13340 | | |
| Weight | | | Operation weight (XL) | | | 6430 | 6530 | 7140 | 7390 | 8160 | 8160 | 9240 | 9640 | 10260 | 10600 | 12640 | 13460 | 14210 | |
| Water heat exchanger | | | Type | | | Single Pass Shell&Tube | | | | | | | | | | | | | |
| Water heat exchanger | | | Water volume | l | 263 | 248 | 241 | 241 | 441 | 383 | 383 | 374 | 374 | 374 | 850 | 850 | 871 | | |
| Water heat exchanger | | | Nominal water flow | Cooling | l/s | 32.00 | 35.20 | 39.70 | 43.00 | 49.50 | 52.30 | 59.00 | 62.40 | 69.20 | 73.70 | 77.40 | 81.50 | 86.00 | |
| Water heat exchanger | | | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 80 | 75 | 55 | 64 | 63 | 69 | 46 | 51 | 61 | 71 | 62 | 68 | 64 |
| Air heat exchanger | | | Type | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | |
| Fan | | | Type | | | Direct propeller type | | | | | | | | | | | | | |
| Fan | | | Drive | | | DOL | | | | | | | | | | | | | |
| Fan | | | Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | | |
| Fan | | | Nominal air flow | l/s | 54188 | 65025 | 75863 | 75863 | 86700 | 86700 | 108376 | 108376 | 119213 | 1300051 | 129454 | 140143 | 151129 | | |
| Fan | | | Model | Quantity | No. | 10 | 12 | 14 | 14 | 16 | 16 | 20 | 20 | 22 | 24 | 24 | 26 | 28 | |
| Fan | | | Model | Speed | rpm | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | | |
| Fan | | | Model | Motor input | kW | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | | |
| Sound power level (XS) | | | Cooling | Nom. | dBA | 102.1 | 102.2 | 102.5 | 102.5 | 102.9 | 102.9 | 103.5 | 103.5 | 104.1 | 104.1 | 105.8 | 106 | 106.2 | |
| Sound pressure level (XS) | | | Cooling | Nom. | dBA | 81.0 | 81.0 | 81.1 | 81.1 | 81.1 | 81.1 | 81.2 | 81.2 | 81.2 | 81.2 | 82.8 | 82.9 | 82.9 | |
| Sound power level (XL) | | | Cooling | Nom. | dBA | 98.6 | 99.2 | 99.5 | 99.5 | 99.9 | 99.9 | 100.5 | 100.5 | 101.1 | 101.1 | 102.8 | 103.0 | 103.2 | |
| Sound pressure level (XL) | | | Cooling | Nom. | dBA | 77.5 | 78.0 | 78.1 | 78.1 | 78.1 | 78.1 | 78.2 | 78.2 | 78.2 | 78.2 | 79.8 | 79.9 | 79.9 | |
| Compressor | | | Type | | | Semi-hermetic single screw compressor inverter driven | | | | | | | | | | | | | |
| Refrigerant circuit | | | Type | | | R-134a | | | | | | | | | | | | | |
| Refrigerant circuit | | | Charge | kg | 141 | 161 | 178 | 178 | 200 | 200 | 235 | 235 | 275 | 320 | 327 | 343 | 361 | | |
| Circuits | | | Quantity | | | 2 | | | | | | | | | | | | | |
| Piping connections | | | Evaporator water inlet/outlet | mm | | 168.3 | | | | 219.1 | | | | 273 | 273 | 273 | | | |
| Power supply | | | Phase / Frequency / Voltage | Hz/V | | 3~/50/400 | | | | | | | | | | | | | |

STRENGTHS

- > Wide capacity range
- > Lower starting current and optimum power factor
- > Wide range of operating conditions
- > MicroTech III controller for superior control logic
- > and an easy interface with LonWorks, Bacnet,
- > Ethernet TCP/IP or Modbus communications
- > Single screw compressor
- > Highest part load performances in its class

STANDARD AVAILABLE

- > Double setpoint
- > Compressor thermal overload relays
- > Phase monitor
- > Evaporator victaulic kit
- > 20mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion valve
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm
- > Fan circuit breakers
- > Main switch interlock
- > Emergency stop
- > Inverter compressor starter

OPTIONS

- > Total heat recovery
- > Partial heat recovery
- > Brine version
- > Under / overvoltage control
- > Ampere volt meter
- > Current limit - display
- > Evaporator flange kit
- > Fan silent mode
- > Fans speed control device
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump (3 different models)
- > Two centrifugal pumps (4 different models)
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fans speed regulation (+ fan silent mode)
- > Refrigerant recovery tank
- > Evaporator right water connection
- > Ground fault relay
- > Low pressure side manometers
- > Rapid restart
- > Transport kit



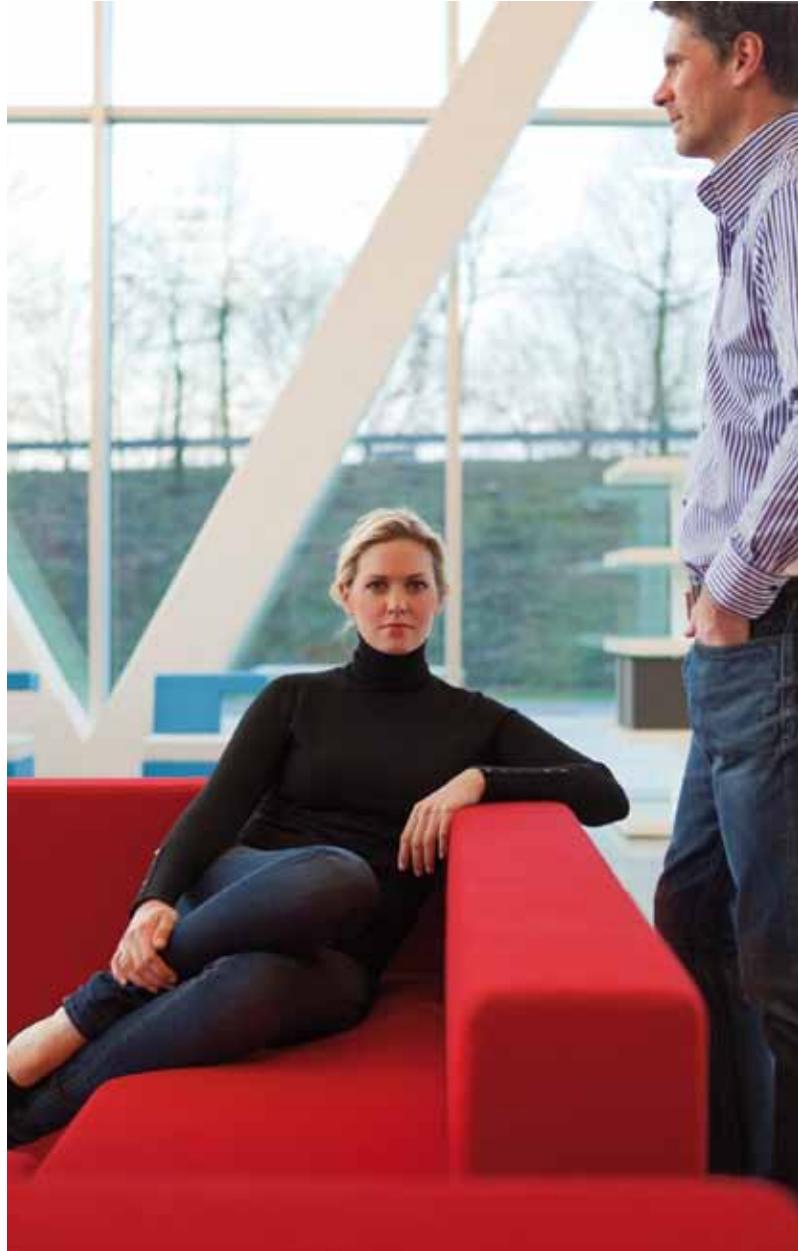
MicroTech III

screw



R-134a

INVERTER





EWAD640-C17CZXR

ACCESSORIES

- › Serial Sequencing Panel (EKDSSP-S)
- › Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKMBACMSTP)
- › BACnet/IP communication module (EKMBACIP)
- › Local/remote Display HMI (EKRUPCS)

Cooling only

| Capacity class | | | | 640 | 700 | 790 | 850 | 980 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | | | |
|-----------------------------------|--|--|-------------------------------|--------------------|----------------|---|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|-------|-------|--------|--------|----|
| Cooling capacity | | | Nom. | kW | 635 | 700 | 789 | 852 | 976 | 1,031 | 1,170 | 1,235 | 1,332 | 1,443 | 1,545 | 1,631 | 1,712 | | |
| Capacity control | | | Method | | Stepless | | | | | | | | | | | | | | |
| Power input | | | Minimum capacity | % | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | |
| EER | | | Cooling | Nom. | kw | 260 | 242 | 271 | 314 | 347 | 388 | 408 | 455 | 524 | 589 | 580 | 610 | 631 | |
| ESEER | | | | | | 2.44 | 2.89 | 2.91 | 2.71 | 2.81 | 2.65 | 2.86 | 2.71 | 2.55 | 2.45 | 2.66 | 2.67 | 2.71 | |
| Dimensions | | | Unit | HeightxWidthxDepth | mm | 25450x2285x6725 | 2540x2285x7625 | 2540x2285x8525 | 2540x2285x10325 | 2540x2285x11625 | 2540x2285x12525 | 2540x2285x13425 | 2540x2285x14325 | | | | | | |
| Weight | | | Unit | | kg | 6170 | 6470 | 7100 | 7360 | 7950 | 7950 | 9120 | 8530 | 10180 | 10530 | 12150 | 12990 | 13740 | |
| | | | Operation weight | | kg | 6430 | 6720 | 7340 | 7600 | 8390 | 8390 | 9500 | 9920 | 10550 | 10910 | 13000 | 13840 | 14610 | |
| Water heat exchanger - evaporator | | | Type | | | Single Pass Shell & Tube | | | | | | | | | | | | | |
| | | | Water volume | l | 263 | 248 | 241 | 241 | 441 | 441 | 383 | 383 | 374 | 374 | 850 | 850 | 871 | | |
| | | | Nominal water flow | Cooling | l/s | 30.30 | 33.40 | 37.60 | 40.70 | 46.60 | 49.20 | 55.80 | 58.90 | 63.60 | 68.80 | 73.70 | 77.80 | 81.70 | |
| | | | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 73 | 69 | 51 | 58 | 57 | 63 | 43 | 47 | 53 | 59 | 57 | 62 | 59 |
| Air heat exchanger | | | Type | | | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | |
| | | | Type | | | Direct propeller type | | | | | | | | | | | | | |
| Fan | | | Drive | | | DOL | | | | | | | | | | | | | |
| | | | Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | | |
| | | | Nominal air flow | l/s | 41536 | 49843 | 58151 | 58151 | 66458 | 66458 | 83072 | 83072 | 83072 | 83072 | 83072 | 99687 | 107994 | 116301 | |
| | | | Model | Quantity | No. | 10 | 12 | 14 | 14 | 16 | 16 | 20 | 20 | 22 | 24 | 24 | 26 | 28 | |
| Soundpowerlevel (XR) | | | Speed | rpm | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | |
| Soundpressurelevel (XR) | | | Motor input | kW | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.784 | 0.784 | 0.784 | 0.784 | 0.784 | 0.784 | 0.784 | 0.784 | 0.784 | |
| Compressor | | | Cooling | Nom. | dBA | 94.6 | 95.2 | 95.5 | 95.5 | 95.9 | 95.9 | 96.5 | 96.5 | 97.1 | 97.1 | 98.8 | 99.0 | 99.2 | |
| Refrigerant circuit | | | Cooling | Nom. | dBA | 74.1 | 74.2 | 74.2 | 74.2 | 73.5 | 74.0 | 74.1 | 74.1 | 74.1 | 75.8 | 75.9 | 75.9 | | |
| Piping connections | | | Type | | | Semi-hermetic single screw compressor Inverter driven | | | | | | | | | | | | | |
| | | | Evaporator water inlet/outlet | kg | 141 | 161 | 178 | 178 | 200 | 200 | 235 | 235 | 275 | 320 | 327 | 343 | 361 | | |
| Power supply | | | Phase / Frequency / Voltage | Hz/V | | R-134a | | | | | | | | | | | | | |
| | | | | | | 2 | | | | | | | | | | | | | |
| | | | | | | 3~/50/400 | | | | | | | | | | | | | |

STRENGTHS

- > Free cooling chiller
- > High efficiency, standard/low (XS/
XL) & reduced (XR) sound levels
- > Greater energy savings and reduced CO₂
emissions during cold season
- > Wide capacity range: 11 sizes between 602 and
1,476 kW (XR), 640 and 1,555 kW (XS/XL)
- > Wide operating range
- > MicroTech III controller



MicroTech III

STANDARD AVAILABLE

- > Why-delta starter
- > Double setpoint
- > Phase monitor
- > Evaporator flange kit
- > 20 mm evaporator insulation
- > Evaporator electric heater
- > Electronic expansion device
- > Discharge line shut off valve
- > Ambient temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm
- > Fan circuit breakers
- > Main switch interlock
- > Emergency stop

screw



R-134a



OPTIONS ON REQUEST

- > Soft starter
- > Brine version
- > Compressor thermal relays
- > Under / overvoltage control
- > Ampere volt meter
- > Capacitor cosf
- > Current limit - display
- > Speedtrol (fan speed control device)
- > Condenser coil guards
- > Evaporator area guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > Evaporator flow switch
- > Suction line shut off valve
- > High pressure side manometers
- > Low pressure side manometers
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > One centrifugal pump
- > Two centrifugal pumps
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Fans speed regulation (+fan silent mode)
- > Evaporator right water connection
- > Ground fault relay
- > Rapid restart
- > Optimized free cooling

ACCESSORIES

- > Daikin Serial Sequencing Panel (EKDSSP-S***)
- > Daikin Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKCMLON)
- > BACnet/MSTP communication module (EKCBACMSTP)
- > BACnet/IP communication module (EKCBACIP)
- > Local/remote Display Human-Machine Interface (HMI) (EKRUPCS)





EWAD-CF

Cooling only

| Capacity class | | | 640 | 770 | 850 | 900 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | | |
|---------------------------------------|-------------------------------|--------------------|---|---|---|--|---|---|---|---|---|---|---|---|------------------------|
| Cooling capacity | Nom. | kW | 640 ¹ / ₂ 295 ² | 772 ¹ / ₂ 365 ² | 852 ¹ / ₂ 413 ² | 902 ¹ / ₂ 434 ² | 1,027 ¹ / ₂ 502 ² | 1,089 ¹ / ₂ 524 ² | 1,269 ¹ / ₂ 594 ² | 1,349 ¹ / ₂ 652 ² | 1,435 ¹ / ₂ 663 ² | 1,493 ¹ / ₂ 659 ² | 1,555 ¹ / ₂ 722 ² | | |
| Mechanical capacity | | kW | 345 ² | 407 ² | 439 ² | 468 ² | 524 ² | 565 ² | 675 ² | 697 ² | 772 ² | | 834 ² | | |
| Capacity control | Method | | | | | | | Stepless | | | | | | | |
| | Minimum capacity | % | | | | | | 12.5 | | | | | | | |
| Power input | Cooling | Nom. | kW | 257 ¹ / ₂ 74.3 ² | 272 ¹ / ₂ 87.9 ² | 293 ¹ / ₂ 90.7 ² | 324 ¹ / ₂ 99.8 ² | 360 ¹ / ₂ 109 ² | 399 ¹ / ₂ 118 ² | 397 ¹ / ₂ 131 ² | 439 ¹ / ₂ 143 ² | 454 ¹ / ₂ 152 ² | 492 ¹ / ₂ 160 ² | 530 ¹ / ₂ 170 ² | |
| EER | | | | 2.49 ¹ / ₂ 8.62 ² | 2.84 ¹ / ₂ 8.78 ² | 2.90 ¹ / ₂ 9.4 ² | 2.78 ¹ / ₂ 9.04 ² | 2.85 ¹ / ₂ 9.43 ² | 2.73 ¹ / ₂ 9.19 ² | 3.19 ¹ / ₂ 9.67 ² | 3.08 ¹ / ₂ 9.45 ² | 3.16 ¹ / ₂ 9.42 ² | 3.04 ¹ / ₂ 9.33 ² | 2.93 ¹ / ₂ 9.16 ² | |
| ESEER | | | | 3.44 | 3.52 | 3.78 | 3.50 | 3.74 | 3.54 | 3.88 | 3.78 | 4.01 | 3.95 | 3.85 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,565x2,480 x6,185 | 2,565x2,480 x7,085 | 2,565x2,480x7,985 | | 2,565x2,480x8,885 | | | 2,565x2,480x10,685 | | | | |
| 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 | 8,040 | 8,580 | | 9,140 | 10,560 | 10,820 | 12,290 | 13,530 | 13,610 | 13,660 | | |
| 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 | 8,320 | 8,870 | | 9,430 | 10,850 | 11,110 | 12,580 | 13,820 | 13,900 | 13,950 | | |
| Water heat exchanger | Type | | | | | | | Single pass shell & tube | | | | | | | |
| | Water volume | I | | 266 | 251 | 243 | | 403 | | 386 | | | 979 | | |
| | Nominal water flow | Cooling | l/s | 27.8 | 33.5 | 37.0 | 39.2 | 44.6 | 47.3 | 55.1 | 58.6 | 62.4 | 64.9 | 67.6 | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 85 / 128 ² | 105 / 172 ² | 90 / 178 ² | 101 / 198 ² | 111 / 245 ² | 124 / 272 ² | 98 / 232 ² | 110 / 259 ² | 139 / 305 ² | 150 / 328 ² | 162 / 354 ² |
| Air heat exchanger | Type | | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | | |
| Fan | Air flow rate | Nom. | I/s | 50,367 | 60,440 | 70,513 | | 80,587 | | | 95,253 | | | | |
| | Speed | | rpm | | | | | | 920 | | | | | | |
| Sound power level (XS) | Cooling | Nom. | dBA | 99.5 | 100.2 | 100.5 | | 101.4 | 101.9 | 102.4 | | 102.5 | | | |
| Sound pressure level (XS) | Cooling | Nom. | dBA | 79.0 ¹ | | 79.7 ¹ | | 80.2 ¹ | 80.7 ¹ | 80.3 ¹ | | 80.4 ¹ | | | |
| Sound power level (XL) | Cooling | Nom. | dBA | 96.0 | 96.8 | 97.4 | | 98.0 | 98.2 | 98.8 | | 98.9 | | | |
| Sound pressure level (XL) | Cooling | Nom. | dBA | 75.5 ¹ | 76.3 ¹ | 76.5 ¹ | | 76.9 ¹ | 77.1 ¹ | 76.7 ¹ | | 76.8 ¹ | | | |
| Compressor | Type | | | | | | | Asymm single screw | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | | | 8~15 | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | | | -20~45 | | | | | | |
| Refrigerant | Type | | | | | | | R-134a | | | | | | | |
| | Charge | | kg | 128 | 146 | 162 | | 182 | | 214 | | 225 | 248 | | |
| | Circuits | Quantity | | | | | | | 2 | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | mm | | 168,3 | | | | 219,1 | | | 273 | | | |
| Power supply | Phase/Frequency/Voltage | | Hz/V | | | | | 3~/50/400 | | | | | | | |
| 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 | |

(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.

STRENGTHS

- › Free cooling chiller
- › High efficiency, standard/low (XS/
XL) & reduced (XR) sound levels
- › Greater energy savings and reduced CO₂
emissions during cold season
- › Wide capacity range: 11 sizes between 602 and
1,476 kW (XR), 640 and 1,555 kW (XS/XL)
- › Wide operating range
- › MicroTech III controller

STANDARD AVAILABLE

- › Wye delta starter
- › Double setpoint
- › Phase monitor
- › Evaporator flange kit
- › 20 mm evaporator insulation
- › Evaporator electric heater
- › Electronic expansion device
- › Discharge line shut off valve
- › Ambient temperature sensor and set-point reset
- › Hour run meter
- › General fault contactor
- › Set-point reset, demand limit and alarm
- › Fan circuit breakers
- › Main switch interlock
- › Emergency stop

OPTIONS ON REQUEST

- › Soft starter
- › Brine version
- › Compressor thermal relays
- › Under / overvoltage control
- › Ampere volt meter
- › Capacitor cosf
- › Current limit - display
- › Speedtrol (fan speed control device)
- › Condenser coil guards
- › Evaporator area guards
- › Cu-cu condenser coil
- › Cu-cu sn condenser coil
- › Alucoat fins coil
- › Evaporator flow switch
- › Suction line shut off valve
- › High pressure side manometers
- › Low pressure side manometers
- › Rubber anti vibration mount
- › Spring anti vibration mount
- › One centrifugal pump
- › Two centrifugal pumps
- › Double pressure relief valve with diverter
- › Compressor circuit breakers
- › Fans speed regulation (+fan silent mode)
- › Evaporator right water connection
- › Ground fault relay
- › Rapid restart
- › Optimized free cooling

ACCESSORIES

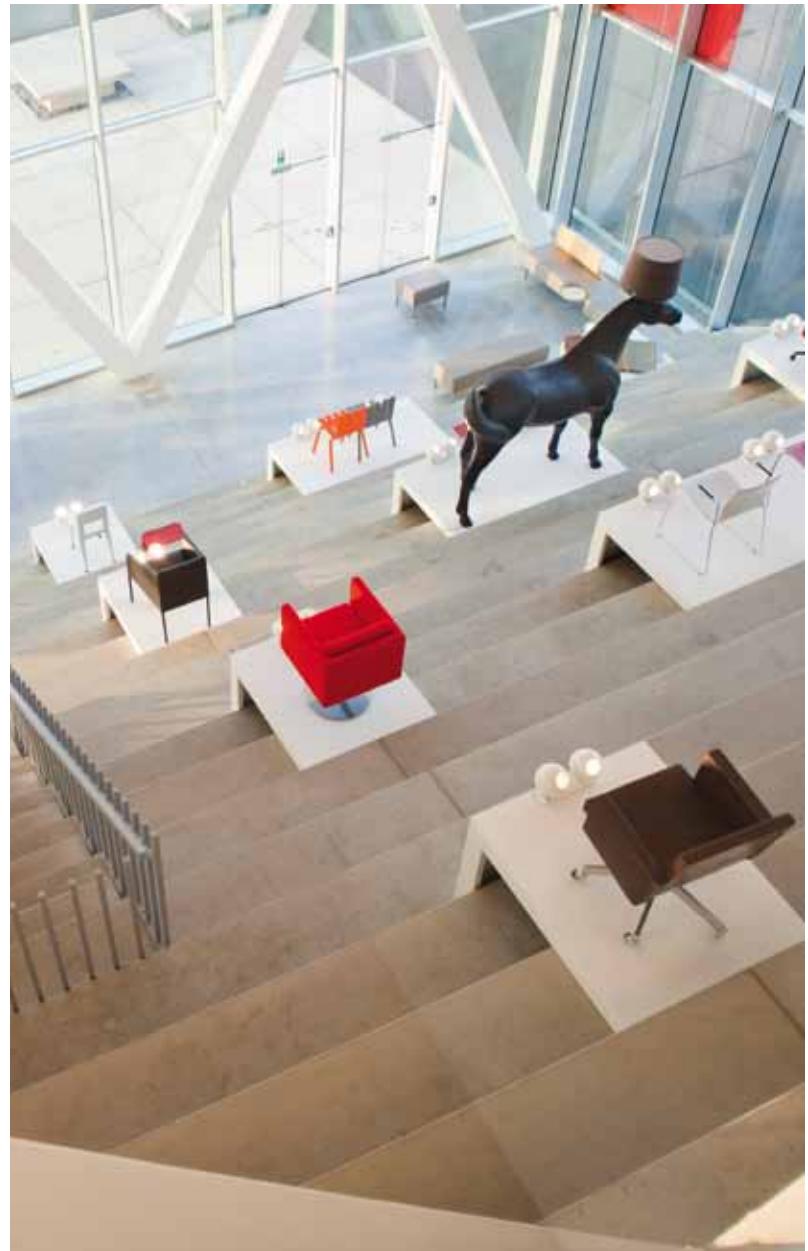
- › Daikin Serial Sequencing Panel (EKDSSP-S***)
- › Daikin Digital Sequencing Panel (EKDDSP)
- › ModBus RTU communication module (EKCM200J)
- › LON communication module (EKCMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/remote Display Human-Machine Interface (HMI) (EKRUPCS)



MicroTech III



R-134a





EWAD-CF

Cooling only

| Capacity class | | | 600 | 740 | 820 | 870 | 980 | C10 | C11 | C12 | C13 | C14 | C15 | | |
|---------------------------------------|-------------------------------|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|------------------------|
| Cooling capacity | Nom. | kW | 602 ¹ / ₂ 270 ² | 739 ¹ / ₂ 334 ² | 821 ¹ / ₂ 379 ² | 866 ¹ / ₂ 409 ² | 981 ¹ / ₂ 459 ² | 1,034 ¹ / ₂ 492 ² | 1,229 ¹ / ₂ 562 ² | 1,302 ¹ / ₂ 598 ² | 1,374 ¹ / ₂ 619 ² | 1,424 ¹ / ₂ 640 ² | 1,476 ¹ / ₂ 668 ² | | |
| Mechanical capacity | | kW | 332 ² | 405 ² | 442 ² | 457 ² | 523 ² | 542 ² | 667 ² | 704 ² | 756 ² | 784 ² | 809 ² | | |
| Capacity control | Method | | | | | | | Stepless | | | | | | | |
| | Minimum capacity | % | | | | | | 12,5 | | | | | | | |
| Power input | Cooling | Nom. | kW | 263 ¹ / ₂ 70,3 ² | 278 ¹ / ₂ 84,3 ² | 299 ¹ / ₂ 88,4 ² | 334 ¹ / ₂ 95,9 ² | 368 ¹ / ₂ 106 ² | 412 ¹ / ₂ 112 ² | 403 ¹ / ₂ 127 ² | 450 ¹ / ₂ 141 ² | 466 ¹ / ₂ 146 ² | 511 ¹ / ₂ 154 ² | 556 ¹ / ₂ 161 ² | |
| EER | | | | 2.29 ¹ / ₂ 8.56 ² | 2.66 ¹ / ₂ 8.77 ² | 2.75 ¹ / ₂ 9.29 ² | 2.59 ¹ / ₂ 9.03 ² | 2.67 ¹ / ₂ 9.27 ² | 2.51 ¹ / ₂ 9.21 ² | 3.05 ¹ / ₂ 9.67 ² | 2.90 ¹ / ₂ 9.22 ² | 2.95 ¹ / ₂ 9.4 ² | 2.79 ¹ / ₂ 9.26 ² | 2.66 ¹ / ₂ 9.15 ² | |
| ESEER | | | | 3.59 | 3.66 | 3.89 | 3.62 | 3.83 | 3.63 | 4.13 | 3.89 | 4.09 | 4.02 | 3.92 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,565x2,480 x6,185 | 2,565x2,480 x7,085 | 2,565x2,480x7,985 | 2,565x2,480x8,885 | | | | | | | 2,565x2,480x10,685 | |
| Weight | | kg | | 8,050 | 8,620 | 9,190 | 10,450 | 10,710 | 12,190 | 12,830 | 12,910 | 12,960 | | | |
| | Operation weight | kg | | 8,320 | 8,870 | 9,430 | 10,850 | 11,110 | 12,580 | 13,820 | 13,900 | 13,950 | | | |
| Water heat exchanger | Type | | | | | | Single pass shell & tube | | | | | | | | |
| | Water volume | l | | 266 | 251 | 243 | 403 | 386 | | | | | 979 | | |
| | Nominal water flow | Cooling | l/s | 26.2 | 32.1 | 35.7 | 37.6 | 42.6 | 44.9 | 53.4 | 56.6 | 59.7 | 61.9 | 64.1 | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 76 / 115 ² | 97 / 159 ² | 84 / 167 ² | 93 / 184 ² | 102 / 225 ² | 113 / 248 ² | 92 / 219 ² | 103 / 243 ² | 128 / 282 ² | 137 / 301 ² | 146 / 321 ² |
| Air heat exchanger | Type | | | | | | High efficiency fin and tube type with integral subcooler | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 38,934 | 46,721 | 54,508 | 62,294 | | | | | | 73,010 | | |
| | Speed | | rpm | | | | 715 | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 91.5 | 92.0 | 92.3 | 93.5 | 93.7 | 94.3 | 94.5 | 94.6 | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 71.0 ¹ | | 71.5 ¹ | 72.3 ¹ | 72.5 ¹ | 72.2 ¹ | 72.3 ¹ | 72.5 ¹ | | | | |
| Compressor | Type | | | | | | Asymm single screw | | | | | | | | |
| Operation range | Water side | Cooling | Min.-Max. °CDB | | | | -8~15 | | | | | | | | |
| | Air side | Cooling | Min.-Max. °CDB | | | | -20~45 | | | | | | | | |
| Refrigerant | Type | | | | | | R-134a | | | | | | | | |
| | Charge | kg | | 128 | 146 | 162 | 182 | 214 | 225 | 248 | | | | | |
| | Circuits | Quantity | | | | | 2 | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet | mm | | | 168.3 | | | 219.1 | | | | | 273 | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | | | | | | |
| 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 | |

(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.

Condensing Unit



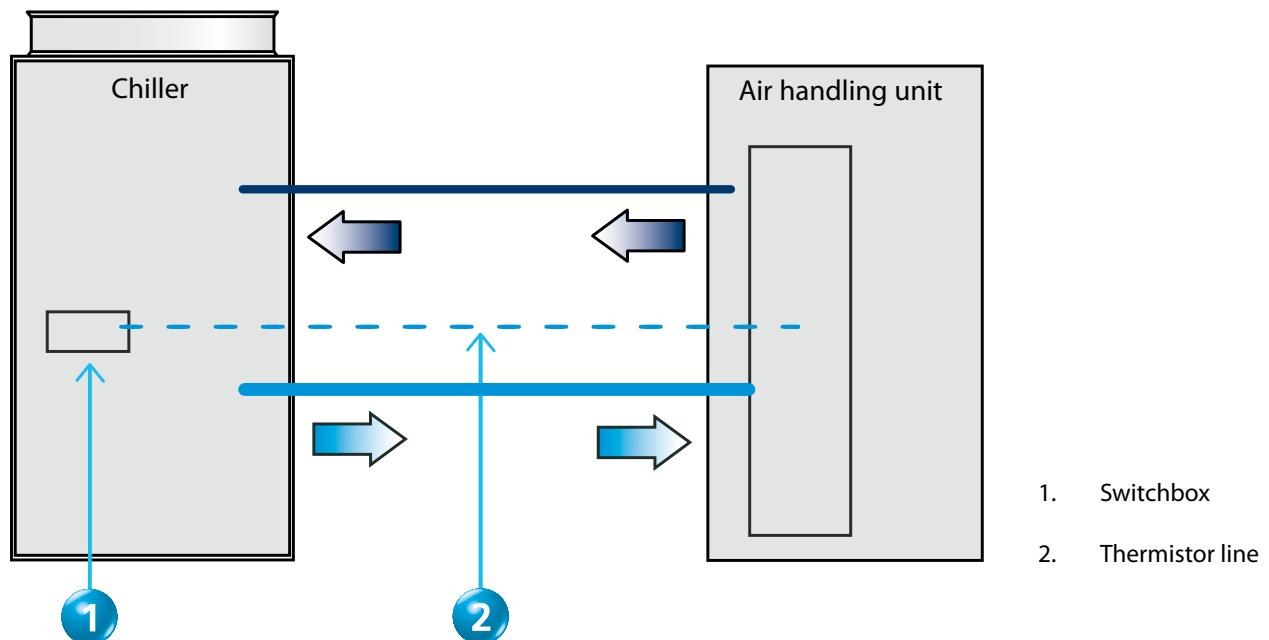
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| ERAD-E-SL | 100 |



The Daikin condensing units can be used in
a wide variety of air conditioning, refrigeration
and ventilation applications.

PIPING DIAGRAM FOR COMFORT COOLING APPLICATION



STRENGTHS

- > Wide capacity range (121 kW - 488 kW)
- > Single refrigerant circuit
- > Compact design
- > Large operation range
(ambient temperature down to -18°C)
- > Water supply down to -15°C



MicroTech III

STANDARD AVAILABLE

- > Wye delta starter (y - d)
- > Double setpoint
- > Phase monitor
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fans circuit breakers
- > Main switch interlock



R-134a

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Transport kit
- > Fans speed regulation (+ fan silent mode)

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKCMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)





ERAD170,200E-SS

Cooling only

| Capacity class | | | 120 | 140 | 170 | 200 | 220 | 250 | 310 | 370 | 440 | 490 | | | | | | | |
|----------------------|-----------------------------|---|------|-------------------|----------|--------|-------------------|--------|--------|-------------------|-------|--------|-------------------|--|--|--|--|--|--|
| Cooling capacity | Nom. | kW | 121 | 144 | 165 | 196 | 219 | 252 | 306 | 370 | 435 | 488 | | | | | | | |
| Capacity control | Method | | | | Stepless | | | 25 | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 41.8 | 51.0 | 57.4 | 65.2 | 73.7 | 76.6 | 92.8 | 122.0 | 147.2 | 160.8 | | | | | | |
| EER | | | | | 2.90 | 2.83 | 2.87 | 3.00 | 2.97 | 3.28 | 3.30 | 3.04 | 2.96 | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,273x1,292x2,165 | | | 2,273x1,292x3,065 | | | 2,273x1,292x3,965 | | | 2,223x2,236x3,070 | | | | | | |
| Weight | Unit | | | kg | | | 1,584 | | | 1,741 | | | 1,936 | | | | | | |
| | Operation weight | | | kg | | | 1,617 | | | 1,781 | | | 1,981 | | | | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 10,922 | 10,575 | 16,383 | 15,863 | 21,844 | 21,150 | 32,767 | | 31,725 | | | | | | | |
| Fan motor | Speed | Cooling | Nom. | rpm | | | | | | | | | 920 | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 91.5 | | | 92.3 | | | 93.0 | | | 94.2 | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 73.5 | | | 73.7 | | | 73.9 | | | 75.1 | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | |
| Operation range | SST | Min-Max | °C | | | | | | | | | | | | | | | | |
| | Condenser | Min-Max | °C | | | | | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | |
| | Charge | | | kg | 17 | 20 | 22 | 27 | 29 | 32 | 45 | 54 | 58 | | | | | | |
| | Circuits | Quantity | | | | | | | | | | | 1 | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | | | | | | | | | | | 3~/50/400 | | | | | | |

STRENGTHS

- > Low operating sound level
- > Wide capacity range (116 kW - 462 kW)
- > Single refrigerant circuit with single screw compressor
- > Compact design
- > Large operation range
(ambient temperature down to -18°C)
- > Water supply down to -15°C



MicroTech III

STANDARD AVAILABLE

- > Wye delta starter (y - d)
- > Double setpoint
- > Fans circuit breakers with thermal overload relays
- > Phase monitor
- > Discharge line shut off valve
- > Suction line shut off valve
- > Ambient outside temperature sensor and set-point reset
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Fans circuit breakers
- > Main switch interlock



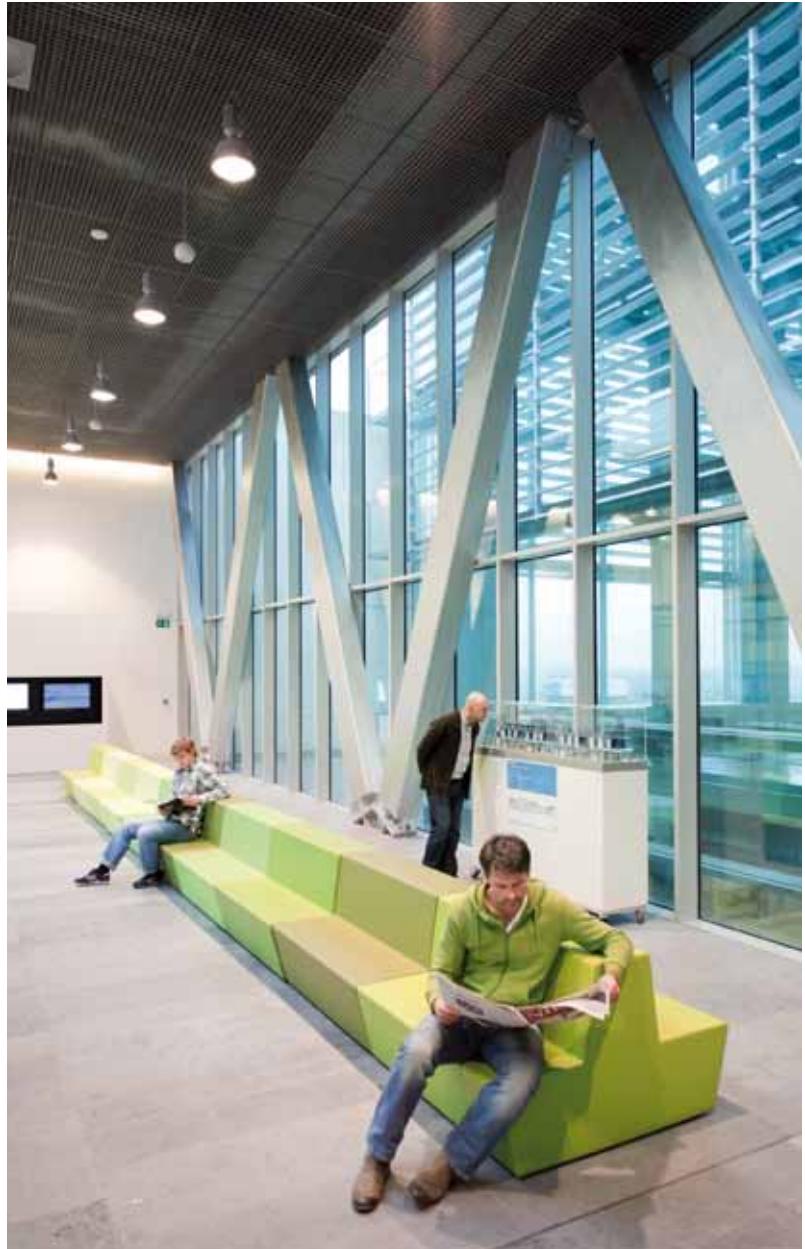
R-134a

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Speedtrol
- > Condenser coil guards
- > Cu-cu condenser coil
- > Cu-cu sn condenser coil
- > Alucoat fins coil
- > High pressure side manometers
- > Container kit
- > Rubber anti vibration mount
- > Spring anti vibration mount
- > Double pressure relief valve with diverter
- > Compressor circuit breakers

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > ModBus RTU communication module (EKCM200J)
- > LON communication module (EKCLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/remote Display HMI (EKRUPCS)





ERAD160,190E-SL

Cooling only

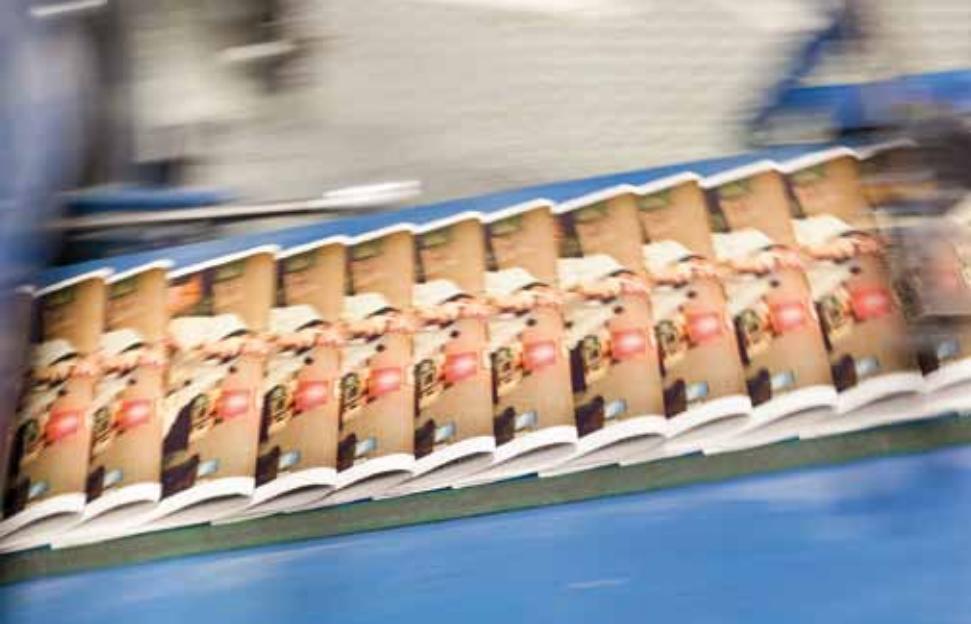
| Capacity class | | | 120 | 140 | 160 | 190 | 210 | 240 | 300 | 350 | 410 | 460 | | | | | | | | |
|----------------------|-----------------------------|---|-------|-------------------|----------|--------|-------------------|--------|--------|-------------------|--------|------|-------------------|--------|--|--|--|--|--|--|
| Cooling capacity | Nom. | kW | 116.0 | 137 | 159 | 187 | 209 | 243 | 295 | 352 | 409 | 462 | | | | | | | | |
| Capacity control | Method | | | | Stepless | | | 25 | | | | | | | | | | | | |
| | Minimum capacity | % | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 42.3 | 52.5 | 57.6 | 66.3 | 73.9 | 78.2 | 91.5 | 122 | 150 | 167 | | | | | | | |
| EER | | | | | 2.74 | 2.61 | 2.75 | 2.82 | 2.83 | 3.11 | 3.23 | 2.88 | 2.73 | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,273x1,292x2,165 | | | 2,273x1,292x3,065 | | | 2,273x1,292x3,965 | | | 2,223x2,236x3,070 | | | | | | | |
| Weight | Unit | | | kg | | | 1,684 | | | 2,036 | | | 2,789 | | | | | | | |
| | Operation weight | | | kg | | | 1,717 | | | 2,081 | | | 2,886 | | | | | | | |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | | | | | | | | | | | | | |
| Fan | Air flow rate | Nom. | l/s | 8,372 | 8,144 | 12,558 | 12,217 | 16,744 | 16,289 | 25,117 | 24,433 | | | | | | | | | |
| Fan motor | Speed | Cooling | Nom. | rpm | | | | | | | | | 715 | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 89.0 | | | 89.8 | | | 90.5 | | | 91.7 | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 71.0 | | | 71.2 | | | 71.4 | | | 72.6 | | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | |
| Operation range | SST | | | Min-Max | °C | | | | | | | | | -9~12 | | | | | | |
| | Condenser | | | Min-Max | °C | | | | | | | | | -18~48 | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | | |
| | Charge | | | kg | 17 | 20 | 22 | 27 | 29 | 32 | 45 | 54 | 58 | 1 | | | | | | |
| Power supply | Phase / Frequency / Voltage | | | Hz / V | | | | | | | | | 3~/50/400 | | | | | | | |

Water Cooled

Daikin offers you compact water cooled chiller units which require only very limited space in a machine room. Used for commercial or industrial applications, these chillers generate cold and hot water, which can be used for chilling, heating, or even both at the same time.

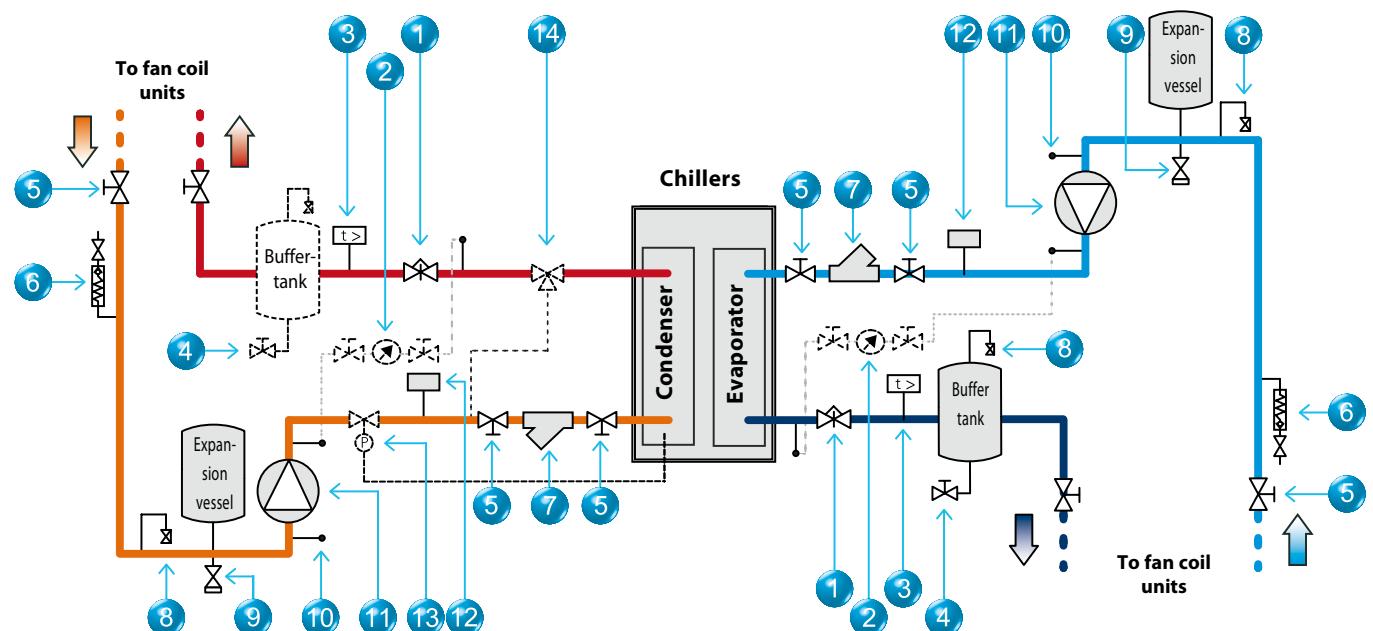
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| EWWD-I-XS | 114 | | |
| EWWD-H-XS | 116 | | |
| EWWQ-B-SS | 118 | | |
| EWWQ-B-XS | 120 | | |
| EWWD-FZXS | 122 | | |



1. Balancing valve
2. Pressure gauge
3. Temperature sensor
4. Drain valve
5. Shut-off valve
6. Fill valve
7. Filter
8. Drain
9. Safety valve
10. Pressure port
11. Pump
12. Flow switch
13. Pressure regulating valve
14. Bypass valve

PIPING DIAGRAM FOR COMFORT COOLING APPLICATION



STRENGTHS

- > Standard integrated: main switch, water filter, flow switch, air purge, pressure ports
- > Daikin scroll compressor
- > Optimised for use with R-407C
- > Electronic DDC controller
- > Low operating sound level
- > Low energy consumption
- > Extension possible up to 195 kW
- > Compact dimensions and low refrigerant volume
- > Easy installation and maintenance
- > Stainless steel plate heat exchanger
- > Remote cooling or heating selection
- > Water/water heat pump, with water reversibility
- > Compatible with hydraulic module
- > $\mu\text{C}^2\text{ SE}$ CONTROLLER
- > pCO³ controller for assembly of 2 or 3 modules

 $\mu\text{C}^2\text{ SE}$ **R-407C****FOR SINGLE MODULE UNITS**

- > Standard main isolator switch
- > Basic hydraulic components for KA-series included with the unit as a kit: flow switch, air purge, filter + shut-off valves for both condenser and evaporator

OPTIONS (FACTORY MOUNTED)

- > Chilled water temperature down to - 5°C or -10°C

ACCESSORIES (KIT)

- > Hydraulic module (see page EHMC-page in this catalogue)
- > Address card for connection to BMS or Remote user interface (EKAC10C)
- > Remote installed user interface (EKRUMCA)
- > Low noise kit 14 Hp-units (EKLS1)
- > Low noise kit 22-65 Hp units (EKLS2)

CONTROL

- > Microprocessor control
- > Water inlet temperature control
- > Cold water or hot water regulation

AVAILABLE**INPUTS / OUTPUTS****Input**

- > Remote ON / OFF
- > Pump contact
- > Cool/heat selection

Output

- > Compressor operation
- > Summary alarm
- > Pump relay contact





EWWP014-035KBW1N

EWWP090-130KBW1N

EWWP145-195KBW1N

| 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) | | 13.0 | 21.5 | 28.0 | 32.5 | 43.0 | 56.0 | 65.0 | 86.0 | 99.0 | 112 | 121 | 130 | 142 | 155 | 168 | 177 | 186 | 195 |
| HEATING CAPACITY (KW) | | 16.6 | 27.3 | 35.4 | 41.2 | 54.8 | 71.4 | 82.7 | 110 | 126 | 143 | 154 | 165 | 181 | 198 | 214 | 226 | 237 | 248 |
| UNIT + CONTROL (Factory mounted) | EWWP014KBW1N | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | EWWP022KBW1N | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | EWWP028KBW1N | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | EWWP035KBW1N | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | EWWP045KBW1N | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | EWWP055KBW1N | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| MODULAR UNITS (Controller available as accessory) | EWWP065KBW1N | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - |
| | EWWP045KAW1M | - | - | - | - | - | - | - | 2 | 1 | - | - | - | 2 | 1 | - | - | - | - |
| | EWWP055KAW1M | - | - | - | - | - | - | - | - | 1 | 2 | 1 | - | 1 | 2 | 3 | 2 | 1 | - |
| CONTROL (kit) | EWWP065KAW1M | - | - | - | - | - | - | - | - | - | 1 | 2 | - | - | - | 1 | 2 | 3 | - |
| | ECB2MUW | - | - | - | - | - | - | - | 1 | 1 | 1 | 1 | 1 | - | - | - | - | - | - |
| CONTROL (kit) | ECB3MUW | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 |

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

Heating only & Cooling only

| Capacity class | | | 014 | 022 | 028 | 035 | 045 | 055 | 065 | 090 | 100 | 110 | 120 | 130 | 145 | 155 | 165 | 175 | 185 | 195 | |
|-----------------------------------|------------------------------------|--------------------|----------------|---------------------------------------|------|-----------|---------------|-------|-----------------|-----------------|------|--------------------|-----------------|------|-------|-------|-------|-------|-------|-------|------|
| Cooling capacity | Nom. | kW | 13.0 | 21.5 | 28.0 | 32.5 | 43.0 | 56.0 | 65.0 | 86.0 | 99.0 | 112 | 121 | 130 | 142 | 155 | 168 | 177 | 186 | 195 | |
| Heating capacity | Nom. | kW | 16.6 | 27.3 | 35.4 | 41.2 | 54.8 | 71.4 | 82.7 | 110 | 126 | 143 | 154 | 165 | 181 | 198 | 214 | 226 | 237 | 248 | |
| Capacity steps number | | | 1 | | | | 2 | | | 3 | | 4 | | 5 | | 6 | | | | | |
| Power input | Cooling | Nom. | kW | 3.61 | 5.79 | 7.48 | 8.75 | 11.80 | 15.50 | 17.60 | 23.6 | 27.3 | 31.0 | 33.1 | 35.2 | 39.1 | 42.8 | 46.5 | 48.6 | 50.7 | 52.8 |
| EER | | | | 3.60 | 3.71 | 3.74 | 3.71 | 3.64 | 3.61 | 3.69 | 3.64 | 3.63 | 3.61 | 3.66 | 3.69 | 3.63 | 3.62 | 3.61 | 3.64 | 3.67 | 3.69 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 600x600x600 | | | 600x600x1,200 | | | 1,200x600x1,200 | | | 1,800x600x1,200 | | | | | | | | |
| Weight | Unit | kg | 118 | 155 | 165 | 172 | 300 | 320 | 334 | 600 | 620 | 640 | 654 | 668 | 920 | 940 | 960 | 974 | 988 | 1.002 | |
| 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 | 205 | 268 | 311 | 205 | | |
| | Water flow rate | Min. l/min | 19 | 31 | 40 | 47 | 62 | 80 | 93 | 123 | 142 | 161 | 173 | 186 | 204 | 222 | 241 | 254 | 267 | 280 | |
| | | Nom. l/min | 37 | 62 | 80 | 93 | 123 | 161 | 186 | 247 | 284 | 321 | 347 | 373 | 407 | 444 | 482 | 507 | 533 | 559 | |
| | | Max. l/min | 75 | 123 | 161 | 186 | 247 | 321 | 373 | 493 | 568 | 642 | 694 | 745 | 814 | 889 | 963 | 1,015 | 1,066 | 1,118 | |
| Water heat exchanger - condenser | Type | | | Brazed plate | | | | | | | | | | | | | | | | | |
| | Water flow rate | Min. l/min | 24 | 39 | 51 | 59 | 79 | 102 | 118 | 157 | 181 | 205 | 221 | 237 | 260 | 283 | 307 | 323 | 339 | 355 | |
| | | Nom. l/min | 48 | 78 | 102 | 118 | 157 | 205 | 237 | 314 | 362 | 410 | 442 | 474 | 519 | 567 | 614 | 647 | 679 | 711 | |
| | | Max. l/min | 95 | 157 | 203 | 237 | 314 | 410 | 474 | 629 | 724 | 819 | 883 | 948 | 1,038 | 1,133 | 1,229 | 1,293 | 1,357 | 1,422 | |
| Sound power level | Cooling | Nom. | dBA | 64 | 71 | 67 | 74 | 71 | 75 | 77 | 73 | 76 | 78 | 79 | | | | | | | |
| Compressor | Type | | | Hermetically sealed scroll compressor | | | | | | | | | | | | | | | | | |
| Operation range | Evaporator | Cooling | Min.-Max. °CDB | -10 (OPZL) ~ 25 | | | | | | | | | | | | | | | | | |
| | Condenser | Cooling | Min.-Max. °CDB | 20 ~ 55 | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | | | R-407C | | | | | | | | | | | | | | | | | |
| | Control | | | Thermostatic expansion valve | | | | | | | | | | | | | | | | | |
| Refrigerant circuit | Charge | kg | 1.2 | 2 | 2.5 | 3.1 | 4.6 | 5.6 | 9.2 | 10.2 | 11.2 | 13.8 | 14.8 | 15.8 | 16.8 | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | FBSP 25mm | | | FBSP 40mm | | | 2 x 2 FBSP 38mm | | | 3 x 2 x FBSP 38mm | | | | | | | | | |
| | Evaporator water drain | | FBSP 25mm | | | FBSP 40mm | | | 2 x 2 FBSP 38mm | | | 3 x 2 x FBSP 38mm | | | | | | | | | |
| | Condenser water inlet/outlet | | FBSP 25mm | | | FBSP 40mm | | | 2 x 2 FBSP 38mm | | | Field installation | | | | | | | | | |
| | Condenser water drain | | FBSP 25mm | | | FBSP 40mm | | | 2 x 2 FBSP 38mm | | | Field installation | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | 3N~ / 50 / 400 | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > Compact design to allow easy indoor installation or retrofit operations
- > High efficiency at full and partial load
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications



MicroTech III

STANDARD

- > Wye-delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > 20 mm evaporator insulation
- > Condenser victaulic kit
- > Condenser Water Side Design pressure 16 bar
- > Condenser 2 passes (dt 4-8 °C)
- > Evaporator flow switch
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Emergency stop
- > Setpoint reset, demand limit and alarm from external device



R-134a

OPTIONS

- > Heat pump version
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit display
- > Condenser double flanges kit
- > 20mm condenser insulation
- > Low pressure side manometers
- > Rubber anti vibration mount
- > Sound proof system (compressor)
- > Set-point reset, demand limit and alarm from external device
- > Double pressure relief valve with diverter
- > Compressor circuit breakers
- > Container kit
- > Transport kit
- > Ground fault relay
- > Soft starter
- > Liquid receiver
- > High pressure side manometers
- > CU-NI 90-10 condenser tubes

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > Modbus RTU communication module (EKCM200J)
- > LON communication module (EKCM-LON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/Remote Display HMI (EKRUPCS)





EWWD-J-SS

Heating only & Cooling only

| Capacity class | | | 120 | 140 | 150 | 180 | 210 | 250 | 280 | 310 | 330 | 360 | 380 | 400 | 450 | 500 | 530 | 560 | | | | | | | | | | | | | | |
|-----------------------------------|-------------------------------|---------------------------------------|------------------|-------------------------------|----------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|-----|--|--|--|--|--|--|--|--|--|--|--|--|
| Cooling capacity | | | Nom. | kW | 120 | 146 | 155 | 178 | 208 | 256 | 285 | 310 | 334 | 357 | 386 | 416 | 464 | 513 | 541 | 570 | | | | | | | | | | | | |
| Heating capacity | | | Nom. | kW | 142 | 172 | 188 | 216 | 249 | 305 | 340 | 377 | 405 | 432 | 466 | 499 | 554 | 610 | 645 | 681 | | | | | | | | | | | | |
| Capacity control | | | Method | | Stepless | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Minimum capacity | % | 25 | | | | | | 12.5 | | | | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kw | 27.3 | 33.3 | 38.5 | 44.2 | 49.3 | 58.7 | 68.3 | 77 | 82.7 | 88.4 | 98.6 | 98.6 | 108 | 117 | 127 | 137 | | | | | | | | | | | | | |
| | Heating | Nom. | kw | 32.9 | 40.1 | 46.4 | 53.5 | 59.57 | 71.68 | 80.75 | 92.88 | 99.9 | 107 | 113 | 119 | 131 | 143 | 152 | 162 | | | | | | | | | | | | | |
| EER | | | 4.40 | 4.38 | 4.03 | 4.03 | 4.22 | 4.37 | 4.18 | 4.03 | 4.04 | 4.04 | 3.91 | 4.22 | 4.30 | 4.38 | 4.26 | 4.16 | | | | | | | | | | | | | | |
| COP | | | 4.32 | 4.29 | 4.05 | 4.04 | 4.18 | 4.26 | 4.21 | 4.06 | 4.05 | 4.04 | 4.12 | 4.19 | 4.22 | 4.26 | 4.23 | 4.22 | | | | | | | | | | | | | | |
| ESEER | | | 5.01 | 4.67 | 4.67 | 4.66 | 4.75 | 5.20 | 4.46 | 4.80 | 4.84 | 5.00 | 4.79 | 5.17 | 5.27 | 5.37 | 5.25 | 4.81 | | | | | | | | | | | | | | |
| Dimensions | | | Unit | HeightxWidthxDepth | mm | 1,020x2,684x913 | | | | | | | | | | | | 2,000x2,684x913 | | | | | | | | | | | | | | |
| Weight | Unit | kg | 1,777 | 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 | Brazed plate, one per circuit | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water heat exchanger - evaporator | Water volume | I | 1.4 | 1.8 | 1.4 | 1.7 | 2.0 | 2.6 | 2.6 | 2.9 | 31 | 33 | 37 | 41 | 46 | 52 | 52 | 52 | | | | | | | | | | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 15 | 13 | 40 | 38 | 36 | 28 | 33 | 40 | 40 | 38 | 38 | 36 | 36 | 28 | 33 | | | | | | | | | | | | | |
| Water heat exchanger - condensor | | | Type | Double pass shell and tube | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water heat exchanger - condensor | Waterflow rate | Nom. | I/s | 7.04 | 8.57 | 9.25 | 10.62 | 13.30 | 15.06 | 16.89 | 18.49 | 19.91 | 28.28 | 23.15 | 24.59 | 27.33 | 30.10 | 31.92 | 33.78 | | | | | | | | | | | | | |
| | Nominal water pressure drop | Cooling | kPa | 20 | 12 | 11 | 11 | 11 | 16 | 26 | 11 | 11 | 11 | 11 | 11 | 11 | 16 | 16 | 26 | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | kPa | 71.4 | 71.4 | 71.4 | 71.4 | 71.4 | 70.0 | 70.0 | 74.4 | 74.4 | 74.4 | 74.4 | 74.4 | 73.8 | 73.0 | 73.0 | 73.0 | | | | | | | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 88.6 | 88.6 | 88.6 | 88.6 | 88.6 | 87.2 | 87.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 91.8 | 91.0 | 91.0 | 91.0 | | | | | | | | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | 1 | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet | 76.2mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Condenser water inlet/outlet | 2" 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | Hz/V | 3 / 50 / 400 | | | | | | | | | | | | | | | 4" | | | | | | | | | | | | | | |

STRENGTHS

- > All models are PED pressure vessel approved
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > EER values: up to 4
- > 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications



MicroTech III

STANDARD AVAILABLE

- > Wye-delta starter
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Condenser water side design pressure 16 bar
- > Electronic expansion valve
- > Suction line shut off valve
- > High pressure side manometers
- > Hour run meter
- > General fault contactor



R-134a

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Heat pump version
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Condenser double flanges kit
- > 20mm evaporator insulation
- > 20mm condenser insulation
- > Condenser victaulic kit
- > Cu-ni 90-10 condenser tubes
- > Evaporator flow switch
- > Rubber anti vibration mount
- > Sound proof system (compressor)
- > Double pressure relief valve with diverter
- > High pressure side manometers
- > Low pressure side manometers
- > Ground fault relay
- > Container kit
- > Transport kit

ACCESSORIES

- > Serial sequencing panel (EKDSSP-S)
- > Digital sequencing panel (EKDDSP)
- > Modbus RTU communication module (EKCM200J)
- > LON communication module (EKCMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/Remote Display HMI (EKRUPCS)





EWWD260G-SS

Heating only & Cooling only

| Capacity class | | | EWWD170G-SS | EWWD210G-SS | EWWD260G-SS | EWWD300G-SS | EWWD320G-SS | EWWD380G-SS | EWWD420G-SS | EWWD460G-SS | EWWD500G-SS | EWWD600G-SS | | | | | | | | | | |
|-----------------------------------|------------------------------------|----------|-------------|---------------------------------------|-------------|-----------------|-------------|-------------|-------------|-----------------|-------------|-------------|------|-----|--|--|--|--|--|--|--|--|
| Cooling capacity | | | Nom. | kW | 166 | 201 | 253 | 280 | 334 | 372 | 403 | 448 | 494 | 556 | | | | | | | | |
| Heating capacity | | | Nom. | kW | 204 | 247 | 310 | 343 | 410 | 456 | 494 | 552 | 610 | 674 | | | | | | | | |
| Capacity control | | | Method | | | | | | | | | | | | | | | | | | | |
| Minimum capacity | | | % | 25 | | | | 12.5 | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 42.2 | 50.6 | 64.9 | 75.3 | 84.3 | 93 | 101 | 115 | 129 | 150 | | | | | | | | | |
| | Heating | Nom. | kW | 52.7 | 63.5 | 80.8 | 89.2 | 106 | 117 | 127 | 144 | 161 | 177 | | | | | | | | | |
| EER | | | | 3.93 | 3.97 | 3.90 | 3.72 | 3.96 | 4.00 | 3.97 | 3.89 | 3.83 | 3.70 | | | | | | | | | |
| ESEER | | | | 5.00 | 5.04 | 4.95 | 4.72 | 5.28 | 5.33 | 5.29 | 5.19 | 5.1 | 4.93 | | | | | | | | | |
| COP | | | | 3.87 | 3.89 | 3.84 | | 3.88 | 3.91 | 3.89 | 3.84 | 3.79 | 3.81 | | | | | | | | | |
| Dimensions | | | Unit | HeightxWidthxDepth | mm | 1,860x920x3,435 | | | | 1,880x860x4,305 | | | | | | | | | | | | |
| 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 | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 87.7 | | | | 90.2 | | | | | | | | | | | | | | |
| | Sound pressure level | Cooling | Nom. | 69.7 | | | | 71.7 | | | | | | | | | | | | | | |
| Compressor | | | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | |
| Operation range | Evaporator | Cooling | Min. °CDB | -8 | | | | | | | | | | | | | | | | | | |
| | | | Max. °CDB | 15 | | | | | | | | | | | | | | | | | | |
| | Condenser | Cooling | Min. °CDB | 20 | | | | | | | | | | | | | | | | | | |
| | | | Max. °CDB | 55 | | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | | | R-134a | | | | | | | | | | | | | | | | | | |
| | Charge | | kg | 50 | 55 | 110 | 50 | 55 | 110 | | | | | | | | | | | | | |
| | Control | | | Electronic expansion valve | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | | 1 | | | | 2 | | | | | | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | 88.9 | | 114.3 | | | 139.7mm | | | | | | | | | | | | | |
| | Condenser water inlet/outlet (OD) | | | | | 5" | | | | | | | | | | | | | | | | |
| Power supply | Phase/Frequency/Voltage | | Hz/V | 3~/50/400 | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > High efficiency
- > All models are PED pressure vessel approved
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > EER values: up to 4.73
- > 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye-delta starter
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Condenser water side design pressure 16 bar
- > Electronic expansion valve
- > Suction line shut off valve
- > Hour run meter
- > General fault contactor
- > Condenser 1 pass (dT 4-8°C)
- > Discharge line shut-off valve
- > Evaporator 2 passes
- > Setpoint reset, demand limit and alarm from external device
- > Main switch interlock door
- > Emergency stop

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Heat pump version
- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Condenser double flanges kit
- > 20mm evaporator insulation
- > 20mm condenser insulation
- > Condenser victaulic kit
- > Cu-ni 90-10 condenser tubes
- > Evaporator flow switch
- > Rubber anti vibration mount
- > Sound proof system compressor
- > Double pressure relief valve with diverter
- > High pressure side manometers
- > Low pressure side manometers
- > Ground fault relay
- > Container kit
- > Transport kit



MicroTech III

SCREW



R-134a





EWW650G-XS

ACCESSORIES

- › Serial sequencing panel (EKDSSP-S)
- › Digital sequencing panel (EKDDSP)
- › Modbus RTU communication module (EKCM200J)
- › LON communication module (EKCMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/Remote Display HMI (EKRUPCS)

Heating only & Cooling only

| Capacity class | | | EWW6190G-XS | EWW6230G-XS | EWW6280G-XS | EWW6320G-XS | EWW6380G-XS | EWW6400G-XS | EWW6460G-XS | EWW6500G-XS | EWW6550G-XS | EWW650G-XS | | |
|-----------------------------------|------------------------------------|---------------------------------------|-------------|-----------------|----------------------------|-------------|-------------|-------------|-------------|-----------------|-------------|------------|--|--|
| Cooling capacity | Nom. | kW | 186 | 223 | 277 | 307 | 366 | 408 | 444 | 496 | 541 | 604 | | |
| Heating capacity | Nom. | kW | 220 | 264 | 326 | 354 | 434 | 482 | 524 | 585 | 638 | 712 | | |
| Capacity control | Method | | | | | | | | | | | | | |
| | Stepless | | | | | | | | | | | | | |
| Power input | Minimum capacity | % | 25 | | | | 12.5 | | | | | | | |
| Cooling | Nom. | kW | 50.1 | 60.6 | 74.5 | 83.7 | 99.9 | 110 | 120 | 132 | 144 | 162 | | |
| Heating | Nom. | kW | 4.70 | 4.64 | 4.66 | 4.30 | 4.62 | 4.68 | 4.67 | 4.73 | 4.72 | 4.39 | | |
| EER | | | 5.97 | 5.9 | 5.92 | 5.46 | 6.15 | 6.24 | 6.23 | 6.31 | 6.30 | 5.85 | | |
| ESEER | | | 4.38 | 4.35 | 4.38 | 4.23 | 4.34 | 4.38 | 4.42 | 4.43 | 4.43 | 4.40 | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,860x920x3,435 | | | | | | 1,880x860x4,305 | | | | |
| 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 | | | | |
| | Nominal water pressure drop | Cooling | Total | kPa | 25 | 35 | 44 | 30 | 24 | 28 | 39 | 46 | | |
| Sound power level | Cooling | Nom. | dBA | | 88.2 | | | 90.9 | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | | 69.7 | | | 71.7 | | | | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | |
| Operation range | Evaporator | Cooling | Min. | °CDB | -8 | | | | | | | | | |
| | | | Max. | °CDB | 15 | | | | | | | | | |
| | Condenser | Cooling | Min. | °CDB | 20 | | | | | | | | | |
| | | | Max. | °CDB | 55 | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | |
| | Charge | kg | | | 55 | | 110 | 105 | | 100 | | | | |
| | Control | | | | Electronic expansion valve | | | | | | | | | |
| | Circuits | Quantity | | | 1 | | | | | 2 | | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | | | | 114.3 | | 139.7 | | | 168.3mm | | | | |
| | Condenser water inlet/outlet (OD) | | | | | | 5" | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | 3~/50/400 | | | | | | | |

STRENGTHS

- > All models are PED pressure vessel approved
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > Cooling range: 333–1,510kW
- > EER values: 4.28 to 4.66
- > 1-2-3 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 for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye delta starter (y - d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Condenser water side design pressure 10 bar
- > Electronic expansion valve
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Condenser 1 pass (dt 4-8 °C)
- > Evaporator 2 passes
- > Main switch interlock door
- > Emergency stop

OPTIONS (FACTORY MOUNTED)

- > Total heat recovery
- > Partial heat recovery
- > Soft starter
- > Heat pump version
- > Brine version
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Condenser double flanges kit
- > Evaporator water side design pressure 25 bar
- > 20mm evaporator insulation
- > 20mm condenser insulation
- > Condenser victaulic kit
- > Cu-ni 90-10 condenser tubes
- > Condenser 2 passes (dt 9-15°C)
- > Evaporator flow switch
- > Condenser flow switch
- > Discharge line shut off valve
- > Suction line shut off valve
- > Container kit
- > Rubber anti vibration mount
- > Sound proof system (integral)
- > Double pressure relief valve with diverter
- > Transport kit
- > Ground fault relay
- > Compressor thermal overload relays
- > High pressure manometers
- > Low pressure manometers
- > Condenser 4 passes
- > Condenser 2 passes (dT4-8°C)



MicroTech III

screw



R-134a



ACCESSORIES

- > Serial sequencing panel (EKDSSP-S)
- > Digital sequencing panel (EKDDSP)
- > Modbus RTU communication module (EKCM200J)
- > LON communication module (EKMLON)
- > BACnet/MSTP communication module (EKMBACMSTP)
- > BACnet/IP communication module (EKMBACIP)
- > Local/Remote Display HMI (EKRUPCS)



EWWD-I-SS

Heating only & Cooling only

| Capacity class | | | EWWD340I-SS | EWWD400I-SS | EWWD460I-SS | EWWD550I-SS | EWWD650I-SS | EWWD700I-SS | EWWD800I-SS | EWWD850I-SS | EWWD900I-SS | | | | | | |
|-----------------------------------|------------------------------------|----------------------------|----------------|-------------------|-------------|-------------|-------------|-------------|-------------------|-------------|-------------|------|----|--|--|--|--|
| Cooling capacity | Nom. | kW | 333 | 394 | 460 | 538 | 640 | 705 | 782 | 844 | 910 | | | | | | |
| Heating capacity | Nom. | kW | 388 | 460 | 538 | 630 | 757 | 832 | 919 | 993 | 1,072 | | | | | | |
| Capacity control | Method | | | Stepless | | | | | 12.5 | | | | | | | | |
| | Minimum capacity | | | 25.0 | | | | | 12.5 | | | | | | | | |
| Power input | Cooling | Nom. | kW | 71.5 | 85.8 | 101 | 120 | 141 | 156 | 171 | 186 | 200 | | | | | |
| | Heating | Nom. | kW | 87.4 | 104 | 122 | 143 | 174 | 191 | 208 | 225 | 243 | | | | | |
| EER | | | | 4.66 | 4.59 | 4.56 | 4.47 | 4.53 | 4.52 | 4.57 | 4.55 | | | | | | |
| ESEER | | | | 5.06 | 4.96 | 4.93 | 4.86 | 5.54 | 5.75 | 5.56 | 5.70 | 5.47 | | | | | |
| COP | | | | 4.44 | 4.42 | 4.41 | | 4.35 | 4.36 | 4.42 | 4.41 | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,821x1,466x3,298 | | | | | 2,103x1,350x4,116 | | | | | | | | |
| Weight | Unit | kg | 2,150 | 2,160 | 2,179 | 2,224 | 3,909 | 3,927 | 3,945 | 3,971 | 3,996 | | | | | | |
| | Operation weight | kg | 2,380 | 2,396 | 2,410 | 2,457 | 4,217 | 4,228 | 4,243 | 4,262 | 4,288 | | | | | | |
| Water heat exchanger - evaporator | Type | Single pass shell and tube | | | | | | | | | | | | | | | |
| | Water volume | l | 193 | | | 183 | 172 | 271 | 263 | 256 | 248 | 241 | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 37 | 50 | 54 | 62 | 55 | 44 | 57 | 53 | 44 | | | | |
| Sound power level | Cooling | Nom. | dBA | 93.7 | 96.6 | 96.7 | | 96.9 | 97.3 | 97.8 | 98.9 | 99.8 | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 75.2 | 76.2 | 78.2 | | 77.8 | 78.2 | 78.7 | 79.8 | 80.7 | | | | | |
| Compressor | Type | Single screw compressor | | | | | | | | | | | | | | | |
| Operation range | Evaporator | Cooling | Min. | °CDB | -8 | | | | | 15 | | | | | | | |
| | | | Max. | °CDB | 15 | | | | | 20 | | | | | | | |
| | Condenser | Cooling | Min. | °CDB | 20 | | | | | 55 | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | |
| | Circuits | Quantity | 1 | | | 2 | | | 104 | | | | | | | | |
| Refrigerant circuit | Charge | kg | 54 | 52 | 51 | 50 | 108 | 106 | 104 | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | 168.3mm | | | | | | | | | | | | | | | |
| | Condenser water inlet/outlet (OD) | 5" | | | | | | | | | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | 3~/50/400 | | | | | | | | | | | | | | |

| Capacity class | | | EWWD950I-SS | EWWD10I-SS | EWWD12I-SS | EWWD13I-SS | EWWD14I-SS | EWWD15I-SS | EWWD16I-SS | EWWD17I-SS | EWWD18I-SS | | | | |
|-----------------------------------|------------------------------------|----------------------------|----------------|-------------------|------------|------------|------------|------------|-------------------|------------|------------|------|--|--|--|
| Cooling capacity | Nom. | kW | 986 | 1,027 | 1,155 | 1,204 | 1,274 | 1,346 | 1,401 | 1,455 | 1,510 | | | | |
| Heating capacity | Nom. | kW | 1,161 | 1,217 | 1,363 | 1,427 | 1,507 | 1,227 | 1,661 | 1,730 | 1,790 | | | | |
| Capacity control | Method | | | Stepless | | | | | 8.3 | | | | | | |
| | Minimum capacity | | | 12.5 | | | 8.3 | | | 4.51 | | | | | |
| Power input | Cooling | Nom. | kW | 219 | 237 | 254 | 268 | 282 | 298 | 316 | 334 | 353 | | | |
| | Heating | Nom. | kW | 262 | 282 | 309 | 326 | 344 | 363 | 383 | 401 | 420 | | | |
| EER | | | | 4.51 | 4.33 | 4.54 | 4.50 | 4.51 | | 4.43 | 4.35 | 4.28 | | | |
| ESEER | | | | 5.61 | 5.36 | 5.51 | 5.56 | | 5.54 | 5.55 | 5.45 | 5.27 | | | |
| COP | | | | 4.43 | 4.32 | 4.41 | 4.38 | | 3.38 | 4.34 | 4.31 | 4.26 | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 2,103x1,350x4,116 | | | | | 2,323x2,130x4,439 | | | | | | |
| Weight | Unit | kg | 4,080 | 4,092 | 6,079 | 6,097 | 6,136 | 6,174 | 6,192 | 6,210 | 6,228 | | | | |
| | Operation weight | kg | 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 | 233 | | | 472 | 504 | 489 | 472 | | | | | | |
| | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 54 | 39 | 52 | 55 | 46 | 57 | 62 | 66 | | | |
| Sound power level | Cooling | Nom. | dBA | 99.8 | 100.4 | 100.8 | 101.2 | 103.0 | | | 80.7 | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 80.7 | | | 80.8 | 81.2 | 83.0 | | | | | | |
| Compressor | Type | Single screw compressor | | | | | | | | | | | | | |
| Operation range | Evaporator | Cooling | Min. | °CDB | -8 | | | | | 15 | | | | | |
| | | | Max. | °CDB | 15 | | | | | 20 | | | | | |
| | Condenser | Cooling | Min. | °CDB | 20 | | | | | 55 | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | |
| | Circuits | Quantity | 2 | | | 3 | | | 150 | | | | | | |
| Refrigerant circuit | Charge | kg | 100 | | | 156 | 155 | 154 | 153 | 152 | 151 | 150 | | | |
| Piping connections | Evaporator water inlet/outlet (OD) | 168.3mm | | | | | | | | | | | | | |
| | Condenser water inlet/outlet (OD) | 5" | | | | | | | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | 3~/50/400 | | | | | | | | | | | | |

STRENGTHS

- > High efficiency
- > All models are PED pressure vessel approved
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > Cooling range: 362–1,134kW
- > EER values: 4.73 to 5.10
- > 1 or 2 truly independent refrigerant circuits
- > Standard electronic expansion valve
- > DX shell and tube evaporator – one pass refrigerant side to minimize pressure drops
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications

STANDARD AVAILABLE

- > Wye delta starter (y - d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Condenser water side design pressure 16 bar
- > Condenser 2 passes (dt 4-8 °C)
- > Electronic expansion valve
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Evaporator 2 passes
- > Emergency stop

OPTIONS (FACTORY MOUNTED)

- > Partial heat recovery
- > Soft starter
- > Heat pump version
- > Brine version
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > Condenser double flanges kit
- > 20mm evaporator insulation
- > 20mm condenser insulation
- > Condenser victaulic kit
- > Cu-ni 90-10 condenser tubes
- > Condenser 4 passes
- > Water pressure differential switch on condenser
- > Water pressure differential switch on evaporator
- > Evaporator flow switch
- > Discharge line shut off valve
- > Suction line shut off valve
- > Container kit
- > Rubber anti vibration mount
- > Sound proof system (integral)
- > Double pressure relief valve with diverter
- > High pressure side manometers
- > Low pressure side manometers
- > Ground fault relay
- > Transport kit



MicroTech III

SCREW



R-134a





EWWD-I-XS

ACCESSORIES

- › Serial sequencing panel (EKDSSP-S)
- › Digital sequencing panel (EKDDSP)
- › Modbus RTU communication module (EKCM200J)
- › LON communication module (EKMLON)
- › BACnet/MSTP communication module (EKCMBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/Remote Display HMI (EKRUPCS)

Heating only & Cooling only

| | | | EWWD-I-XS | | | | | | | | | | | | | | | | | |
|-----------------------------------|-------------------------|-------------------------|----------------|----------------------------|-------|-------|------|-------------------|-------|-------|-------|-------|-------|-------|--|--|--|--|--|--|
| Capacity class | | | 360 | 440 | 500 | 600 | 750 | 800 | 850 | 950 | C10 | C11 | C12 | | | | | | | |
| Cooling capacity | | | Nom. kW | 362 | 433 | 506 | 573 | 720 | 795 | 866 | 933 | 976 | 1,038 | 1,134 | | | | | | |
| Heating capacity | | | Nom. kW | 411 | 493 | 577 | 660 | 823 | 908 | 990 | 1,069 | 1,126 | 1,203 | 1,313 | | | | | | |
| Capacity control | | | Method | Stepless | | | | | | | | | | | | | | | | |
| Minimum capacity | | | % | 25.0 | | | | 12.5 | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 71.0 | 85.4 | 100 | 121 | 141 | 156 | 170 | 185 | 199 | 219 | 240 | | | | | | |
| | Heating | Nom. | kW | 85.9 | 103 | 121 | 143 | 172 | 189 | 206 | 223 | 240 | 263 | 285 | | | | | | |
| EER | | | | 5.10 | 5.07 | 5.06 | 4.75 | 5.09 | 5.10 | 5.08 | 5.05 | 4.90 | 4.73 | | | | | | | |
| ESEER | | | | 5.34 | 5.27 | 5.22 | 5.11 | 6.13 | 6.31 | 6.01 | 6.14 | 5.9 | 6.05 | 5.67 | | | | | | |
| COP | | | | 4.78 | 4.79 | 4.77 | 4.62 | 4.78 | 4.80 | 4.81 | 4.79 | 4.69 | 4.57 | 4.61 | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,883x1,430x4,012 | | | | 2,245x1,350x4,782 | | | | | | | | | | | | |
| 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 | | | | | | | | |
| Nominal water pressure drop | Cooling | Heat exchanger | kPa | 64 | 54 | 68 | | 58 | 68 | 56 | 64 | 72 | 46 | 52 | | | | | | |
| Water heat exchanger - condenser | | | Type | Single pass shell and tube | | | | | | | | | | | | | | | | |
| Water flow rate | Nom. | l/s | | 20.9 | 25.0 | 29.2 | 33.4 | 20.8 | 21.0 | 25.0 | | 28.3 | 33.1 | | | | | | | |
| Nominal water pressure drop | Cooling | kPa | | 48 | 67 | 51 | 66 | 48 | 67 | | | 50 | 51 | 65 | | | | | | |
| Nominal water pressure drop2 | Cooling | kPa | | - | - | - | - | 48 | 66 | 67 | 50 | 65 | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 94 | 97 | | | | 98 | 99 | 100 | | | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 75 | 76 | | 78 | 79 | 80 | 81 | | | | | | | | | | |
| Compressor | Type | Single screw compressor | | | | | | | | | | | | | | | | | | |
| Operation range | Evaporator | Cooling | Min.-Max. °CDB | -8~15 | | | | | | | | | | | | | | | | |
| | Condenser | Cooling | Min.-Max. °CDB | 20~55 | | | | | | | | | | | | | | | | |
| Refrigerant | | | Type | R-134a | | | | | | | | | | | | | | | | |
| Control | | | | - | | | | | | | | | | | | | | | | |
| Circuits | | Quantity | | 1 | | | | 2 | | | | | | | | | | | | |
| Refrigerant circuit | Charge | kg | | 90 | 87 | 85 | | 180 | 177 | 174 | 172 | 170 | | | | | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 3~/50/400 | | | | | | | | | | | | | | | | |

STRENGTHS

- > Cooling range: 369 -1,215 kW
- > Heating range: 419 - 1,356 kW
- > Condenser leaving water temperatures (CLWT) up to 65°C (optional)
- > Heat pump version available
- > Flooded type heat exchangers
- > MicroTech III controller



MicroTech III

STANDARD AVAILABLE

- > Wye delta starter (y - d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > 20mm evaporator insulation
- > Condenser victaulic kit
- > Condenser water side design pressure 10 bar
- > Condenser 2 passes (4-8°C)
- > Electronic expansion valve
- > Discharge line shut off valve
- > Hour run meter
- > General fault contactor
- > Set point reset, demand limit and alarm for external device
- > Main switch interlock door
- > Emergency stop
- > Evaporator 2 passes
- > Double pressure relief valve with diverter

screw



R-134a

OPTIONS

- > Heat pump version
- > Brine version
- > Evaporator marine waterbox victaulic or flanged (1/2/3 passes)
- > CU-NI 90-10 Condenser tubes
- > Condenser 1 pass (dT 4-8°C)
- > Condenser 3 passes
- > Suction line shut-off valve
- > High/low pressure side manometers
- > Sound proof system (integral)
- > Evaporator 1 pass / 3 passes
- > High temperature kit
- > Soft starter
- > Compressor thermal overload relays
- > Under/over voltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit
- > Water pressure differential switch on condenser/evaporator
- > Evaporator/Condenser flow switch
- > Compressor circuit breakers
- > Ground fault relay
- > Rubber anti vibration mounts
- > Container kit
- > Transport kit





EWWD-H-

ACCESSORIES

- > Serial sequencing panel (EKDSSP-S)
- > Digital sequencing panel (EKDDSP)
- > Modbus RTU communication module (EKCM200J)
- > LON communication module (EKCMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/Remote Display HMI (EKRUPCS)

Heating only & Cooling only

| Capacity class | | | 370 | 450 | 530 | 610 | 750 | 830 | 930 | 980 | C10 | C11 | C12 | | | | | | | | |
|-----------------------------------|--|--|---|---------------------------------------|-------------------|-----------------------|-----------------------|-------------------|-------------------|-------------------|-------|-------|-------|-------|-------|--|--|--|--|--|--|
| Cooling capacity | | | Nom. kW | 369 | 445 | 521 | 608 | 748 | 827 | 932 | 978 | 1,050 | 1,133 | 1,215 | | | | | | | |
| Heating capacity | | | Nom. kW | 419 | 505 | 589 | 687 | 837 | 924 | 1,036 | 1,093 | 1,173 | 1,265 | 1,356 | | | | | | | |
| Capacity control | | | Method | Stepless | | | | | Stepless | | | | | | | | | | | | |
| Power input | | | Minimum capacity % | 25 | | | | 12.5 | | | | | | | | | | | | | |
| Power input | | | Cooling Nom. kW | 62.8 | 75.4 | 87.0 | 101 | 125 | 138 | 151 | 163 | 174 | 188 | 201 | | | | | | | |
| | | | Heating Nom. kW | 84.5 | 101 | 117 | 136 | 159 | 175 | 192 | 206 | 221 | 238 | 255 | | | | | | | |
| EER | | | | 5.88 | 5.90 | 5.99 | 6.02 | 5.98 | 5.99 | 6.17 | 6.00 | 6.03 | | 6.04 | | | | | | | |
| ESEER | | | | 6.44 | 6.47 | 6.56 | 6.57 | 7.16 | 7.23 | 7.32 | 7.37 | 7.40 | 7.43 | 7.42 | | | | | | | |
| COP | | | | 4.96 | 4.98 | 5.03 | 5.06 | 5.28 | 5.27 | 5.40 | 5.30 | 5.31 | 5.32 | 5.31 | | | | | | | |
| Dimensions | | | Unit | HeightxWidthxDepth mm | 2,121x1,353x3,341 | 2,121x1,353 x3,419 | 2,048x1,384 x3,417 | 2,048x1,689x3,609 | 2,048x1,711x3,609 | 2,161x1,711x3,509 | | | | | | | | | | | |
| Weight | | | Unit | kg | 3,089 | 3,370 | 3,603 | 3,781 | 5,289 | 5,375 | 5,654 | 5,707 | 6,066 | 6,105 | 6,156 | | | | | | |
| | | | Operation weight | kg | 3,250 | 3,588 | 3,870 | 4,163 | 5,694 | 5,835 | 6,174 | 6,262 | 6,709 | 6,773 | 6,859 | | | | | | |
| Water heat exchanger - evaporator | | | Type | Flooded shell & tube | | | | | | | | | | | | | | | | | |
| | | | Water volume l | 78 | 107 | 134 | 160 | 172 | 201 | 261 | 272 | 295 | 310 | 327 | | | | | | | |
| | | | Nominal water pressure drop Cooling kPa | 48 | 40 | 38 | 42 | 48 | 40 | 38 | 35.0 | | | 37.0 | 40 | | | | | | |
| Water heat exchanger - condenser | | | Type | Flooded Shell & Tube | | | | | | | | | | | | | | | | | |
| | | | Water flow rate Nom. l/s | 20.63 | 24.86 | 29.05 | 33.87 | 41.71 | 46.11 | 51.74 | 54.52 | 58.48 | 63.12 | 67.65 | | | | | | | |
| | | | Nominal water pressure drop Cooling kPa | 35 | 30 | 32 | 28 | 34 | 30 | 37 | 35.0 | 33.0 | | 35 | | | | | | | |
| Sound power level | | | Cooling Nom. dBA | 96.7 | 97.7 | 98.7 | 99.1 | 100.2 | 100.7 | 101.2 | 101.7 | 102.2 | 102.7 | | | | | | | | |
| Sound pressure level | | | Cooling Nom. dBA | 78.0 | 79.0 | 80.0 | | 81.0 | 81.5 | 82.0 | 82.5 | 83.0 | 83.5 | | | | | | | | |
| Compressor | | | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | |
| Operation range | | | Evaporator Cooling | Min.-Max. °CDB | -8~15 | | | | 18~65 | | | | | | | | | | | | |
| | | | Condenser Cooling | Min.-Max. °CDB | 18~65 | | | | | | | | | | | | | | | | |
| Refrigerant | | | Type | R-134a | | | | | | | | | | | | | | | | | |
| | | | Charge kg | 210 | 190 | 180 | 210 | 220 | 250 | 300 | | 330 | | | | | | | | | |
| | | | Circuits Quantity | 1 | | | | | | | | | | | | | | | | | |
| Piping connections | | | Evaporator water inlet/outlet mm | 168.3 | | | | 219.1 | | | | | | | | | | | | | |
| | | | Condenser water inlet/outlet inch | 6 | | | | 8 | | | | | | | | | | | | | |
| Power supply | | | Phase/Frequency/Voltage Hz/V | 3~/50/400 | | | | | | | | | | | | | | | | | |

STRENGTHS

- › All models are PED pressure vessel approved
- › 1 or 2 stepless single-screw compressors
- › 1 or 2 truly independent refrigerant circuits
- › Optimised for use with R-410A
- › Standard electronic expansion valve
- › Compact design
- › Partial heat recovery available
- › MicroTech III controller



MicroTech III

STANDARD AVAILABLE

- › Wye Delta Starter (Y-D)
- › Double setpoint
- › Phase monitor
- › Evaporator victaulic kit
- › Evaporator Water side design pressure 10 bar
- › Evaporator Water side design pressure 16 bar
- › Electronic expansion valve
- › Hour run meter
- › General fault contactor
- › Set-point reset, demand limit & alarm from external device
- › Double pressure relief valve with diverter
- › Evaporator 2 passes
- › Main switch interlock door
- › Emergency stop



R-410A

OPTIONS

- › Partial heat recovery
- › Soft starter
- › Brine version
- › Compressor thermal overload relays
- › Under/overvoltage control
- › Energy meter
- › Capacitors for power factor correction
- › Current limit - display
- › 20mm evaporator insulation
- › 20mm condenser insulation
- › Condenser victaulic kit
- › Cu-ni 90-10 condenser tubes
- › Evaporator electric heater
- › Evaporator flow switch
- › Discharge line shut off valve
- › Suction line shut off valve
- › Container kit
- › Rubber anti vibration mount
- › Sound proof system (integral)
- › Condenser double flanges kit
- › High pressure side manometers
- › Low pressure side manometers
- › Ground fault relay
- › Transport kit

ACCESSORIES

- › Serial sequencing panel (EKDSSP-S)
- › Digital sequencing panel (EKDDSP)
- › Modbus RTU communication module (EKCM200J)
- › LO N communication module (EKCMLON)
- › BACnet/MSTP communication module (EKCBACMSTP)
- › BACnet/IP communication module (EKCMBACIP)
- › Local/Remote Display HMI (EKRUPCS)





EWWQC19,C20B-SS

Cooling only

| Capacity class | | | 380 | 460 | 560 | 640 | 730 | 800 | 860 | 870 | 960 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C19 | C20 | |
|-----------------------------------|-------------------------------|--------------------|----------------|-------------------|-------|-------------------|-----------------------|-----------------------|-----------------------|-------------------|-----------------------|-----------------------|-------|-------------------|-------|-------|-------------------|-------|-------------------|-------|-------|-------|
| Cooling capacity | Nom. | kW | 380 | 464 | 562 | 637 | 727 | 796 | 862 | 872 | 960 | 1,007 | 1,055 | 1,185 | 1,255 | 1,325 | 1,460 | 1,584 | 1,748 | 1,888 | 2,050 | |
| Capacity control | Method | | | | | | | | | | | | | | | | | | | | | |
| | Minimum capacity | % | | | | | | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 85.6 | 104 | 128 | 144 | 166 | 172 | 202 | 190 | 209 | 240 | 232 | 256 | 274 | 290 | 333 | 367 | 401 | 432 | 466 |
| EER | | | | 4.44 | 4.46 | 4.40 | 4.41 | 4.37 | 4.64 | 4.26 | 4.59 | 4.60 | 4.19 | 4.55 | 4.62 | 4.59 | 4.56 | 4.38 | 4.32 | 4.36 | 4.37 | 4.40 |
| ESEER | | | | 5.16 | 5.21 | 5.22 | 4.95 | 5.64 | 4.83 | 5.63 | 5.59 | 4.76 | 5.6 | 5.61 | 5.62 | 5.55 | 5.18 | 5.06 | 5.11 | 5.07 | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,849x1,140x3,373 | | 2,001x1,276x3,454 | 1,848x1,314 x3,355 | 2,158x1,350 x5,020 | 1,848x1,314 x2,001 | 2,158x1,350x5,020 | 1,848x1,314 x2,001 | 2,378x1,350 x4,894 | | 2,455x1,350x5,070 | | | 2,495x1,350x4,892 | | 2,495x1,350x4,865 | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | |
| | Water volume | l | | 124 | 118 | 176 | 170 | 274 | 344 | 266 | 344 | 325 | 251 | 325 | | | 538 | | 505 | 495 | 539 | 527 |
| | Nominal water pressure drop | Cooling | kPa | 47 | 63 | 43 | 46 | 53 | 52 | 48 | 62 | 57 | 55 | 67 | 43 | 48 | 53 | 58 | 67 | 86 | 95 | 119 |
| Water heat exchanger - condenser | Type | | | | | | | | | | | | | | | | | | | | | |
| | Water flow rate | Nom. | l/s | 22.2 | 27.2 | 32.9 | 37.3 | 42.7 | 23.1 | 50.9 | 23.4 | 27.9 | 59.6 | 27.6 | 34.3 | 33.4 | 38.4 | 42.6 | 42.7 | 51 | 50.8 | 59.8 |
| | Nominal water pressure drop | Cooling | kPa | 58 | 62 | 66 | 63 | 15 | 62 | 19 | 62 | 65 | 25 | 65 | 70 | 67 | | | 16 | | 14 | |
| | Nominal water pressure drop2 | Cooling | kPa | | | - | | 62 | - | 65 | | 67 | 70 | 67 | 16 | 18 | 16 | | 14 | | | |
| Sound power level | Cooling | Nom. | dBA | 100.2 | 101.2 | 102.3 | 101.5 | 104.7 | 102.3 | 104.7 | 105.1 | 103.2 | 104.7 | 105.2 | 106.5 | 105.8 | 106.2 | 106.6 | 107.1 | 107.5 | | |
| Sound pressure level | Cooling | Nom. | dBA | 82.2 | 83.0 | 83.9 | 83.2 | 84 | 84.9 | 85.2 | 85 | 85.6 | 86 | 86.5 | 86.9 | 86.2 | 86.6 | 87.0 | 87.5 | 87.9 | | |
| Compressor | Type | | | | | | | | | | | | | | | | | | | | | |
| | Evaporator | Cooling | Min.-Max. °CDB | | | | | | | | | | | | | | | | | | | |
| | Condenser | Cooling | Min.-Max. °CDB | | | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | | | | | | | | | | | | | | | | R-410A | | | | | |
| | Charge | kg | | 80 | | 90 | | 80 | | | | | | | | | | - | | | | |
| | Control | | | | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | | | | | | 1 | | 2 | 1 | | | | | | 2 | | | | | |
| Refrigerant circuit | Charge | kg | | | | | | - | | 80 | | 90 | | 85 | | 100 | 95 | 100 | | | 130 | |
| Refrigerant circuit 2 | Charge | kg | | | | | | - | | 80 | - | 90 | | 85 | | 100 | 95 | 100 | | | 130 | |
| Piping connections | Evaporator water inlet/outlet | | | | | | | | | | | | | | | | | - | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > High efficiency
- > All models are PED pressure vessel approved
- > 1 or 2 stepless single-screw compressors
- > 1 or 2 truly independent refrigerant circuits
- > Shell and tube heat exchanger
- > Optimised for use with R-410A
- > Standard electronic expansion valve
- > Compact design
- > Partial heat recovery available
- > MicroTech III controller

STANDARD AVAILABLE

- > Wye Delta Starter (Y-D)
- > Double setpoint
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator Water side design pressure 10 bar
- > Condenser Water side design pressure 16 bar
- > Electronic expansion valve
- > High pressure side manometers
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit & alarm from external device
- > Double pressure relief valve with diverter
- > Evaporator 2 passes
- > Emergency stop
- > Main switch interlock door

OPTIONS

- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under/overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > 20mm evaporator insulation
- > 20mm condenser insulation
- > Condenser victaulic kit
- > Cu-ni 90-10 condenser tubes
- > Evaporator electric heater
- > Evaporator flow switch
- > Discharge line shut off valve
- > Suction line shut off valve
- > Container kit
- > Rubber anti vibration mount
- > Sound proof system (integral)
- > Ground fault relay
- > Transport kit

ACCESSORIES

- > Serial sequencing panel (EKDSSP-S)
- > Digital sequencing panel (EKDDSP)
- > Modbus RTU communication module (EKCM200J)
- > LO N communication module (EKCMLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/Remote Display HMI (EKRUPCS)



MicroTech III

SCREW



R-410A





EWWQC19-C22B-XS

Cooling only

| Capacity class | | | 420 | 520 | 640 | 730 | 800 | 970 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C19 | C20 | C21 | | | | | | |
|-----------------------------------|--|--|-------------------------------|---------------------------------------|----------------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|-------------------|-------------------|-------|-------------------|-------|-------|------------------|-------------------|------------------|-------|-----|--|--|
| Cooling capacity | | | Nom. | kW | 422 | 516 | 639 | 725 | 801 | 973 | 1,037 | 1,116 | 1,158 | 1,270 | 1,369 | 1,449 | 1,573 | 1,733 | 1,863 | 2,020 | 2,152 | | | | |
| Capacity control | | | Method | Stepless | | | | | 12.5 | | | | | | | | | | | | | | | | |
| | | | Minimum capacity | % | 25 | | | | | 205 | 227 | 228 | 252 | 269 | 286 | 315 | 349 | 382 | 417 ¹ | 451 | | | | | |
| Power input | | | Cooling | Nom. | kW | 84.9 | 102 | 126 | 143 | 159 | 193 | 205 | 227 | 228 | 252 | 269 | 286 | 315 | 349 | 382 | 417 ¹ | 451 | | | |
| EER | | | | | | 4.97 | 5.03 | 5.09 | 5.07 | 5.05 | | 5.06 | 4.91 | 5.07 | 5.04 | 5.08 | 5.07 | 4.99 | 4.96 | 4.87 | 4.84 | 4.77 | | | |
| ESEER | | | | | | 5.86 | 5.88 | 5.97 | 5.95 | 5.89 | 5.66 | 6.18 | 5.54 | 6.13 | | 6.28 | 6.23 | 5.92 | 6 | 5.73 | 5.78 | 5.64 | | | |
| Dimensions | | | Unit | HeightxWidthxDepth | mm | 2,001x1,276x3,863 | 2,001x1,268 x3,878 | 2,003x1,314 x3,878 | 2,003x1,446 x3,919 | 2,454x1,350 x5,219 | 2,003x1,446 x3,919 | 2,454x1,350x5,219 | 2,454x1,350x5,219 | 2,495x1,350x4,829 | | 2,495x1,350x4,865 | | | | 2,495x1,350x4,865 | | | | | |
| 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 | Shell and tube | | | | | | | | | | | | | | | | | | | | | |
| | | | Water volume | l | 220 | 213 | 200 | 334 | 325 | 538 | 587 | 538 | 575 | 563 | 551 | | 495 | 484 | 535 | 527 | | | | | |
| | | | Nominal water pressure drop | Cooling | Heat exchanger | kPa | 57 | 70 | 73 | 65 | 58 | 55 | 70 | | 65 | 56 | 68 | 76 | 71 | 91 | 93 | 115 | 129 | | |
| Water heat exchanger - condenser | | | Type | Shell and tube | | | | | | | | | | | | | | | | | | | | | |
| | | | Water flow rate | Nom. | I/s | 24.2 | 29.5 | 36.5 | 41.4 | 45.8 | 55.7 | 29.5 | 64.2 | 29.6 | 36.3 | 36.7 | 41.2 | 44.9 | 44.6 | 53.3 | 53.2 | 61.9 | | | |
| | | | Nominal water pressure drop | Cooling | | kPa | 50 | 40 | 41 | 46 | 60 | 64 | 39 | 84 | 35 | 48 | 49 | 46 | 43 | | 60 | 52 | 78 | | |
| | | | Nominal water pressure drop | Cooling | | kPa | - | | | | | | | | | | | | | | | | | | |
| Sound power level | | | Cooling | Nom. | dBA | 100.9 | 101.7 | 102.6 | 102.7 | 102.0 | 102.9 | 105.2 | 103.8 | 105.6 | 106.1 | 106.5 | | 105.8 | 106.2 | 106.6 | 107.1 | 107.5 | | | |
| Sound pressure level | | | Cooling | Nom. | dBA | 82.2 | 83.0 | 83.9 | | 83.2 | 84.0 | 85.6 | 84.9 | 86.0 | 86.5 | 86.9 | | 86.2 | 86.6 | 87.0 | 87.5 | 87.9 | | | |
| Compressor | | | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | | | |
| Operation range | | | Evaporator | Cooling | Min.-Max. | °CDB | -4~10 | | | | | | | | | | | | | | | | | | |
| | | | Condenser | Cooling | Min.-Max. | °CDB | 25~45 | | | | | | | | | | | | | | | | | | |
| Refrigerant | | | Type | R-410A | | | | | | | | | | | | | | | | | | | | | |
| | | | Control | - | | | | | | | | | | | | | | | | | | | | | |
| | | | Circuits | Quantity | 2 | | | | | | | | | | | | | | | 2 | | | | | |
| Refrigerant circuit | | | Charge | kg | 130 | | | | | | | | | | | | | | | 130 | | | | | |
| Refrigerant circuit 2 | | | Charge | kg | 130 | | | | | | | | | | | | | | | 130 | | | | | |
| Piping connections | | | Evaporator water inlet/outlet | - | | | | | | | | | | | | | | | | - | | | | | |
| Power supply | | | Phase/Frequency/Voltage | Hz/V | 3~/50/400 | | | | | | | | | | | | | | | - | | | | | |

STRENGTHS

- > Wide capacity range from 114 to 1,048 kW
- > An inverter driven compressor allows the capacity to be adjusted precisely to match variations in room and outside temperatures
- > Top seasonal efficiency (ESEER up to 9.60)
- > Onboard digital electronics provide smart controls

STANDARD AVAILABLE

- > Evaporator – 2 passes configuration
- > Evaporator Victaulic kit
- > Evaporator water side design pressure 10 bar
- > 20mm evaporator insulation
- > Condenser – 2 passes configuration
- > Condenser Victaulic kit
- > Condenser water side design pressure 10 bar
- > Electronic expansion valve
- > Water pressure differential switch on evaporator and condenser
- > Inverter compressor starter
- > Double pressure relief valve with diverter
- > Current limit
- > Hour run meter
- > General fault contactor
- > Set-point reset,demand limit and alarm from external device

OPTIONS

- > Evaporator 1/3 passes
- > Evaporator double flange kit
- > Evaporator marine water box (victaulic)
- > Evaporator water side design pressure 21 bar
- > Condenser 1/3 passes
- > Condenser double flange kit
- > Condenser marine water box (victaulic)
- > 20mm condenser insulation
- > Cu-Ni 90-10 condenser tubes
- > Evaporator/Condenser Flow switch
- > Suction line shut off valve
- > Energy Meter
- > Rubber type antivibration mounts
- > Sound proof system (integral)
- > Transport kit
- > Container kit
- > High pressure side manometers
- > Low pressure side manometers

centrifugal



R-134a

INVERTER





EWWD320-C10FZXS

ACCESSORIES

- › EKDSSP*** Serial Sequencing Panel
- › EKDDSP Digital Sequencing Panel
- › EKPWPRO PlantWatchPRO monitoring system
- › EKPWPROM PlantWatchPRO monitoring system (modem & webserver included)
- › EKAC200J Serial Card RS485/Modbus
- › EKACBAC Ethernet Card BACnet
- › EKACLON Serial Card LON FTT 10 (chiller profile pre-loaded)
- › EKACRS232 Serial Card RS232 Modem Interface (single unit only)
- › EKACWEB Web Server Card
- › EKACBACMSTP Serial Card BACnet MSTP
- › EKCON Converter RS485 to RS232
- › EKCONUSB Converter RS485 to USB
- › EKMODEM Fixed modem
- › EKGSMOD GSM modem
- › EKRUPCK Remote display kit
- › EKPWPROEXT PlantWatchPro I/O extension module for hardwiring and retrofit
- › EKGWWEB Gateway web (Ethernet LAN SNMP)
- › EKGWMODEM Gateway for modem

Cooling only

| Capacity class | | | 320 | 430 | 520 | 640 | 860 | C10 |
|-----------------------------------|-------------------------------|--|----------------|-------------------|-------|----------------------------|-------------------|-------------------|
| Cooling capacity | Min. | kW | 114 | 128 | 172 | 114 | 128 | 172 |
| | Max. | kW | 317 | 429 | 521 | 635 | 856 | 1,048 |
| Capacity control | | | | | | | | |
| Power input | Cooling | Min. | kW | 21.6 | 27.7 | 33.1 | 21.6 | 27.7 |
| | Cooling | Max. | kW | 65.9 | 85.7 | 104 | 132 | 171 |
| EER | | | | 5.40 | | 6.00 | 5.40 | 5.50 |
| ESEER | | | | 8.60 | | 9.40 | 8.80 | 8.60 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,823x1,276x3,254 | | 1,823x1,276x3,419 | 1,755x1,790x3,441 | 1,748x1,853x3,289 |
| Weight | Unit | | kg | 2,360 | 2,416 | 2,546 | 3,709 | 4,095 |
| | Operation weight | | kg | 2,520 | 2,634 | 2,812 | 4,074 | 4,548 |
| Water heat exchanger - evaporator | Type | Flooded shell and tube (2 passes) | | | | | | |
| Nominal water pressure drop | Cooling | Heat exchanger | kPa | 30 | 31 | 23 | 18 | 21 |
| Water heat exchanger - condenser | Type | Flooded shell and tube (2 passes) | | | | | | |
| Water flow rate | Nom. | | l/s | 18.3 | 24.6 | 29.9 | 36.7 | 49.1 |
| Nominal water pressure drop | Cooling | | kPa | 24 | 25 | 28 | 24 | 25 |
| Sound power level | Cooling | Nom. | dBA | 89.0 | 90.1 | 91.2 | 92.4 | 93.6 |
| Sound pressure level | Cooling | Nom. | dBA | 70.9 | 72.0 | 73.0 | 73.8 | 75.1 |
| Compressor | Type | Oil free centrifugal compressor with magnetic bearings | | | | | | |
| Operation range | Evaporator | Cooling | Min.-Max. °CDB | | | 2~15 | | |
| | Condenser | Cooling | Min.-Max. °CDB | | | 18~46 | | |
| Refrigerant | Type | R-134a | | | | | | |
| Charge | | kg | | 210 | 190 | 180 | 220 | 300 |
| Control | | | | | | Electronic expansion valve | | |
| Circuits | Quantity | | | | | 1 | | |
| Piping connections | Evaporator water inlet/outlet | | mm | 168.3 | | 219.1 | | 273 |
| | Condenser water inlet/outlet | | mm | 168.3 | | | 219.1 | |
| Power supply | Phase / Frequency / Voltage | | Hz / V | | | 3~ / 50 / 400 | | |

R-134a

INVERTER



DAIKIN WATER COOLED CHILLERS WITH CENTRIFUGAL COMPRESSORS

- › Single compressor unit up to 4.5MW
- › Dual compressor unit on single circuit up to 9MW
- › Optional variable speed drives (VFD) for superior partload performance
- › Compressor unloading down to 5% for dual compressor units and 10% for single compressor units without hot gas bypass
- › Control flexibility for easy integration into BMS

WIDE CHOICE OF CAPACITIES AND EFFICIENCIES

Single compressor

- › D-DWSC: 300 kW - 4,500 kW - Approximately 1.1 million possible chiller offerings with combination options of motors, impellers, gears and vessels

Dual compressor

- › D-DWDC: 600 kW - 9,000 kW - Approximately 0.75 million possible chiller offerings with combination options of motors, impellers, gears and vessels

VARIABLE FREQUENCY DRIVE OPTION (VFD)

- › Inverter technology greatly improving part load efficiency
- › Reducing annual energy costs

HIGH EFFICIENCY

- › COP up to 7 at full load
- › COP up to 12 at partial load
(when coupled with inverter VFD)

UNMATCHED UNLOADING

Unloading to 10% of full load for a D-DWSC single compressor chiller and 5% for a D-DWDC dual compressor unit, without using inefficient hot gas bypass. This unloading capability provides improved stability of the chilled water temperature and less harmful cycling of compressors.

The movable discharge diffuser increases stability and reduces vibrations.



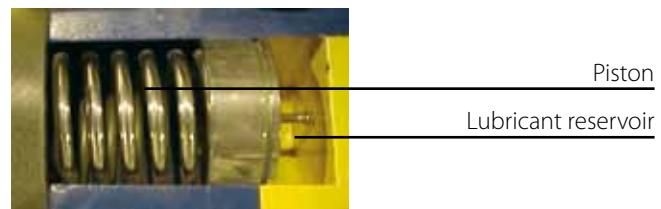
Moveable diffuser closing off impeller discharge area

POWER LOSS DAMAGE PROTECTION

Power failures do not allow chillers to proceed through their normal shutdown sequence. Poor lubrication at this point can damage the bearings and reduce compressor life. The compressors are equipped with a lubricant reservoir and a piston with a compressed spring which provides pressurized lubricant to the bearings during the coast-down period. Also, the compressors decelerate quickly due to the low inertia.

REFRIGERANT STORAGE CAPABILITY

The condensers are sized to hold the entire chiller refrigerant charge and are provided with the necessary valves to isolate this charge. This feature eliminates the need for separate storage vessels in most applications.



LOW OPERATIONAL SOUND LEVEL

Liquid Injection

A small amount of liquid refrigerant is taken from the condenser and injected into the compressor discharge area. The liquid droplets absorb sound energy and reduce the compressor's overall operational sound level. The droplets evaporate and reduce discharge superheat.

Quieter as chiller unloads

Daikin's design results in a reduction in sound levels at lower loads, where most chillers spend most of their operating hours.

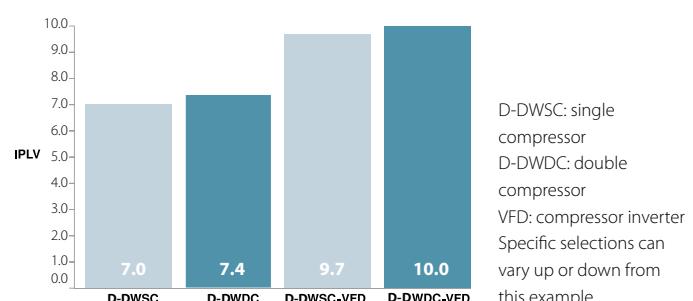
ONE D-DWDC DUAL COMPRESSOR CHILLER VERSUS TWO SINGLE COMPRESSOR CHILLERS

- › Lower equipment costs than two separate chillers
- › Lower installation cost than two separate chillers
- › Lower annual operating cost than either one large or two small chillers
- › Less equipment room space required than for two separate chillers (smaller footprint)
- › Capacity reduction to 5% of design value
- › Standby redundancy for most of the cooling season options of motors, impellers, gears and vessels

EXCELLENT PART LOAD EFFICIENCY

When one compressor is running, it is able to utilize the heat transfer area of the entire chiller, twice the amount found on a single compressor chiller. This huge amount of surface provides exceptional part load efficiency. The addition of VFDs to the dual compressor chiller produces a very high ARI certified Integrated Part Load Value (IPLV).

PARTIAL LOADS EFFICIENCY FOR 2,000 KW CENTRIFUGAL UNIT



R-134a

centrifugal



IN-HOUSE DEVELOPED MAGNETIC BEARING COMPRESSOR

Centrifugal compressor

- › Industry's highest full load efficiency
- › Best part load efficiency when coupled with a variable frequency drive
- › One moving part (rotor - shaft assembly)

Unit mounted Variable Frequency Drive (VFD)

- › Very high part load efficiency
- › Great unloading capability
- › Automatic speed adjustment
- › Soft start

Magnetic bearing technology

- › No friction loss
- › No oil contamination
- › No additional oil management systems
- › Increased equipment life



WIDE CHOICE OF CAPACITIES AND EFFICIENCIES

DWME chillers can be selected with different combination of the main components such as the compressor size, the exchangers, the electrical motor, etc. A selected unit, at fixed evaporator and condenser conditions, will provide cooling capacity, power input, EER, etc. depending on the compressor speed of rotation. A dedicated selection tool is available to perform the unit selection at the real working conditions. DWME boast outstanding energy efficiencies, at both full and part load.

| SIZE | COOLING CAPACITY |
|-------|------------------|
| 500S | 1,400 - 1,900 kW |
| EER * | up to 6.50 |
| ESEER | up to 10.0 |

* at Eurovent conditions:
Evaporator water In/Out 12/7°C, Condenser water In/Out 30/35°C



QUIET OPERATION

- › 76~82dB(A) of sound level at 1 meter (according to AHRI standard 575)
- › DWME chillers are ideal for sound sensitive environments such as libraries, schools, etc

SMART CONTROL

- › On-board advanced electronics allow smart control also in case of power failure
- › User friendly touch screen operator interface

EXTENSIVE PORTFOLIO OF OPTIONS

Standard options

- › Water-side vessel construction of 150psi
- › Copper evaporator and condenser tubes
- › 0.025 inches tube thickness
- › Victaulic connections
- › 2 pass heat exchangers
- › Single insulation $\frac{3}{4}$ inches on evaporator, suction and discharge piping
- › Water differential pressure switches
- › Sound insulation
- › EMI filter

Options (on request)

- › Water-side vessel construction of 300psi
- › 0.028/0.035 inches tube thickness
- › 90/10 Cu-Ni condenser tubes (only with 0.028/0.035 tube thickness)
- › Flanged connections
- › Marine water boxes
- › 1 or 3 pass heat exchangers
- › Double insulation $1\frac{1}{2}$ inches on evaporator
- › Pumpout unit
- › Refrigerant monitor
- › Low THD (Harmonics)
- › High short circuit current rating
- › Ground fault protection
- › Input power mete

Condenserless Chiller

Daikin offers you flexible and compact chillers with remote condenser, which can be used to satisfy applications with special requirements in the field of available space, sound level or extreme operating conditions. In these exceptional cases, remote condenser solutions can be preferred over standard air cooled or water cooled solutions.

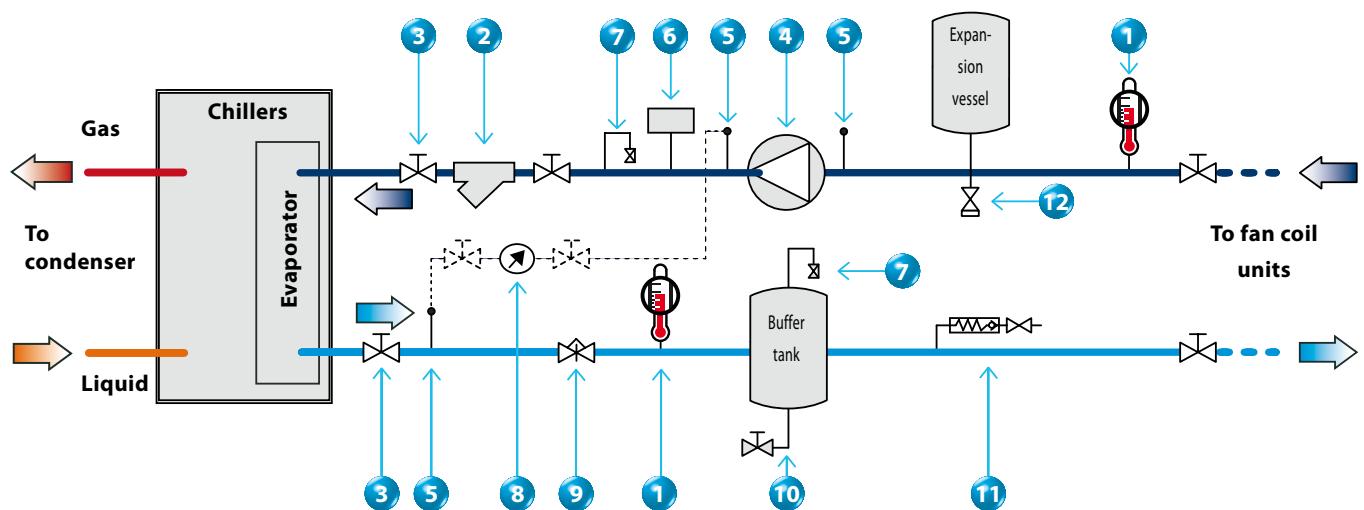
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1. Temperature sensor
2. Filter
3. Shut-off valve
4. Pump
5. Pressure port
6. Flow switch
7. Drain
8. Pressure gauge
9. Water flow adjusting valve
10. Drain valve
11. Fill valve
12. Safety valve

PIPING DIAGRAM FOR COMFORT COOLING APPLICATION



STRENGTHS

- > Daikin scroll compressor
- > Optimised for use with R-407C
- > Electronic DDC controller
- > Low operating sound level
- > Low energy consumption
- > Compact dimensions and low refrigerant volume
- > Easy installation and maintenance
- > Stainless steel plate heat exchanger
- > Compatible with hydraulic module
- > For EWLP012-065KBW1N following components are standard included: main switch, pressure ports, flow switch, filter, shut-off valves and air purge
- > μ C² SE controller



OPTIONS (FACTORY MOUNTED)

- > Chilled water temperature down to - 5°C or -10°C

scroll



R-407C

ACCESSORIES (KIT)

- > Hydraulic module
(see page EHMC-page in this catalogue)
- > Address card for connection to BMS or
Remote user interface (EKAC10C)
- > Remote installed user interface (EKRUMCA)
- > Low noise kit 14 Hp-units (EKLS1)
- > Low noise kit 22-65 Hp units (EKLS2)

CONTROL

- > Microprocessor control
- > Water inlet
temperature control
- > Cold water or hot water regulation

AVAILABLE

INPUTS / OUTPUTS

Input

- > Remote ON / OFF
- > Pump contact
- > Cool/heat selection

Output

- > Compressor operation
- > Summary alarm
- > Pump relay contact





EWLP012-030KBW1N

Cooling only

| Capacity class | | | 012 | 020 | 026 | 030 | 040 | 055 | 065 |
|----------------------|------------------------------------|----------|---------------------------------------|--------------------|------------------------------|------|--------------|-------------------|------|
| Capacity | Cooling | kW | 12.1 | 20.0 | 26.8 | 31.2 | 40.0 | 53.7 | 62.4 |
| Power input | Cooling | kW | 4.2 | 6.6 | 8.5 | 10.1 | 13.4 | 17.8 | 20.3 |
| Capacity Steps | | | | 1 | | | | 2 | |
| EER | | | 2.88 | 3.03 | 3.15 | 3.09 | 2.99 | 3.02 | 3.07 |
| Dimensions | Height x Width x Depth | mm | | 600 x 600 x 600 | | | | 600 x 600 x 1,200 | |
| Weight | Machine weight | kg | 108 | 141 | 147 | 151 | 252 | 265 | 274 |
| Water Heat Exchanger | Type | | | Brased plate | | | | | |
| Evaporator | Minimum water volume in the system | l | 62 | 103 | 134 | 155 | 205 | 268 | 311 |
| | Water flow rate | Min | 17 | 29 | 38 | 45 | 57 | 77 | 89 |
| | | Nominal | 35 | 57 | 77 | 89 | 115 | 154 | 179 |
| | | Max | 69 | 115 | 153 | 179 | 229 | 307 | 358 |
| Compressor | Type | | Hermetically sealed scroll compressor | | | | | | |
| | Model | Quantity | | 1 | | | 2 | | |
| Sound Power | Cooling | dBA | | 64 | 71 | 67 | | 74 | |
| Operation Range | Evaporator | Min-Max | °CDB | | -10(OPZL) ~ 20 | | | | |
| | Condensing temperature | Min~Max | °CDB | | 25 ~ 60 | | | | |
| Refrigerant circuit | Refrigerant type | | | | R-407C | | | | |
| | No of circuits | | | 1 | | | 2 | | |
| | Refrigerant control | | | | Thermostatic expansion valve | | | | |
| Power Supply | | | | 3N~/400V/50Hz | | | | | |
| Piping connections | Evaporator water inlet/outlet | mm | | FBSP 25 | | | | FBSP 40 | |
| | Evaporator water drain | | | Field installation | | | | | |
| | Liquid line connection | mm | 9.52 flare | 12.7 flare | | | 2x12.7 flare | | |
| | Discharge line connection | mm | 12.7 flare | 19.1 flare | | | 2x19.1 flare | | |

STRENGTHS

- > Compact design to allow easy indoor installation or retrofit operations
- > High efficiency at full and partial load
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications



MicroTech III

STANDARD

- > Wye-delta starter (y-d)
- > Double set point
- > Phase monitor
- > Evaporator victaulic kit
- > 20 mm evaporator insulation
- > Evaporator flow switch
- > Electronic expansion valve
- > Discharge line shut off valve
- > Suction line shut off valve
- > Hour run meter
- > General fault contactor
- > Main switch interlock
- > Emergency stop

SCREW



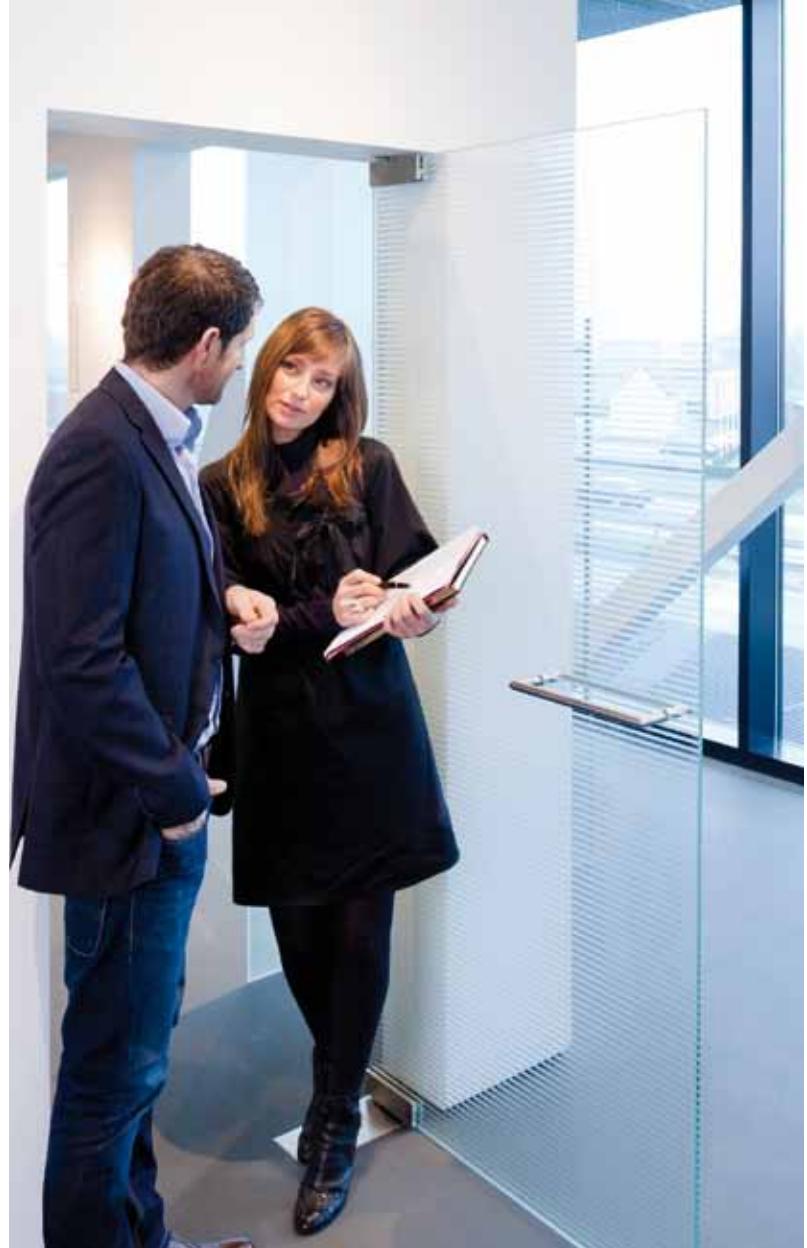
R-134a

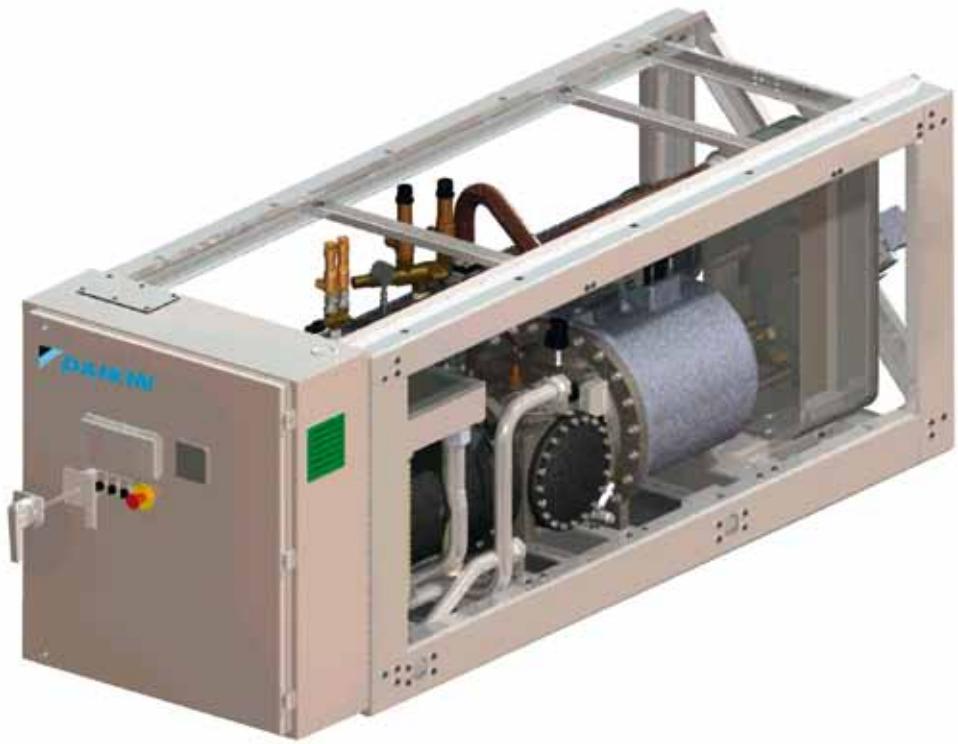
OPTIONS

- > Brine version
- > Compressor thermal overload relays
- > Under / overvoltage control
- > Energy meter
- > Current limit display
- > Low pressure side manometers
- > Rubber anti vibration mount
- > Sound proof system (compressor)
- > Set-point reset, demand limit and alarm from external device
- > Double pressure relief valve with diverter
- > Automatic circuit breakers
- > Liquid receiver
- > High pressure side manometers
- > Soft starter
- > Container kit
- > Transport kit
- > Ground fault relay
- > Compressor circuit breakers

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > Modbus RTU communication module (EKCM200J)
- > LON communication module (EKCLON)
- > BACnet/MSTP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/Remote Display HMI (EKRUPCS)





EWLD120J-SS

Cooling only

| Capacity class | | | 110 | 130 | 145 | 165 | 195 | 235 | 265 | 290 | 310 | 330 | 360 | 390 | 430 | 470 | 500 | 530 | | | | | |
|-----------------------------------|--|--|------------------------------------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|--|--|--|--|
| Cooling capacity | | | Nom. kW | 110 | 128 | 143 | 164 | 192 | 237 | 265 | 286 | 307 | 328 | 356 | 383 | 429 | 474 | 502 | 530 | | | | |
| Power input | | | Cooling Nom. kw | 30.9 | 38.0 | 43.3 | 49.8 | 55.3 | 65.2 | 74.5 | 86.5 | 93.0 | 99.5 | 105 | 111 | 121 | 130 | 140 | 149 | | | | |
| EER | | | | 3.55 | 3.36 | 3.31 | 3.30 | 3.47 | 3.63 | 3.56 | 3.31 | 3.30 | 3.30 | 3.39 | 3.47 | 3.56 | 3.63 | 3.59 | 3.56 | | | | |
| Dimensions | | | HeightxWidthxDepth mm | 1,020x2,684x913 | | | | | | | | 2,000x2,684x913 | | | | | | | | | | | |
| Weight | | | Unit kg | 1,124 | 1,141 | 1,237 | 1,263 | 1,305 | 1,489 | 1,489 | 2,474 | 2,500 | 2,526 | 2,568 | 2,611 | 2,795 | 2,979 | 2,979 | 2,979 | | | | |
| | | | Operation weight kg | 1,138 | 1,159 | 1,253 | 1,281 | 1,327 | 1,518 | 1,518 | 2,505 | 2,533 | 2,562 | 2,608 | 2,655 | 2,845 | 3,036 | 3,036 | 3,036 | | | | |
| Water heat exchanger - evaporator | | | Type | | | | | | | | | | | | | | | | | | | | |
| Sound power level | | | Cooling Nom. dBA | 71.4 | 71.4 | 71.4 | 71.4 | 71.4 | 70.0 | 70.0 | 74.4 | 74.4 | 74.4 | 74.4 | 74.4 | 73.8 | 73.0 | 73.0 | 73.0 | | | | |
| Sound pressure level | | | Cooling Nom. dBA | 88.6 | 88.6 | 88.6 | 88.6 | 88.6 | 87.2 | 87.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 91.8 | 91.0 | 91.0 | 91.0 | | | | |
| Compressor | | | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | |
| Refrigerant | | | Type | R-134a | | | | | | | | | | | | | | | | | | | |
| | | | Circuits Quantity | 1 | | | | | | 2 | | | | | | | | | | | | | |
| Piping connections | | | Evaporator water inlet/outlet | 3" | | | | | | | | | | | | | | | | | | | |
| Power supply | | | Phase / Frequency / Voltage Hz / V | 3 / 50 / 400 | | | | | | | | | | | | | | | | | | | |

STRENGTHS

- > Cooling range: 161-526kW
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > 1 or 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
- > MicroTech III controller



MicroTech III

STANDARD AVAILABLE

- > Wye Delta starter (Y-D)
- > Double setpoint
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator Water side design pressure 10 bar
- > Electronic expansion valve
- > Suction line shut off valve
- > Hour run meter
- > General fault contactor



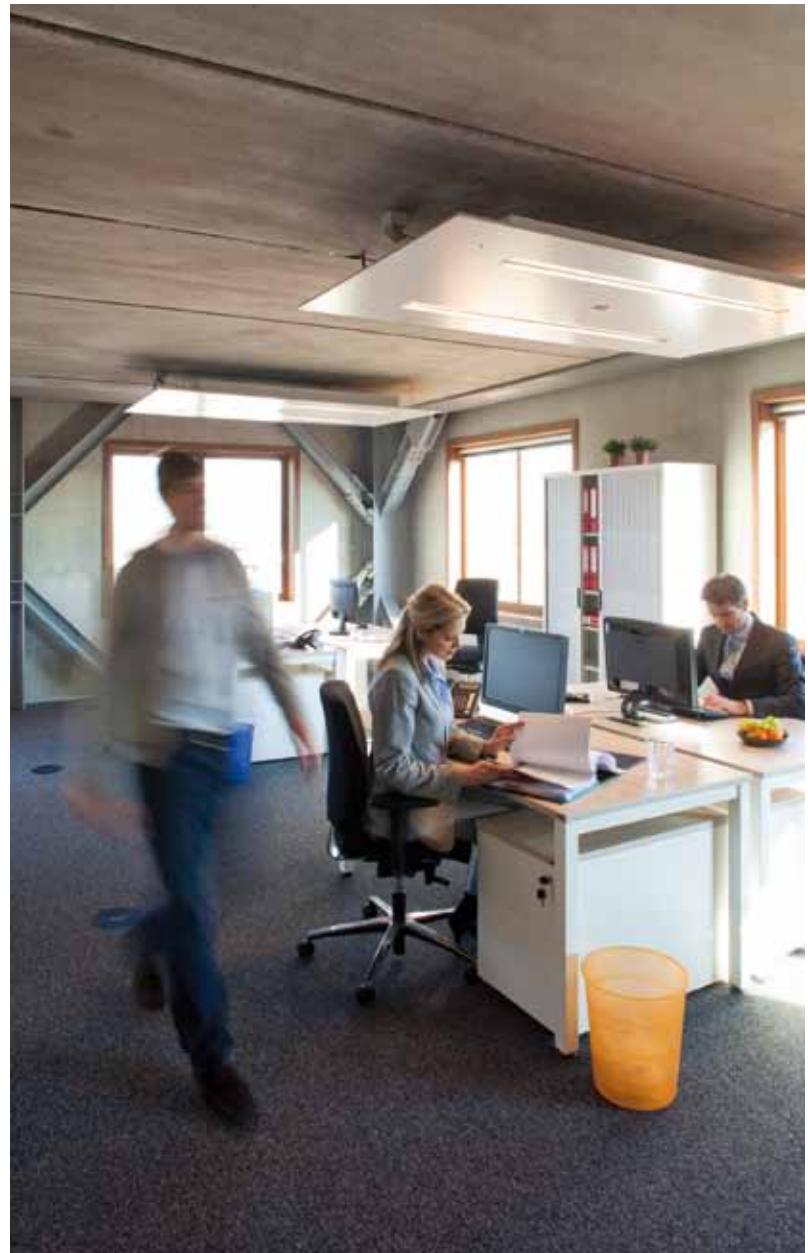
R-134a

OPTIONS

- > Partial heat recovery
- > Soft starter
- > Brine version
- > Compressor thermal overload relays
- > Under/ overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > 20mm evaporator insulation
- > Evaporator flow switch
- > Transport kit
- > Rubber anti vibration mount
- > Sound proof system
- > Double pressure relief valve with diverter
- > Liquid receiver
- > High pressure side manometers
- > Low pressure side manometers
- > Ground fault relay
- > Container kit

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > Modbus RTU communication module (EKCM200J)
- > LON communication module (EKCLON)
- > BACnet/MTSP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/Remote Display HMI (EKRUPCS)





EWLD~G-SS

Cooling only

| Capacity class | | | 160 | 190 | 240 | 280 | 320 | 360 | 380 | 420 | 480 | 550 | | | | | | |
|-----------------------------------|------------------------------------|--------------------|-------------------|---------------------------------------|--------|---------------------|-------------------|----------|----------|------------|----------|----------|------------|----------|--|--|--|--|
| Cooling capacity | Nom. | | kW | 161 | 189 | 244 | 270 | 316 | 352 | 381 | 428 | 476 | 526 | | | | | |
| Capacity steps | % | | stepless 25 - 100 | | | stepless 12.5 - 100 | | | | | | | | | | | | |
| Power input | Cooling | | kW | 45.4 | 54.3 | 65.9 | 74.6 | 90.6 | 99.7 | 108.6 | 120 | 131.5 | 148 | | | | | |
| EER | | | | 3.54 | 3.48 | 3.70 | 3.62 | 3.48 | 3.53 | 3.51 | 3.57 | 3.62 | 3.55 | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,860x1,000x3,700 | | | 1,942x1,100x4,400 | | | | | | | | | | | |
| 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 | Minimum water volume in the system | | | l | 1,151 | 1,354 | 1,749 | 1,938 | 1,130 | 1,262 | 1,365 | 1,535 | 1,704 | 1,884 | | | | |
| | Water flow rate | Min. | | l/min | 230.20 | 270.90 | 349.74 | 387.58 | 452.22 | 504.83 | 546.25 | 613.90 | 681.84 | 753.80 | | | | |
| | | Nom. | | l/min | 460.39 | 541.81 | 699.47 | 775.16 | 904.44 | 1,009.65 | 1,092.50 | 1,227.81 | 1,363.69 | 1,507.60 | | | | |
| | Nominal water pressure drop | Max. | | l/min | 649.15 | 763.95 | 986.26 | 1,092.97 | 1,275.27 | 1,423.61 | 1,540.42 | 1,731.21 | 1,922.80 | 2,125.71 | | | | |
| | | Cooling | Heat exchanger | kPa | 48 | 69 | 43 | 53 | 64 | 63 | 72 | 54 | 68 | | | | | |
| | Model | | | Quantity | | | 1 | | | | | | | | | | | |
| | Type | | | EV19270055 | | | EV27270066 | | | EV27270088 | | | EV32270099 | | | | | |
| | Type | | | Shell and tube - direct expansion | | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 88 | | | 90.5 | | | | | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 69.7 | | | 71.7 | | | | | | | | | | | |
| Compressor | Type | | | Semi-hermetic single screw compressor | | | | | | | | | | | | | | |
| Operation range | Evaporator | Cooling | Min.-Max. °CDB | -8~15 | | | | | | | | | | | | | | |
| | Condenser | Cooling | Min.-Max. °CDB | 25~60 | | | | | | | | | | | | | | |
| Refrigerant | Type | | | R-134a | | | | | | | | | | | | | | |
| | Charge | | | kg | | | 5 | | | 10 | | | | | | | | |
| | Control | | | Electronic expansion valve | | | | | | | | | | | | | | |
| | Circuits | Quantity | | 1 | | | 2 | | | | | | | | | | | |
| Piping connections | Evaporator water inlet/outlet | | | 88.9 | | | 114.3 | | | 139.7 | | | | | | | | |
| Power supply | Phase / Frequency / Voltage | | Hz / V | 3~/50/400 | | | | | | | | | | | | | | |

STRENGTHS

- > Cooling range: 328–1,422kW
- > EER range: 3.51 to 3.91
- > Stepless single-screw compressor
- > Optimised for use with R-134a
- > 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
- > MicroTech III controller for superior control logic and an easy interface with LonWorks, Bacnet, Ethernet TCP/IP or Modbus communications



MicroTech III

STANDARD AVAILABLE

- > Wye Delta Starter (Y-D)
- > Double setpoint
- > Phase monitor
- > Evaporator victaulic kit
- > Evaporator water side design pressure 10 bar
- > Electronic expansion valve
- > High pressure side manometers
- > Hour run meter
- > General fault contactor
- > Set-point reset, demand limit and alarm from external device
- > Evaporator 2 passes
- > Main switch interlock door
- > Emergency stop



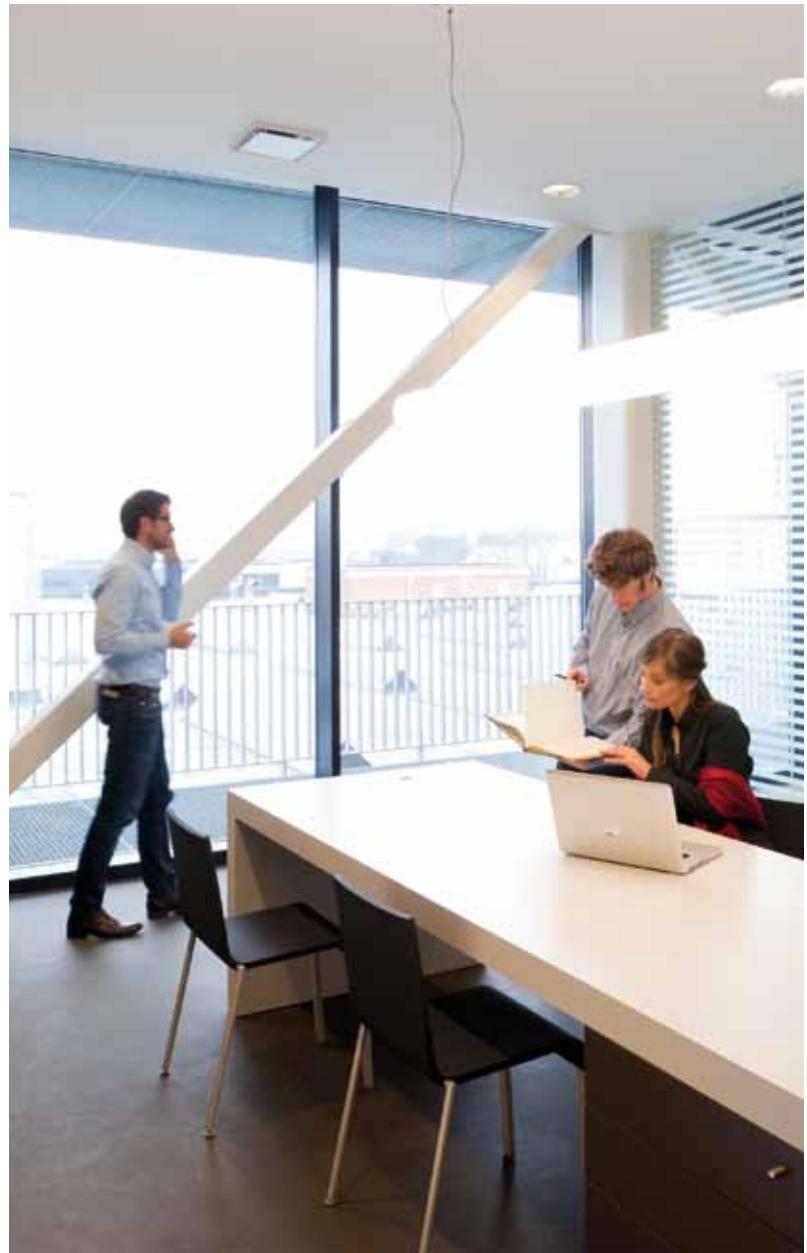
R-134a

OPTION

- > Soft starter
- > Brine version
- > Under / overvoltage control
- > Energy meter
- > Capacitors for power factor correction
- > Current limit - display
- > 20mm evaporator insulation
- > Evaporator flow switch
- > Discharge line shut off valve
- > Suction line shut off valve
- > Container kit
- > Rubber anti-vibration mount
- > Sound proof system (integral)
- > Double pressure relief valve with diverter
- > Liquid receiver
- > High pressure side manometers
- > Low pressure side manometers
- > Compressor thermal overload relays
- > Transport kit

ACCESSORIES

- > Serial Sequencing Panel (EKDSSP-S)
- > Digital Sequencing Panel (EKDDSP)
- > Modbus RTU communication module (EKCM200J)
- > LON communication module (EKCMLON)
- > BACnet/MTSP communication module (EKCMBACMSTP)
- > BACnet/IP communication module (EKCMBACIP)
- > Local/Remote Display HMI (EKRUPCS)



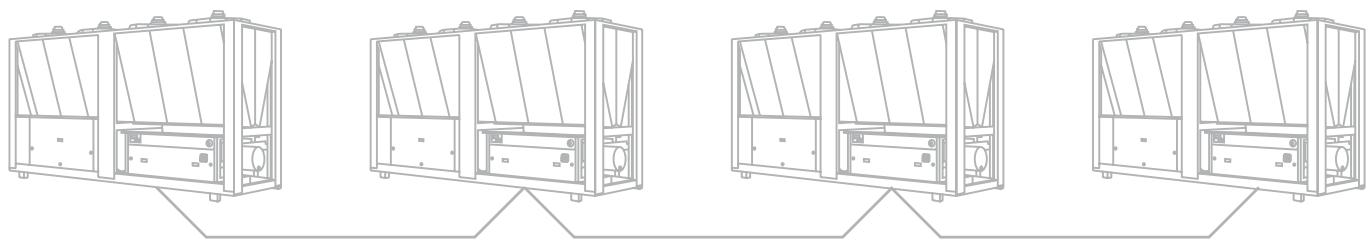
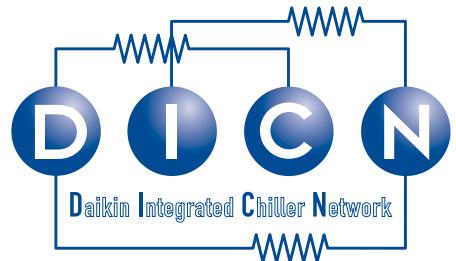


EWLD~I-SS

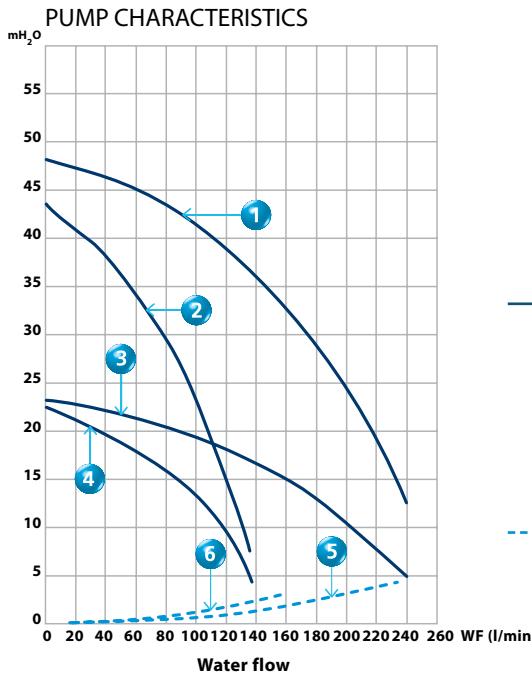
Cooling only

| EWLD-I-SS | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|------------------------------------|---------------------------------------|-----------|-------------------|-------|-------|-------|-------------------|-------|-------|-------|-------------------|----------|-------|-------|-------------------|-------|-------|---------|-------|-------|-----|
| Capacity class | | | 320 | 400 | 420 | 500 | 600 | 650 | 750 | 800 | 850 | 900 | 950 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | |
| Cooling capacity | Nom. | kW | 328 | 391 | 428 | 504 | 596 | 657 | 730 | 788 | 850 | 919 | 966 | 1,033 | 1,078 | 1,125 | 1,188 | 1,267 | 1,319 | 1,370 | 1,422 | |
| Capacity control | Method | | | | | | | | | | | | Stepless | | | | | | | | | |
| | Minimum capacity | | % 25 | | 12.5 | | 8.3 | | | | | | | | | | | | | | | |
| Power input | Cooling | Nom. | kW | 83.8 | 100 | 116 | 137 | 165 | 181 | 198 | 214 | 231 | 252 | 271 | 279 | 296 | 312 | 329 | 347 | 366 | 386 | 405 |
| EER | | | | 3.91 | 3.9 | 3.7 | 3.67 | 3.61 | 3.63 | 3.69 | 3.67 | 3.65 | 3.56 | 3.59 | 3.64 | 3.60 | 3.61 | 3.65 | 3.6 | 3.55 | 3.51 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 1,899x1,468x3,114 | | | | 2,323x1,350x4,116 | | | | 2,415x2,128x4,427 | | | | 2,415x2,135x4,426 | | | | | | |
| 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 | Water volume | l | | 193 | 183 | 172 | 271 | 263 | 256 | 248 | 241 | 233 | 504 | 489 | 472 | 504 | 489 | 472 | | | | |
| | Nominal water pressure drop | Cooling | Total | kPa | 34 | 47 | 54 | 49 | 39 | 52 | 47 | 45 | 52 | 46 | 49 | 41 | 51 | 55 | 59 | 63 | | |
| | Type | Single pass shell and tube | | | | | | | | | | | | | | | | | | | | |
| Sound power level | Cooling | Nom. | dBA | 93.7 | 96.6 | 96.7 | 96.9 | 97.3 | 97.8 | 98.9 | 99.8 | 100.4 | 100.8 | 101.2 | 103 | | | | | | | |
| Sound pressure level | Cooling | Nom. | dBA | 75.2 | 76.2 | 78.2 | 77.8 | 78.2 | 78.7 | 79.8 | 80.7 | 80.4 | 80.8 | 81.2 | 83 | 80.4 | 80.8 | 81.2 | 83 | | | |
| Compressor | Type | Semi-hermetic single screw compressor | | | | | | | | | | | | | | | | | | | | |
| Operation range | Evaporator | Cooling | Min. °CDB | -8 | | | | | | | | | | | | | | | | | | |
| | | | Max. °CDB | 15 | | | | | | | | | | | | | | | | | | |
| | Condenser | Cooling | Min. °CDB | 25 | | | | | | | | | | | | | | | | | | |
| | | | Max. °CDB | 60 | | | | | | | | | | | | | | | | | | |
| Refrigerant | Type | R-134a | | | | | | | | | | | | | | | | | | | | |
| | Charge | kg | | 5 | | | | | | | | | | | | | | | | | | |
| | Circuits | Quantity | | 1 | | | | 2 | | | | | | | | | 3 | | | | | |
| Piping connections | Condenser water inlet/outlet (OD) | - | | | | | | | | | | | | | | | | | | | | |
| | Evaporator water inlet/outlet (OD) | 168.3mm | | | | | | | | | | | | | | | | | 219.1mm | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 3~/50/400 | | | | | | | | | | | | | | | | | | |

Daikin chillers can be equipped with Daikin Integrated Chiller Network (DICN) which allows the simultaneous operation of up to 4 chillers as if they were a single unit, in order to deliver the required cooling capacity. This results in precise and efficient capacity control and is also useful for back up purposes, ensuring that the necessary amount of cooling is available and guaranteeing reliable operation of the chiller plant. This function enables a Daikin chiller plant to be operated via a single controller. Please note that DICN is only possible within the same series.

**APPLICABLE SERIES:**

- › EWAQ080-260DAYN (R-410A)
- › EWYQ080-250DAYN (R-410A)



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

STRENGTHS

- > 100l buffer tank
- > Freeze-up protection (heater tape)
- > Single pump
- > 12l expansion vessel
- > Standard dual pressure ports

Hydraulic module

| EHMC-AV | 10 | | 15 | | 30 | |
|--------------------|--------------------|------|---------|---------------|-------|-------------|
| | 1010 | 1080 | 1010 | 1080 | 1010 | 1080 |
| Nominal flow | l/min | 62 | | 88 | | 187 |
| Nominal ESP | mH ₂ O | 17 | 34 | 15 | 27 | 10 |
| Nominal input | W | 630 | 1,050 | 650 | 1,070 | 1,070 |
| Dimensions (HxWxD) | mm | | | 1,284x635x688 | | 2,090 |
| Machine weight | kg | 99 | 101 | 102 | 104 | 105 |
| Sound power | dBA | | | 63 | | |
| Sound pressure | dBA | | | 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" | | |

Buffer tank

The Daikin EKBT is a hydraulic kit for in- or outdoor installation. It is designed to be installed with EUWA/Y-KBZW1 series, in closed systems, and can be used for water and glycol applications.

| MODEL | Description | Volume | Dimensions | Unit weight |
|-----------|--------------------------|--------|-------------------|-------------|
| EKBT | Buffer tank with cabinet | 200l | 1,284x637x754 | 86,5 |
| EKBTC500N | Buffer tank | 500l | 710x1,670 | 70 |
| EKBTC10N | Buffer tank | 1,000l | 860x2,020 | 100 |
| EKBTC500C | Buffer tank with cabinet | 500l | 1,200x1,200x1,950 | 160 |
| EKBTC10C | Buffer tank with cabinet | 1,000l | 1,200x1,450x1,950 | 185 |

Fan Coil Units

Fan Coil Units are a highly efficient means of turning a water chiller, heat pump or hot water boiler into an efficient, quiet air conditioning system. These units are an effective solution to provide a comfortable environment for both commercial and residential applications.

Daikin offers a wide range of Fan Coil Units for both concealed and exposed applications. Three models are available in flexible application.

The only moving part in the units is the fan, making them ideal for use in offices, hotels and at home. The goal is to obtain the right solution, both technically and aesthetically.

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FAN COIL UNITS PRODUCT PORTFOLIO

| Reference | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 16 | 18 | 20 | 22kW |
|-----------|--------|---------|---|---|---|---|------------------------|-----------------------------|---|---|---|----|----|----|----|----|----|------|
| FWC-BT/BF | 2-pipe | cooling | | | | | | 06 - 07 - 08 - 09 | | | | | | | | | | |
| | | heating | | | | | | 06 - 07 - 08 - 09 - 10 - 19 | | | | | | | | | | |
| | 4-pipe | cooling | | | | | 06 - 07 - 08 - 09 | | | | | | | | | | | |
| | | heating | | | | | 06 - 07 - 08 - 09 - 10 | | | | | | | | | | | |
| FWF-BT/BF | 2-pipe | cooling | | 02 - 03 - 04 - 05 | | | | | | | | | | | | | | |
| | | heating | | 02 - 03 - 04 - 05 | | | | | | | | | | | | | | |
| | 4-pipe | cooling | | 02 - 03 - 04 - 05 | | | | | | | | | | | | | | |
| | | heating | | 02 - 03 - 04 - 05 | | | | | | | | | | | | | | |
| FWC-AT/AF | 2-pipe | cooling | | | | | | 07 - 08 - 10 - 11 - 12 | | | | | | | | | | |
| | | heating | | | | | | 07 - 08 - 10 - 11 - 12 | | | | | | | | | | |
| | 4-pipe | cooling | | 0203 - 04 - 05 - 06 | | | | | | | | | | | | | | |
| | | heating | | 0203 - 04 - 05 - 06 | | | | | | | | | | | | | | |
| FWF-CT | 2-pipe | cooling | | 02 - 03 - 04 | | | | | | | | | | | | | | |
| | | heating | | 02 - 03 - 04 | | | | | | | | | | | | | | |
| FWB-BT | 2-pipe | cooling | | 02 - 03 - 04 - 05 - 06 - 07 - 08 - 09 - 10 | | | | | | | | | | | | | | |
| | | heating | | 02 - 03 - 04 - 05 - 06 - 07 - 08 - 09 - 10 | | | | | | | | | | | | | | |
| | 4-pipe | cooling | | 02 - 03 - 04 - 05 - 06 - 07 - 08 - 09 - 10 | | | | | | | | | | | | | | |
| | | heating | | 02 - 03 - 04 - 05 - 06 - 07 - 08 - 09 - 10 | | | | | | | | | | | | | | |
| FWB-JT/JF | 2-pipe | cooling | | 02 - 03 - 04 - 05 - 06 - 07 - 08 - 09 - 10 - 11 | | | | | | | | | | | | | | |
| | | heating | | 02 - 03 - 04 - 05 - 06 - 07 - 08 - 09 - 10 - 11 | | | | | | | | | | | | | | |
| | 4-pipe | cooling | | 02 - 03 - 04 - 05 - 06 - 07 - 08 - 10 | | | | | | | | | | | | | | |
| | | heating | | 02 - 03 - 04 - 05 - 06 - 07 - 08 - 10 | | | | | | | | | | | | | | |
| FWT-BT | 2-pipe | cooling | | 02 - 03 - 04 - 05 - 06 | | | | | | | | | | | | | | |
| | | heating | | 02 - 03 - 04 - 05 - 06 | | | | | | | | | | | | | | |
| FWL-DT/DF | 2-pipe | cooling | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | | heating | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | 4-pipe | cooling | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | | heating | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| FWM-DT/DF | 2-pipe | cooling | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | | heating | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | 4-pipe | cooling | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | | heating | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| FWD-AT/AF | 2-pipe | cooling | | 04 - 06 - 08 - 10 - 12 - 16 - 18 | | | | | | | | | | | | | | |
| | | heating | | 04 - 06 - 08 - 10 - 12 - 16 - 18 | | | | | | | | | | | | | | |
| | 4-pipe | cooling | | 04 - 06 - 08 - 10 - 12 - 16 - 18 | | | | | | | | | | | | | | |
| | | heating | | 04 - 06 - 08 - 10 - 12 - 16 - 18 | | | | | | | | | | | | | | |
| FWV-DT/DF | 2-pipe | cooling | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | | heating | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | 4-pipe | cooling | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |
| | | heating | | 01 - 02 - 03 - 04 - 06 - 08 - 10 | | | | | | | | | | | | | | |

FAN COIL UNIT - ACCESSORIES

| | FWM-DT/DF / FWL-DT/DF / FWV-DT/DF | | | | | | | | FWD-AT/AF | | | | | | FWB-BT | | | | FWT-BT | FWC-AT/AF | FWC-BT/BF | FWF-CT | FWF-BT/BF | | | |
|---|-----------------------------------|---|---|---|---|---|----|---|-----------|---|----|----|----|----|--------|-----|------|-----------|-----------|-----------|-----------|-------------------|-----------|-------------------|---|--|
| | 1 | 2 | 3 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 12 | 16 | 18 | 2-4 | 5-7 | 8-10 | All sizes | All sizes | | | |
| Network & control systems | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wired remote controller (Standard) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wired remote controller (Advanced) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wired remote controller (Advanced Plus) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Controller electromechanical | | | | | | | | | | | | | | | | | | | | | | | | | | |
| On board mounting kit | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wall mounting kit | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wired remote controller (Cooling only) | - | | | | | | | | | | | | | | | | | | SRC-COB | SRC-COB | - | SRC-COB | - | | | |
| Wired remote controller (Heat pump) | - | | | | | | | | | | | | | | | | | | SRC-HPB | SRC-HPB | - | SRC-HPB | - | | | |
| Wireless controller (Cooling only) | - | | | | | | | | | | | | | | | | | | WRC-COB | - | - | - | - | - | | |
| Wireless controller (Heat pump) | - | | | | | | | | | | | | | | | | | | WRC-HPB | - | - | - | - | - | | |
| Temperature sensor kit | | | | | | | | | | | | | | | | | | | | - | - | - | - | - | - | |
| Relative humidity sensor kit | | | | | | | | | | | | | | | | | | | | - | - | - | - | - | - | |
| Fan stop thermostat | | | | | | | | | | | | | | | | | | | | - | - | - | - | - | - | |
| Master slave interface | | | | | | | | | | | | | | | | | | | | - | - | - | - | - | - | |
| Power interface | - | | | | | | | | | | | | | | EPIB6 | | | | - | - | | EKFCMBCB7 | - | EKFCMBCB7 | | |
| Optional PCB for MOD-bus connection | - | | | | | | | | | | | | | | | | | | - | - | | EKFCMBCB | - | EKFCMBCB | | |
| Remote control - Infrared - H/P | - | | | | | | | | | | | | | | | | | | - | - | | BRC7E532F | - | BRC7E530 | | |
| Remote control - Infrared - C/O | - | | | | | | | | | | | | | | | | | | - | - | | BRC7E533F | - | BRC7E531 | | |
| Central remote control + electrical box with earth terminal (3 blocks) | - | | | | | | | | | | | | | | | | | | - | - | | DCS302CA51+J0831A | - | DCS302CA51+J0831A | | |
| Unified on/off controller + electrical box with earth terminal (2 blocks) | - | | | | | | | | | | | | | | | | | | - | - | | DCS301BA51+J0812A | - | DCS301BA51+J0812A | | |
| Schedule timer | - | | | | | | | | | | | | | | | | | | - | - | | DST301BA51 | - | DST301BA51 | | |
| Intelligent touch controller + electrical installation box | - | | | | | | | | | | | | | | | | | | - | - | | DCS601CS1C+J0841A | - | DCS601CS1C+J0841A | | |
| Remote sensor | - | | | | | | | | | | | | | | | | | | - | - | | KRCS01-1 | - | KRCS01-1 | | |
| Remote "On/Off" and "forced off" kit | - | | | | | | | | | | | | | | | | | | - | - | | EKROROA | - | EKROROA | | |
| Valve control PCB | - | | | | | | | | | | | | | | | | | | - | - | | EKRP1C11 | - | EKRP1C11 | | |
| Optional PCB for MOD-bus connection | - | | | | | | | | | | | | | | | | | | - | - | | EKFCMBCB7 | - | EKFCMBCB7 | | |
| Wiring adapter for electrical appendices | - | | | | | | | | | | | | | | | | | | - | - | | KRP2A52/KRP4AA53 | - | KRP2A52/KRP4AA53 | | |

| | FWM-DT/DF / FWL-DT/DF / FWV-DT/DF | | | | | | | | FWD-AT/AF | | | | | | | | | | | | |
|---|-----------------------------------|---|---|----------|---|---|-----------|----------|-----------|-----------|----------|----|----|-----------|---|---|-----------|----|--------------|----|--------------|
| | 1 | 2 | 3 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 12 | 16 | 18 | 4 | 6 | 8 | 10 | 12 | 16 | 18 |
| Valves | | | | | | | | | | | | | | | | | | | | | |
| 3-way on/off valve kit (2-pipe) | | | | E2MV03A6 | | | | E2MV06A6 | | | E2MV10A6 | | | ED2MV04A6 | | | ED2MV10A6 | | ED2MV12A6 | | ED2MV18A6 |
| 3-way on/off valve kit (4-pipe) | | | | E4MV03A6 | | | | E4MV06A6 | | | E4MV10A6 | | | ED4MV04A6 | | | ED4MV10A6 | | 2x ED2MV12A6 | | 2x ED2MV18A6 |
| 2-way on/off valve kit (cooling heat exchanger) | | | | | | | E2MV207A6 | | | E2MV210A6 | | | | | | | | | | | |

| | FWB-BT | | | FWB-JT/JF | | | FWC-AT/AF | | | FWC-BT/BF | | | FWF-CT | | | FWF-BT/BF | | | | | |
|--|--------|-----|-----------|-----------|--|-----------|-----------|--|---|-------------|--|---|----------------|--|---|------------|--|---|---------------|--|--|
| | 2-4 | 5-7 | 8-10 | All sizes | | | All sizes | | | All sizes | | | All sizes | | | All sizes | | | All sizes | | |
| Valves | | | | | | | | | | | | | | | | | | | | | |
| 3-way on/off valve kit (2-pipe) | - | - | - | | | | MCWCN | | | MCKAW2T3VN | | | EKMV3C09B7 | | | MCKCW2T3VN | | | EKMV3C09B | | |
| 3-way on/off valve kit (4-pipe) | - | - | - | | | | MCWHN | | | MCKAWH4T3VN | | | 2 x EKMV3C09B7 | | | - | | | 2x EKMV3C09B7 | | |
| 2-way on/off valve kit (additional heat exchanger) | | | E2MV207A6 | | | E2MV210A6 | | | - | | | - | | | - | | | - | | | |
| 3-way on/off valve kit (additional heat exchanger) | | | E2MV307A6 | | | E2MV310A6 | | | - | | | - | | | - | | | - | | | |
| 2-way on/off valve kit (2-pipe) | - | - | - | | | | - | | | - | | | EKMV2C09B7 | | | - | | | EKMV2C09B7 | | |
| 2-way on/off valve kit (4-pipe) | - | - | - | | | | - | | | - | | | 2x EKMV2C09B7 | | | - | | | 2x EKMV2C09B7 | | |

| | FWC-AT/AF | | FWF-CT | | FWC-BT/BF | | FWF-BT/BF | |
|---|-----------|--------------|-----------|---|-------------|---|-----------|--|
| | All sizes | | All sizes | | All sizes | | All sizes | |
| Decoration panel 600x600 (2-pipe) | - | | DCP600TB | | - | | - | |
| Decoration panel 900x900 (2-pipe) | | DCP900TB 243 | | - | | - | | |
| Decoration panel 900x900 (4-pipe) | | DCP900FB 243 | | - | | - | | |
| Decoration panel 4-way blow (RAL 9010 Grey sealings) | - | | - | | - | | BYFQ60B | |
| Decoration panel - Standard (RAL 9010 - grey sealings) Round flow | - | | - | | BYCQ140CW1 | | - | |
| Decoration panel - White (RAL 9010 - white sealings) Round flow | - | | - | | BYCQ140CW1W | | - | |



| Other accessories | FWM-DT/DF / FWL-DT/DF / FWV-DT/DF | | | | | | | FWD-AT/AF | | | | | | | FWB-BT | | | | | | | | |
|-------------------------------|-----------------------------------|---------|----------------|-------------|---|-----------|----|------------|------------|-----------|----|------------|-----------|----|-----------------|----------|----------|--|--|--|--|--|--|
| | 1 | 2 | 3 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 12 | 16 | 18 | 2-4 | 5-7 | 8-10 | | | | | | |
| Electric heater (Standard) | EEH01A6 | EEH02A6 | EEH03A6 | EEH06A6 | | EEH10A6 | | EDE-H04A6 | ED-EHS06A6 | EDEHS10A6 | | ED-EHS12A6 | EDEHS18A6 | | Factory mounted | | | | | | | | |
| Electric heater (Big) | - | | | | | | | EDE-H04A6 | ED-EHB06A6 | EDEHB10A6 | | ED-EHB12A6 | EDEHB18A6 | | - | | | | | | | | |
| Fresh air intake | EFA02A6 | | EFA03A6 | EFA06A6 | | EFA10A6 | | EDM-FA04A6 | EDM-FA06A6 | EDMFA10A6 | | EDM-FA12A6 | EDMFA18A6 | | - | | | | | | | | |
| Additional heat exchanger | ESRH02A6 | | ESRH03A6 | ESRH06A6 | | ESRH10A6 | | - | | | | | | | EA-H04A6 | EA-H07A6 | EA-H10A6 | | | | | | |
| Air intake & discharge grille | EAIDF02A6 | | EAID-F03A6 202 | EAIDF06A6 | | EAIDF10A6 | | - | | | | | | | - | | | | | | | | |
| Rear panel | ERPV02A6 | | ERP-V03A6 40 | ERPV06A6 48 | | ERPV10A6 | | - | | | | | | | - | | | | | | | | |
| Supporting feet | ESFV06A6 21 | | | | | | | ESFV10A6 | | | | | | | - | | | | | | | | |
| Supporting feet & grille | ESFVG02A6 | | ESFV-G03A6 | ESFVG06A6 | | ESFVG10A6 | | - | | | | | | | - | | | | | | | | |
| Vertical auxiliary drainpan | EDPVB6 | | | | | | | EDDPV10A6 | | | | | EDDPV18A6 | | - | | | | | | | | |
| Horizontal auxiliary drainpan | EDPHB6 | | | | | | | EDDPH10A6 | | | | | EDDPH18A6 | | - | | | | | | | | |

| Other accessories | FWC-BT/BF | FWF-BT/BF |
|--|-----------------|-------------|
| Sealing member of air discharge outlet | KDBHQ55C140 | KDBHQ48A60 |
| Panel spacer | - | KDBQ44B60 |
| Long-life filter | KAFP551K160 | KAFQ441BA60 |
| Fresh air intake kit | KDDQ55C140-1/-2 | KDDQ44XA60 |
| Installation box for adapter PCB | KRP1H98 | KRP1BA101 |

FAN COIL UNIT - CONTROL

The fan coil units can be operated by different controllers according to the model.



ECFWMB6

ELECTROMECHANICAL BUILT-IN CONTROLLER

- › Fan speed selector
- › Manual cooling/heating changeover.
- › ON/OFF valves can also be controlled with ECFWMB6



BR315D7

WIRED REMOTE CONTROLLER

- › to control each fan coil unit independently
- › cooling and heating function
- › ON/OFF timer function



BRCE532F

INFRARED REMOTE CONTROLLER

- › to control each fan coil unit independently
- › cooling and heating function



FWEC1A

ELECTRONIC CONTROLLER

- › Control of on-off valves for two or four pipes systems
- › Control of auxiliary heating element
- › Cooling/heating switching in the following modes: local or remote manual (centralised), automatic (depending on water temperature (optional) or air temperature)
- › Possibility, by means of clean contacts, of remote centralised cooling/heating switching and external activation
- › Temperature sensor kit (accessory FWTSKAA)
- › Economy function (setpoint correction by 2.5°C and forcing of the fan to run at minimum available speed)
- › Composed by:
 - lc display
 - keyboard
- › On board and wall mounted installation.
- › Same as FWEC1A with following additional functions:
 - 1) humidity management:
 - display of relative humidity
 - dehumidification function
 - (cooling mode) Manual activation
 - 2) serial communication interface (RS485 bus)
 - possibility to set up a master-slave system up to 247 slave units, in which one of the controls plays the role of master and manages all the other slave units. (modbus protocol)



FWEC2A

- › Composed by:
 - lc display
 - keyboard

- › On board and wall mounted installation.
- › Same as FWEC2A with following additional functions:
 - 1) Back light
 - 2) Proportional valve control (two voltage outputs for the proportional valves)
 - 3) Voltage contact 0-10V
 - 4) Time clock and weekly schedule (on / off or setpoint air)
 - 5) Integration in BMS (already included in the FWEC2A version)
 - 6) Two digital outputs (voltage free) to manage electric heaters with the weekly schedule



MERCA

STANDARD WIRED REMOTE CONTROLLER

- › Fan speed
- › Sleep function
- › Swing
- › Temperature setting
- › Operating mode
- › LCD display
- › ON/OFF switch
- › Real time clock
- › Timer active
- › Timer ON/OFF



SRC-COA



SRC-HPA

SIMPLIFIED WIRED REMOTE CONTROLLER FOR COOLING ONLY & HEAT PUMP

- › Temperature display
- › Temperature setting
- › Timer switch setting
- › ON/OFF switch
- › Fan speed
- › Operating mode
- › Swing
- › "Sleep"function



WRC - COB/HPB

WIRELESS CONTROLLER FOR COOLING ONLY & HEATPUMP

- › LCD display
- › Temperature setting
- › Operating mode
- › Timer switch setting
- › Turbo mode
- › Swing
- › "Sleep"function
- › Real time clock
- › ON/OF switch
- › Fan speed



FWV01, 02DT/DF



FWEC1, 2, 3A



ECFWMB6



- > Low sound power levels and electrical absorption thanks to plastic impeller, ABS winding staircase and improved electric motor
- > 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
- > Quick removal of washable filter
- > Electric heater : no relay up to 2kW capacity
- > Electronic controller with water probe, available in standard, advanced and advanced plus version

| Indoor units | | | | 2-PIPE | | | | | | | 4-PIPE | | | | | | |
|---------------------------|-----------------------------|--------------------|------|---|-------------|---------------|---------------|-------------|-------------|---------------|---|------|------|------|------|-------|-------|
| | | | | 01 | 02 | 03 | 04 | 06 | 08 | 10 | 01 | 02 | 03 | 04 | 06 | 08 | 10 |
| Cooling capacity | Total capacity | High | kW | 1.54 | 2.09 | 2.93 | 4.33 | 4.77 | 6.71 | 8.02 | 1.46 | 1.90 | 2.87 | 4.33 | 4.67 | 6.64 | 7.88 |
| | Sensible capacity | High | kW | 1.20 | 1.51 | 2.11 | 3.15 | 3.65 | 4.91 | 5.96 | 1.14 | 1.51 | 2.07 | 3.15 | 3.57 | 4.85 | 5.85 |
| Heating capacity | 2-Pipe | High | kW | 2.14 | 2.57 | 3.81 | 5.63 | 6.36 | 7.83 | 10.03 | | | | | | - | |
| | 4-Pipe | High | kW | | | | | | | | 1.90 | 2.10 | 3.08 | 5.05 | 5.30 | 7.91 | 9.30 |
| Power input | High | W | | 37 | 53 | 56 | 98 | | 137 | 175 | 37 | 53 | 56 | 98 | 98 | 137 | 175 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 564x774x226 | 564x984x226 | 564x1,194x226 | 564x1,404x251 | 564x774x226 | 564x984x226 | 564x1,194x226 | 564x1,404x251 | | | | | | |
| Weight | Unit | kg | | 19 | 20 | 25 | 30 | 31 | 41 | | 20 | 21 | 26 | 32 | 33 | 44 | |
| Heat exchanger | Water volume | l | | 0.5 | 0.7 | 1 | 1.4 | | 2.1 | | 0.5 | 0.7 | 1 | 1.4 | | 2.1 | |
| Additional heat exchanger | Water volume | l | | | | | | | | | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | |
| Water flow | Cooling | l/h | | 265 | 359 | 504 | 745 | 820 | 1,154 | 1,343 | 251 | 327 | 494 | 745 | 803 | 1,142 | 1,355 |
| | Heating | l/h | | 265 | 359 | 504 | 745 | 820 | 1,154 | 1,343 | 196 | 182 | 286 | 396 | 465 | 694 | 816 |
| Water pressure drop | Cooling | kPa | | 13 | | 11 | 12 | 14 | 12 | 19 | | 13 | 11 | 12 | 14 | 12 | 19 |
| | Heating | kPa | | 9 | 11 | 9 | 10 | 9 | 16 | | 7 | 8 | 5 | 10 | 8 | 9 | |
| Fan | Type | | | Centrifugal multi-blade, double suction | | | | | | | Centrifugal multi-blade, double suction | | | | | | |
| | Air flow rate | High | m³/h | 319 | 344 | 442 | 706 | 785 | 1,011 | 1,393 | 307 | 327 | 431 | 690 | 763 | 998 | 1,362 |
| Sound power level | High | dBA | | 45 | 50 | 47 | 52 | 56 | 58 | 64 | 45 | 50 | 47 | 52 | 56 | 58 | 64 |
| Piping connections | Drain | OD | mm | | | | 16 | | | | | | | 16 | | | |
| Water connections | Std. heat exchanger | inch | | | | | 1/2 | | 3/4 | | | | 1/2 | | | 3/4 | |
| Power supply | Phase / Frequency / Voltage | Hz / V | | 1 / 50 / 230 | | | | | | | 1 / 50 / 230 | | | | | | |
| Current input | High | A | | 0.17 | 0.24 | 0.25 | 0.44 | 0.43 | 0.60 | 0.76 | 0.17 | 0.24 | 0.25 | 0.44 | 0.43 | 0.60 | 0.76 |



FWL03DT/DF



FWL03DT/DF



FWEC1, 2, 3A



ECFWMB6

- > Low sound power levels and electrical absorption thanks to plastic impeller, ABS winding staircase and improved electric motor
- > 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
- > Quick removal of washable filter
- > Electric heater : no relay up to 2kW capacity
- > Electronic controller with water probe, available in standard, advanced and advanced plus version



| Indoor units | | | | 2-PIPE | | | | | | | 4-PIPE | | | | | | |
|---------------------------|-----------------------------|--------------------|------|---|-------------|---------------|---------------|------|-------------|-------------|---|---------------|------|------|------|-------|-------|
| | | | | 01 | 02 | 03 | 04 | 06 | 08 | 10 | 01 | 02 | 03 | 04 | 06 | 08 | 10 |
| Cooling capacity | Total capacity | High | kW | 1.54 | 2.09 | 2.93 | 4.33 | 4.77 | 6.71 | 8.02 | 1.46 | 1.90 | 2.87 | 4.33 | 4.67 | 6.64 | 7.88 |
| | Sensible capacity | High | kW | 1.20 | 1.51 | 2.11 | 3.15 | 3.65 | 4.91 | 5.96 | 1.14 | 1.51 | 2.07 | 3.15 | 3.57 | 4.85 | 5.85 |
| Heating capacity | 2-Pipe | High | kW | 2.14 | 2.57 | 3.81 | 5.63 | 6.36 | 7.83 | 10.03 | | | | | | - | |
| | 4-Pipe | High | kW | | | | - | | | | 1.90 | 2.10 | 3.08 | 5.05 | 5.30 | 7.91 | 9.30 |
| Power input | High | W | | 37 | 53 | 56 | | 98 | 137 | 175 | 37 | 53 | 56 | | 98 | 137 | 175 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 564x774x226 | 564x984x226 | 564x1,194x226 | 564x1,404x251 | | 564x774x226 | 564x984x226 | 564x1,194x226 | 564x1,404x251 | | | | | |
| Weight | Unit | kg | | 20 | 21 | 27 | 32 | 33 | | 44 | 21 | 22 | 28 | 34 | 35 | | 46 |
| Heat exchanger | Water volume | l | | 0.5 | 0.7 | 1 | 1.4 | | 2.1 | | 0.5 | 0.7 | 1 | 1.4 | | | 2.1 |
| Additional heat exchanger | Water volume | l | | | | - | | | | | 0.2 | 0.3 | 0.4 | | | 0.6 | |
| Water flow | Cooling | l/h | | 265 | 359 | 504 | 745 | 820 | 1,154 | 1,343 | 251 | 327 | 494 | 745 | 803 | 1,142 | 1,355 |
| | Heating | l/h | | 265 | 359 | 504 | 745 | 820 | 1,154 | 1,343 | 196 | 182 | 286 | 396 | 465 | 694 | 816 |
| Water pressure drop | Cooling | kPa | | 13 | | 11 | 12 | 14 | 12 | 19 | | 13 | 11 | 12 | 14 | 12 | 19 |
| | Heating | kPa | | 9 | 11 | | 9 | 10 | 9 | 16 | 7 | 8 | 5 | 10 | 8 | 9 | |
| Fan | Type | | | Centrifugal multi-blade, double suction | | | | | | | Centrifugal multi-blade, double suction | | | | | | |
| | Air flow rate | High | m³/h | 319 | 344 | 442 | 706 | 785 | 1,011 | 1,393 | 307 | 327 | 431 | 690 | 763 | 998 | 1,362 |
| Sound power level | High | dBA | | 45 | 50 | 47 | 52 | 56 | 58 | 64 | 45 | 50 | 47 | 52 | 56 | 58 | 64 |
| Water connections | Std. heat exchanger | inch | | 1/2 | | | | 3/4 | | 1/2 | | | | 3/4 | | | |
| Power supply | Phase / Frequency / Voltage | Hz / V | | 1 / 50 / 230 | | | | | | | 1 / 50 / 230 | | | | | | |
| Current input | High | A | | 0.17 | 0.24 | 0.25 | 0.44 | 0.43 | 0.60 | 0.76 | 0.17 | 0.24 | 0.25 | 0.44 | 0.43 | 0.60 | 0.76 |



FWM01, 02DT/DF



FWM01, 02DT/DF



FWEC1, 2, 3A

- > Low sound power levels and electrical absorption thanks to plastic impeller, ABS winding staircase and improved electric motor
- > 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
- > Quick removal of washable filter
- > Electric heater: no relay up to 2kW capacity
- > Electronic controller with water probe, available in standard, advanced and advanced plus version



| Indoor units | | | | 2-PIPE | | | | | | | 4-PIPE | | | | | | |
|---------------------------|-----------------------------|--------------------|--------|---|-------------|---------------|---------------|-------------|-------------|---------------|---|------|------|------|------|-------|-------|
| | | | | 01 | 02 | 03 | 04 | 06 | 08 | 10 | 01 | 02 | 03 | 04 | 06 | 08 | 10 |
| Cooling capacity | Total capacity | High | kW | 1.54 | 2.09 | 2.93 | 4.33 | 4.77 | 6.71 | 8.02 | 1.46 | 1.90 | 2.87 | 4.33 | 4.67 | 6.64 | 7.88 |
| | Sensible capacity | High | kW | 1.20 | 1.51 | 2.11 | 3.15 | 3.65 | 4.91 | 5.96 | 1.14 | 1.51 | 2.07 | 3.15 | 3.57 | 4.85 | 5.85 |
| Heating capacity | 2-Pipe | High | kW | 2.14 | 2.57 | 3.81 | 5.63 | 6.36 | 7.83 | 10.03 | | | | | | - | |
| | 4-Pipe | High | kW | | | | | | | | 1.90 | 2.10 | 3.08 | 5.05 | 5.30 | 7.91 | 9.30 |
| Power input | High | | W | 37 | 53 | 56 | 98 | | 137 | 175 | 37 | 53 | 56 | 98 | | 137 | 175 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 535x584x224 | 535x794x224 | 535x1,004x224 | 535x1,214x249 | 535x584x224 | 535x794x224 | 535x1,004x224 | 535x1,214x249 | | | | | | |
| Weight | Unit | | kg | 14 | 15 | 19 | 23 | | 32 | | 15 | 16 | 20 | 25 | | 34 | |
| Heat exchanger | Water volume | | l | 0.5 | 0.7 | 1 | 1.4 | | 2.1 | | 0.5 | 0.7 | 1 | 1.4 | | 2.1 | |
| Additional heat exchanger | Water volume | | l | | | | | | | | 0.2 | 0.3 | 0.4 | 0.6 | | | |
| Water flow | Cooling | | l/h | 265 | 359 | 504 | 745 | 820 | 1,154 | 1,343 | 251 | 327 | 494 | 745 | 803 | 1,142 | 1,355 |
| | Heating | | l/h | 265 | 359 | 504 | 745 | 820 | 1,154 | 1,343 | 196 | 182 | 286 | 396 | 465 | 694 | 816 |
| Water pressure drop | Cooling | | kPa | 13 | 11 | 12 | 14 | 12 | 19 | | 13 | 11 | 12 | 14 | 12 | 19 | |
| | Heating | | kPa | 9 | 11 | 9 | 10 | 9 | 16 | 7 | 8 | 5 | 10 | 8 | 9 | | |
| Fan | Type | | | Centrifugal multi-blade, double suction | | | | | | | Centrifugal multi-blade, double suction | | | | | | |
| Sound power level | Air flow rate | High | m³/h | 319 | 344 | 442 | 706 | 785 | 1,011 | 1,393 | 307 | 327 | 431 | 690 | 763 | 998 | 1,362 |
| Piping connections | Drain | OD | mm | | | | 17 | | | | | | | 17 | | | |
| Water connections | Std. heat exchanger | | inch | | | | 1/2 | | 3/4 | | | | 1/2 | | | 3/4 | |
| Power supply | Phase / Frequency / Voltage | | Hz / V | 1~ / 50 / 230 | | | | | | | 1~ / 50 / 230 | | | | | | |
| Current input | High | | A | 0.17 | 0.24 | 0.25 | 0.44 | 0.43 | 0.60 | 0.76 | 0.17 | 0.24 | 0.25 | 0.44 | 0.43 | 0.60 | 0.76 |

FWD-AT/AF

Flexi type unit



FWD04AT/AF



FWD04AT/AF



FWEC1,2,3A



- › Quick fixing system for wall or ceiling mounted installation
- › Straight duct connector is mounted to discharge side
- › Electronic controller with water probe, available in standard, advanced and advanced plus version
- › The air filter can easily be removed for cleaning

| Indoor units | | | | 2-PIPE | | | | | | | 4-PIPE | | | | | | |
|---------------------------|-----------------------------|--------------------|--------|---|-------------|---------------|---------------|---------------|-------------|-------------|---|---------------|---------------|-------|-------|-------|-------|
| | | | | 04 | 06 | 08 | 10 | 12 | 16 | 18 | 04 | 06 | 08 | 10 | 12 | 16 | 18 |
| Cooling capacity | Total capacity | High | kW | 3.90 | 6.20 | 7.80 | 8.82 | 11.90 | 16.40 | 18.30 | 3.90 | 6.20 | 7.80 | 8.82 | 11.90 | 16.40 | 18.30 |
| | Sensible capacity | High | kW | 3.08 | 4.65 | 6.52 | 7.16 | 9.36 | 12.80 | 14.10 | 3.08 | 4.65 | 6.52 | 7.16 | 9.36 | 12.80 | 14.10 |
| Heating capacity | 2-Pipe | High | kW | 4.05 | 7.71 | 9.43 | 10.79 | 14.45 | 19.81 | 21.92 | - | 4.49 | 6.62 | 9.21 | 15.86 | 21.15 | |
| | 4-Pipe | High | kW | | | | | | | | 4.49 | 6.62 | 9.21 | 15.86 | 21.15 | | |
| Power input | High | | W | 234 | 349 | 443 | | 714 | | 1,197 | 234 | 349 | 443 | 714 | | 1,197 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 280x754x559 | 280x964x559 | 280x1,174x559 | 352x1,174x718 | 352x1,384x718 | 280x754x559 | 280x964x559 | 280x1,174x559 | 352x1,174x718 | 352x1,384x718 | | | | |
| Weight | Unit | | kg | 33 | 41 | 47 | 49 | 65 | 77 | 80 | 35 | 43 | 50 | 52 | 71 | 83 | 86 |
| Heat exchanger | Water volume | | l | 1.06 | 1.42 | 1.79 | 2.38 | 2.5 | 4.02 | 5.03 | 1.06 | 1.42 | 1.79 | 2.38 | 2.50 | 4.02 | 5.03 |
| Additional heat exchanger | Water volume | | l | | | | | | | | 0.35 | 0.47 | 0.59 | 1.42 | | 1.72 | |
| Water flow | Cooling | | l/h | 674 | 1,064 | 1,339 | 1,514 | 2,056 | 2,833 | 3,140 | 674 | 1,064 | 1,339 | 1,514 | 2,056 | 2,833 | 3,140 |
| | Heating | | l/h | 674 | 1,064 | 1,339 | 1,514 | 2,056 | 2,833 | 3,140 | 349 | 581 | 808 | 1,392 | | 1,856 | |
| Water pressure drop | Cooling | | kPa | 17 | 24 | 16 | 26 | 34 | 45 | 17 | 24 | 16 | 26 | 34 | 45 | | |
| | Heating | | kPa | 14 | 20 | 13 | 21 | 28 | 37 | 9 | 15 | 13 | 12 | 16 | | | |
| Fan | Type | | | Centrifugal multi-blade, double suction | | | | | | | Centrifugal multi-blade, double suction | | | | | | |
| | Air flow rate | High | m³/h | 800 | 1,250 | 1,600 | 2,200 | | 3,000 | | 800 | 1,250 | 1,600 | 2,200 | | 3,000 | |
| | Available pressure | High | Pa | 66 | 58 | 68 | 64 | 97 | 145 | 134 | 63 | 53 | 63 | 59 | 92 | 138 | 128 |
| Sound power level | High | | dBA | 66 | 69 | 72 | 74 | | 78 | | 66 | 69 | 72 | 74 | | 78 | |
| Piping connections | Drain | OD | mm | | | | 16 | | | | | | | 16 | | | |
| Water connections | Std. heat exchanger | | inch | | | 3/4 | | | 1 | | | 3/4 | | | 1 | | |
| Power supply | Phase / Frequency / Voltage | | Hz / V | | | | 1~ / 50 / 230 | | | | | | 1~ / 50 / 230 | | | | |
| Current input | High | | A | 0.95 | 1.58 | 1.97 | 3.21 | | 5.37 | | 0.95 | 1.58 | 1.97 | 3.21 | | 5.37 | |



FWT05, 06BT



MERCA



SRC-COA/HPA



WRC-COB/HPB



- > Wide operating range
- > Easy installation and maintenance
- > 3-speed fan motor
- > Double-intake centrifugal fans
- > Excellent air flow and air distribution
- > Flexibility via interchangeable water connection side
- > High power air flow
- > Insulated with self-extinguishing class 1 heat insulation
- > Removable washable air filter (self-extinguishing class 1)
- > Slim and compact aesthetic design
- > Wireless remote control up to 9m distance, availability of a wired or simplified controller
- > LED indicator gives an indication on the (normal or wrong) operation of the unit

| Indoor units | | | | 2-PIPE | | | | |
|----------------------|-----------------------------|--------------------|--------|-------------------------------------|-------------|------|---------------|-------|
| | | | | 02 | 03 | 04 | 05 | 06 |
| Cooling capacity | Total capacity | High | kW | 2.34 | 2.78 | 3.22 | 4.54 | 5.28 |
| | Sensible capacity | High | kW | 1.74 | 2.03 | 2.35 | 3.65 | 4.33 |
| Heating capacity | 2-Pipe | High | kW | 3.02 | 3.75 | 4.10 | 6.01 | 6.74 |
| Power input | High | | W | 24 | 25 | 29 | 66 | 69 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 260x799x198 | 260x899x198 | | 304x1,062x222 | |
| Weight | Unit | | kg | 10 | 12 | | 16 | |
| | Operation weight | | kg | 10 | 13 | | 17 | |
| Heat exchanger | Water volume | | l | 0.49 | 0.57 | | 0.85 | |
| Water flow | Cooling | | l/h | 402 | 478 | 554 | 781 | 908 |
| | Heating | | l/h | 402 | 478 | 554 | 781 | 908 |
| Water pressure drop | Cooling | | kPa | 48.3 | 64.7 | 69.3 | 50.3 | 69.3 |
| | Heating | | kPa | 42 | 58.6 | 60.6 | 50.6 | 70.6 |
| Fan | Type | | | Centrifugal-direct driven fan motor | | | | |
| | Air flow rate | High | m³/h | 467 | 510 | 586 | 1,070 | 1,121 |
| Sound power level | High | | dBA | 53 | | 55 | 61 | 64 |
| Sound pressure level | High | | dBA | 40 | 39 | 42 | 49 | 50 |
| Piping connections | Drain | OD | mm | 16 | | | 20 | |
| Water connections | Std. heat exchanger | | inch | 1/2 | | | | |
| Power supply | Phase / Frequency / Voltage | | Hz / V | 1~ / 50 / 220-240 | | | | |
| Current input | High | | A | 0.11 | 0.13 | 0.29 | 0.30 | |



FWB04BT



FWEC1, 2, 3A

- > Low sound power levels and electrical absorption thanks to plastic impeller, ABS winding staircase and improved electric motor
- > Compact dimensions, can easily be mounted in a narrow ceiling void
- > 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



| Indoor units | | | 2-PIPE | | | | | | | | | |
|---------------------------|-----------------------------|--------------------|--|---------------|------|------|---------------|-------|-------|---------------|-------|-------|
| | | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | |
| Cooling capacity | Total capacity | High | kW | 2.61 | 3.14 | 3.49 | 5.08 | 5.45 | 6.47 | 7.57 | 8.67 | 10.34 |
| | Sensible capacity | High | kW | 1.88 | 2.16 | 2.34 | 3.6 | 3.87 | 4.4 | 5.23 | 5.96 | 6.9 |
| Heating capacity | 2-Pipe | High | kW | 5.47 | 6.01 | 6.47 | 10.31 | 11.39 | 12.28 | 15.05 | 16.85 | 18.78 |
| | 4-Pipe | High | kW | | 3.14 | | | 5.99 | | | | 12.8 |
| Power input | High | W | | 79 | | | 154 | | | | | 294 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 239x1,039x609 | | | 239x1,389x609 | | | 239x1,739x609 | | |
| Weight | Unit | | kg | 23 | 24 | 26 | 31 | 33 | 35 | 43 | 45 | 48 |
| | Operation weight | | kg | 24 | 26 | 28 | 33 | 35 | 38 | 45 | 48 | 52 |
| Heat exchanger | Water volume | l | l | 1.1 | 1.5 | 2.2 | 1.6 | 2.1 | 3.2 | 2.1 | 2.8 | 4.2 |
| Additional heat exchanger | Water volume | l | | 0.4 | | | 0.6 | | | 1.7 | | |
| Water flow | Cooling | l/h | 448 | 539 | 598 | 873 | 936 | 1,111 | 1,299 | 1,488 | 1,774 | |
| | Heating | l/h | 480 | 527 | 567 | 904 | 999 | 1,077 | 1,319 | 1,479 | 1,647 | |
| | Additional heat exchanger | l/h | | 275 | | | 526 | | | | 1,123 | |
| Water pressure drop | Cooling | kPa | 8 | 14 | 11 | 15 | 8 | 14 | | 21 | | 26 |
| | Heating | kPa | 7 | 10 | 8 | 12 | 7 | 10 | 16 | 15 | | 18 |
| | Additional heat exchanger | kPa | | 3 | | | 5 | | | 8 | | |
| Fan | Type | | Centrifugal - forward blades - directly coupled on fan motor | | | | | | | | | |
| | Air flow rate | High | m³/h | 400 | | | 800 | | | 1,200 | | |
| | Available pressure | High | Pa | 71 | | | 65 | | | 59 | | |
| Sound power level | High | | dBA | 56 | | | 59 | | | 69 | | |
| Sound pressure level | High | | dBA | 44.5 | | | 47.5 | | | 57.5 | | |
| Piping connections | Drain | OD | mm | | | | 16 | | | | | |
| Water connections | Std. heat exchanger | | inch | | | | 3/4 | | | | | |
| Add. heat exchanger | | inch | | | | | | | | 1 | | |
| Power supply | Phase / Frequency / Voltage | | Hz / V | | | | 1~ / 50 / 230 | | | | | |
| Current input | High | | A | 0.36 | | | 0.73 | | | 1.28 | | |



FWB02JT/JF



FWEC1, 2, 3A

- > Wide operating range
- > Quiet operation via enlarged fan wheels
- > Easy maintenance: filter can be removed from both sides and beneath (maximum filter size is 400mm)
- > Flexibility (2-pipe or 4-pipe)
- > 4-speed fan motor
- > Direct driven centrifugal fans
- > Flexibility via interchangeable water connection side
- > High power air flow
- > Available static pressure of 30 Pa
- > Extended drain pan as standard
- > Standard Filter
- > Insulated with self-extinguishing class 1 heat insulation
- > Electronic room thermostat



| Indoor units | | | | 2-PIPE | | | | | | | | | | | 4-PIPE | | | | | | | | |
|----------------------|-----------------------------|--------------------|------|---|---------|---------------|---------------|---------------|-------------------|---------------|-----------|-----------|-----------|-----------|-----------|---------|---------|-------------------|-----------|-----------|-----------|-----------|---------|
| | | | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 02 | 03 | 04 | 06 | 07 | 08 | 10 | | | |
| Indoor units | | | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 02 | 03 | 04 | 06 | 07 | 08 | 10 | 02 | 03 | |
| Cooling capacity | Total capacity | High | kW | 1.64 | 2.67 | 2.99 | 3.34 | 4.81 | 5.31 | 6.16 | 7.26 | 8.49 | 8.99 | 1.67 | 2.67 | 3.03 | 4.88 | 5.33 | 6.53 | 8.21 | 251x814 | 251x984 | |
| Sensible capacity | High | | kW | 0.94 | 1.88 | 1.95 | 2.07 | 3.40 | 4.15 | 4.39 | 5.06 | 6.37 | 6.41 | 0.97 | 1.83 | 1.93 | 3.41 | 4.01 | 4.91 | 6.28 | x590 | x590 | |
| Heating capacity | 2-Pipe | High | kW | 2.16 | 3.62 | 3.97 | 4.11 | 6.30 | 7.47 | 8.09 | 9.64 | 11.57 | 11.71 | - | 2.12 | 3.69 | 3.87 | 6.40 | 7.52 | 9.01 | 11.09 | 251x814 | 251x984 |
| 4-Pipe | High | | kW | - | - | - | - | - | - | - | - | - | - | 2.49 | 3.92 | 4.43 | 6.70 | 8.16 | 9.56 | 11.68 | x590 | x590 | |
| Power input | High | | W | 34 | 53 | 57 | 54 | 86 | 121 | 117 | 134 | 164 | 166 | 34 | 51 | 54 | 84 | 117 | 137 | 163 | 251x814 | 251x984 | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 251x814 | 251x984 | 251x1,114x590 | 251x1,314x590 | 251x1,564x590 | 251x1,664x590 | 251x1,924x590 | 251x1,114 | 251x1,314 | 251x1,564 | 251x1,664 | 251x1,924 | 251x814 | 251x984 | 251x1,114 | 251x1,314 | 251x1,564 | 251x1,664 | 251x1,924 | |
| Weight | Unit | | kg | 20.0 | 23.0 | 28.0 | 31.0 | 33.0 | 44.0 | 48.0 | 52.0 | 50.0 | 56.0 | 22.0 | 27.0 | 31.0 | 36.0 | 48.0 | 52.0 | 56.0 | x590 | x590 | |
| Weight | Operation weight | | kg | 20.7 | 24.0 | 29.1 | 32.5 | 34.4 | 45.8 | 50.4 | 54.6 | 52.4 | 59.1 | 22.9 | 28.3 | 32.5 | 37.9 | 50.4 | 54.6 | 59.1 | x590 | x590 | |
| Heat exchanger | Water volume | | l | 0.69 | 0.95 | 1.14 | 1.52 | 1.44 | 1.82 | 2.42 | 2.62 | 2.36 | 3.14 | 0.92 | 1.26 | 1.52 | 1.92 | 2.42 | 2.62 | 3.14 | 251x814 | 251x984 | |
| Water flow | Cooling | | l/h | 386 | 549 | 739 | 803 | 1,022 | 1,109 | 1,383 | 1,523 | 1,764 | 1,910 | 386 | 530 | 724 | 986 | 1,138 | 1,296 | 1,660 | 251x814 | 251x984 | |
| | Heating | | l/h | 386 | 549 | 738 | 802 | 1,020 | 1,107 | 1,336 | 1,524 | 1,764 | 1,911 | 387 | 530 | 725 | 985 | 1,139 | 1,299 | 1,660 | x590 | x590 | |
| | Additional heat exchanger | | l/h | - | - | - | - | - | - | - | - | - | 269 | 391 | 493 | 663 | 820 | 924 | 1,142 | 251x814 | 251x984 | | |
| Water pressure drop | Cooling | | kPa | 10.91 | 8.34 | 15.64 | 11.22 | 31.31 | 12.56 | 7.62 | 9.83 | 21.71 | 16.81 | 10.95 | 8.24 | 15.67 | 29.95 | 9.24 | 12.49 | 19.38 | 251x814 | 251x984 | |
| | Heating | | kPa | 8.86 | 6.76 | 12.84 | 9.21 | 25.87 | 11.13 | 6.57 | 8.60 | 18.56 | 14.46 | 8.94 | 6.64 | 12.84 | 24.16 | 7.89 | 9.67 | 16.50 | x590 | x590 | |
| | Additional heat exchanger | | kPa | - | - | - | - | - | - | - | - | - | 10.66 | 24.73 | 41.72 | 81.63 | 25.31 | 31.33 | 50.03 | 251x814 | 251x984 | | |
| Fan | Type | | | Direct driven centrifugal fan (forward-curved blades)hot-galvanised steel | | | | | | | | | | | 30 | | | | | | | | |
| | Air flow rate | High | m³/h | 262 | 428 | 431 | 428 | 757 | 945 | 950 | 1,066 | 1,463 | 1,341 | 220 | 424 | 437 | 747 | 898 | 1,112 | 1,385 | 251x814 | 251x984 | |
| | Available pressure | High | Pa | | | | | | | | | | | | | | | | | | | | |
| Sound power level | High | | dBA | 47.5 | 52 | 49 | 50 | | 52 | | 55 | 55.5 | 56 | 47 | 52 | 50 | | 52 | | 55 | | 56 | |
| Sound pressure level | High | | dBA | 35.5 | 40 | 37 | 38 | | 40 | | 39.5 | 43 | 43.5 | 44 | 35 | 40 | 38 | 40 | 39.5 | 43 | 44 | 251x814 | 251x984 |
| Water connections | Std. heat exchanger | | inch | | | | | | 3/4 | | | | | | | | | 3/4 | | | | 251x814 | 251x984 |
| Power supply | Phase / Frequency / Voltage | Hz / V | | | | | | | 1~ / 50 / 220-240 | | | | | | | | | 1~ / 50 / 220-240 | | | | 251x814 | 251x984 |
| Current input | High | | A | 0.15 | 0.24 | 0.26 | 0.25 | 0.39 | 0.55 | 0.53 | 0.61 | | 0.75 | | | | | | | | | 251x814 | 251x984 |



FWC-BT/BF



BRC315D7



BRCE532F



- > 360° air discharge ensures uniform air flow and temperature distribution
- > Modern style decoration panel in white (RAL9010)
- > Fresh air intake for healthy living
- > Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- > Possibility to shut 1 or 2 flaps for easy installation in corners
- > Standard drain pump with 850mm lift



| Indoor units | | | | 2-PIPE | | | | 4-PIPE | | | |
|----------------------|-------------------------|-----------|------|---------------|---------|-----------|---------|---------------|---------|---------|---------|
| | | | | FWC06BT | FWC07BT | FWC08BT | FWC09BT | FWC06BF | FWC07BF | FWC08BF | FWC09BF |
| Cooling capacity | Total capacity | High | kW | 5.0 | 5.6 | 6.3 | 7.2 | 4.9 | 5.6 | 6.3 | 7.2 |
| | Sensible capacity | High | kW | 3.4 | 4.0 | 4.5 | 5.3 | 3.4 | 3.9 | 4.4 | 5.2 |
| Heating capacity | 2-Pipe | High | kW | 6.3 | 7.1 | 8.3 | 9.5 | - | - | - | - |
| | 4-Pipe | High | kW | - | - | - | - | 6.2 | 6.8 | 7.8 | 8.8 |
| Power input | High | W | | 40 | 46 | 58 | 76 | 41 | 47 | 59 | 77 |
| Dimensions | Unit | HxWxD | mm | 288x840x840 | | | | 288x840x840 | | | |
| Weight | Unit | kg | | 26 | | | | 29 | | | |
| Water pressure drop | Cooling | kPa | | 15 | 19 | 26 | 34 | 15 | 19 | 25 | 32 |
| | Heating | kPa | | 15 | 19 | 26 | 34 | 24 | 30 | 38 | 47 |
| Fan | Type | Turbo fan | | | | Turbo fan | | | | | |
| | Air flow rate | High | m³/h | 1,062 | 1,236 | 1,518 | 1,776 | 1,032 | 1,200 | 1,476 | 1,746 |
| Sound power level | High | dBA | | 36 | 39 | 44 | 49 | 36 | 39 | 44 | 49 |
| Sound pressure level | High | dBA | | 24 | 28 | 32 | 37 | 24 | 28 | 32 | 37 |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 1~/50/220-240 | | | | 1~/50/220-240 | | | |



FWF-BT/BF



BRC315D7



BRCE532F

- > Modern stylish decoration panel in white (RAL9010)
- > Fresh air intake kit available
- > Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- > Possibility to close 1 or 2 flaps for different air flow patterns
- > Drainpump standard mounted (lift: 750mm)



| Indoor units | | | | 2-PIPE | | | | 4-PIPE | | | |
|----------------------|-----------------------------|--------|------|-------------------|-------------|---------|---------|-------------------|-------------|---------|---------|
| | | | | FWF02BT | FWF03BT | FWF04BT | FWF05BT | FWF02BF | FWF03BF | FWF04BF | FWF05BF |
| Cooling capacity | Total capacity | High | kW | 1.7 | 2.8 | 3.3 | 4.0 | 1.7 | 2.3 | 2.8 | 3.5 |
| Sensible capacity | | | | 1.3 | 1.7 | 2.1 | 2.7 | 1.3 | 1.3 | 1.7 | 2.3 |
| Heating capacity | 2-Pipe | High | kW | 2.6 | 3.4 | 4.1 | 5.3 | | | | - |
| | 4-Pipe | High | kW | | | | | 3.1 | 3.3 | 3.9 | 4.8 |
| Power input | High | | kW | | 67 | 70 | 89 | 67 | 62 | 74 | 93 |
| Dimensions | Unit | HxWxD | mm | | 285x575x575 | | | | 285x575x575 | | |
| Weight | Unit | | kg | 19 | 19 | 19 | 19 | 19 | 20 | 20 | 20 |
| Water pressure drop | Cooling | | kPa | 6 | 19 | 31 | 42 | 6 | 13 | 21 | 33 |
| | Heating | | | 6 | 19 | 31 | 42 | 12 | 6 | 9 | 13 |
| Fan | Type | | | Turbo fan | | | | Turbo fan | | | |
| | Air flow rate | High | m³/h | 468 | 468 | 660 | 876 | 468 | 438 | 618 | 822 |
| Sound power level | High | | dBA | 40 | 40 | 44 | 49 | 40 | 42 | 46 | 51 |
| Sound pressure level | High | | dBA | 27 | 27 | 33 | 39 | 27 | 29 | 35 | 41 |
| Power supply | Phase / Frequency / Voltage | Hz / V | | 1~ / 50 / 220-240 | | | | 1~ / 50 / 220-240 | | | |





FWC-AT/AF



SRC-COA/HPA



WRC-COB/HPB

- > Wide operating range
- > Easy installation and maintenance
- > Flexibility (2-pipe or 4-pipe)
- > 3-speed fan motor
- > Double-intake centrifugal fans
- > Air suction from underneath
- > High power air flow
- > Removable washable air filter (self-extinguishing class 1)
- > Built-in high pressure drain pump with 700mm lift
- > Infrared remote control as standard with decoration panel kit



| Indoor units | | | | 2-PIPE | | | | | 4-PIPE | | | | |
|----------------------|-------------------------|------------------------|------|---------------|---------|---------|---------|---------|------------------------|---------|---------|---------|---------|
| | | | | FWC07AT | FWC08AT | FWC10AT | FWC11AT | FWC12AT | FWC02AF | FWC03AF | FWC04AF | FWC05AF | FWC06AF |
| Cooling capacity | Total capacity | High | kW | 6.63 | 7.50 | 8.80 | 9.95 | 10.80 | 3.81 | 3.96 | 4.63 | 5.01 | 5.16 |
| | Sensible capacity | High | kW | 4.90 | 5.40 | 6.40 | 7.10 | 7.70 | 3.40 | 3.52 | 4.07 | 4.40 | 4.54 |
| Heating capacity | 2-Pipe | High | kW | 8.40 | 9.50 | 11.00 | 12.00 | 12.90 | - | | | | |
| | 4-Pipe | High | kW | | | - | | | 10.55 | 10.99 | 12.51 | 13.48 | 13.77 |
| Current input | High | A | | 0.52 | 0.64 | 0.68 | 0.79 | 1.06 | 0.53 | 0.61 | 0.67 | 0.80 | 1.02 |
| Power input | High | W | | 127 | 151 | 164 | 192 | 253 | 122 | 138 | 153 | 184 | 232 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 335x820x821 | | | | | 335x820x821 | | | | |
| Weight | Unit | kg | | 31.0 | 32.0 | 35.0 | 38.0 | 40.0 | 31.0 | 32.0 | 35.0 | 38.0 | 40.0 |
| | Operation weight | kg | | 34.0 | 35.0 | 38.0 | 41.0 | 43.0 | 34.0 | 35.0 | 38.0 | 41.0 | 43.0 |
| Heat exchanger | Water volume | l | | 2.69 | | | | | 2.69 | | | | |
| Water flow | Cooling | l/h | | 1,140 | 1,290 | 1,514 | 1,711 | 1,858 | 655 | 681 | 796 | 862 | 888 |
| | Heating | l/h | | 1,140 | 1,290 | 1,514 | 1,711 | 1,858 | 907 | 945 | 1,076 | 1,159 | 1,184 |
| Water pressure drop | Cooling | kPa | | 24.8 | 30.8 | 41.6 | 52.2 | 69.3 | 3.56 | 3.78 | 4.94 | 5.70 | 5.96 |
| | Heating | kPa | | 21.4 | 26.8 | 35.3 | 45.2 | 64.1 | 4.8 | 5.5 | 7.2 | 8.6 | 8.9 |
| Fan | Type | Direct drive turbo fan | | | | | | | Direct drive turbo fan | | | | |
| | Air flow rate | High | m³/h | 1,310 | 1,380 | 1,560 | 1,740 | 1,840 | 1,310 | 1,380 | 1,560 | 1,740 | 1,840 |
| Sound power level | High | dBA | | 52 | 55 | 60 | 61 | 64 | 52 | 55 | 60 | 61 | 64 |
| Sound pressure level | High | dBA | | 42 | 45 | 49 | 51 | 53 | 42 | 45 | 49 | 51 | 53 |
| Piping connections | Drain | OD | mm | 19.05 | | | | | 19.05 | | | | |
| Water connections | Std. heat exchanger | inch | | 3/4 | | | | | 3/4 | | | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 1~/50/220-240 | | | | | 1~/50/220-240 | | | | |



FWF-CT



MERCA



SRC-COA/HPA



WRC-COB/HPB



- > 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

| Indoor units | | | | 2-PIPE | | |
|----------------------|-------------------------|------------------------|------|--------------|---------|---------|
| | | | | FWF02CT | FWF03CT | FWF04CT |
| Cooling capacity | Total capacity | High | kW | 2.49 | 4.10 | 4.54 |
| | Sensible capacity | High | kW | 1.91 | 2.93 | 3.37 |
| Heating capacity | 2-Pipe | High | kW | 3.52 | 4.69 | 5.28 |
| | 4-Pipe | High | kW | - | - | - |
| Power input | High | W | | 63 | 64 | 79 |
| Current input | High | A | | 0.27 | 0.28 | 0.34 |
| Dimensions | Unit | HeightxWidthxDepth | mm | 250x570x570 | | |
| Weight | Unit | kg | | 22 | 23 | 23 |
| | Operation weight | kg | | 22 | 23 | 23 |
| Water pressure drop | Cooling | kPa | | 19.00 | 27.00 | 29.00 |
| | Heating | kPa | | 17.00 | 24.00 | 27.00 |
| Fan | Type | Direct drive turbo fan | | | | |
| | Air flow rate | High | m³/h | 646 | 680 | 748 |
| Sound power level | High | dBA | | 52 | 54 | 56 |
| Sound pressure level | High | dBA | | 42 | 45 | 48 |
| Piping connections | Drain | OD | mm | 19.05 | | |
| Water connections | Std. heat exchanger | | inch | 3/4 | | |
| Power supply | Phase/Frequency/Voltage | Hz/V | | 1~50/220-440 | | |

Air handling units

D-AHU Professional

GENERAL CHARACTERISTICS

Pre defined family of size

Twenty-seven (27) fixed sizes optimized for the most cost effective selection and manufacturing standardization.

Infinite variable

- Designed for special applications all over the world. The system is giving the possibility to tailor the unit to the clients need with very small incremental, 1 cm.
- Air flow from 1.100 m³/h up to 124.000 m³/h
- All the sizes are modular manufactured to facilitate the transport and the assembly on site.

EUROVENT CERTIFICATION

Daikin is participating in the EUROVENT CERTIFICATION Programme for Air Handling Units. They are certified under the number 11.05.003 and presented on www.eurovent-certification.com



| MODEL BOX-SP65 | | EUROVENT CLASSIFICATION ACCORDING TO EN1886 | | | | |
|---|-----|--|----------------------------|------------------------------|------------------------------|------------------------------|
| Casing mechanical strength | D1 | CASING MECHANICAL STRENGTH | D1 | D2 | D3 | EXCEEDING10 |
| | | Casing Class | 4,00 | 10,00 | | |
| | | Maximum relative deflection mm x m ⁻¹ | | | | |
| Casing air leakage Negative pressure -400 Pa | L1 | CASING AIR LEAKAGE | L1 | L2 | L3 | |
| | | Leakage Class | 0,15 | 0,44 | 1,32 | |
| | | Maximum leakage rate (f ₇₀₀) l x s ⁻¹ x m ⁻² | | | | |
| Casing air leakage Positive pressure +700 Pa | L1 | CASING AIR LEAKAGE | L1 | L2 | L3 | |
| | | Leakage Class | 0,22 | 0,63 | 1,90 | |
| | | Maximum leakage rate (f ₇₀₀) l x s ⁻¹ x m ⁻² | | | | |
| Filter bypass leakage | F9 | FILTER BYPASS LEAKAGE | F9 | F8 | F7 | F6 |
| | | Filter Class | 0,50 | 1 | 2 | 4 |
| | | Maximum filter bypass leakage rate k in % of the volume flow rate | | | | G1 TO F5 |
| Thermal transmittance | T2 | THERMAL TRANSMITTANCE | T1 | T2 | T3 | T4 |
| | | Class | U <= 0,5 | 0,5 < U <= 1 | 1 < U <= 1,4 | 1,4 < U <= 2 |
| | | Thermal transmittance (U) W/m ² x K | | | | T5 |
| Thermal bridging of the casing | TB2 | THERMAL BRDGING OF THE CASING | TB1 | TB2 | TB3 | TB4 |
| | | Class | 0,75 < K _b <= 1 | 0,6 < K _b <= 0,75 | 0,45 < K _b <= 0,6 | 0,3 < K _b <= 0,45 |
| | | Thermal bridging facto (kb) W x m ² x K-1 | | | | TB5 |
| | | | | | | No requirements |

SOFTWARE

ASTRA is the powerful software that Daikin has developed to offer a quick and comprehensive service for the customer in order to make the technical choice and the economic valorization of each AHU. It is a complete tool that can configure any type of product and respond exactly to the strictest design needs. The result is a comprehensive economic offer including all the technical data and drawings, the psychrometric diagram with the relative air treatment and the fans' performance curves. However Daikin did not stop there, went further.

MECCANO is the other powerful software developed and designed to quickly convert the offer in the executive order. Technical drawings to be sent and approved by the client, executive drawings for the production, bill of material, code generation for each component used are just a few of the many functions of the instrument.

The ASTRA-MECCANO integration has therefore made possible the complete automated management of the process by reducing the time of the offer and of the delivery and improving the service to our customers.





TECHNICAL DATA

| Construction type | SP 65 | SP 45 | FP 50 | FP 25 |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Material | - | - | - | - |
| Aluminium | standard | standard | standard | standard |
| Anodized aluminium | option | option | option | option |
| Aluminium with thermal break | option | option | option | option |
| Anodized aluminium with thermal break | option | option | option | option |
| Corner | - | - | - | - |
| Material | - | - | - | - |
| Glass fibre reinforced nylon | standard | standard | standard | standard |
| Panel | - | - | - | - |
| Insulation | - | - | - | - |
| Polyurethane foam density 45 kg/m³ thermal conductivity 0.020 W/m*K fire reaction class 1 | standard | standard | standard | standard |
| Mineral wool density 90 kg/m³ thermal conductivity 0.037 W/m*K(referred to 20°C) fire reaction class 0 | option | option | option | option |
| External sheet material | - | - | - | - |
| Grey Plastisol covered galvanized steel | standard | standard | standard | standard |
| Pre-coated galvanized steel | option | option | option | option |
| Galvanized steel | option | option | option | option |
| Aluminium | option | option | option | option |
| AISI 304 stainless steel | option | option | option | option |
| Internal sheet material | - | - | - | - |
| Galvanized steel | standard | standard | standard | standard |
| Pre-coated galvanized steel | option | option | option | option |
| Grey Plastisol covered galvanized steel | option | option | option | option |
| Aluminium | option | option | option | option |
| AISI 304 stainless steel | option | option | option | option |
| Base frame | - | - | - | - |
| Material | - | - | - | - |
| Aluminium | standard (from size 1 to size 17) |
| Galvanized steel | standard (from size 18 to size 27) |
| Handle | - | - | - | - |
| Material | - | - | - | - |
| Glass fibre reinforced nylon | standard | standard | standard | standard |
| Type | - | - | - | - |
| Compression type | standard | standard | standard | standard |
| Hinge function type (possibility to remove door) | option | option | option | option |

FANS

- > Forward bladed fan
- > Backward bladed 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

HEAT RECOVERY SYSTEMS

- > Heat wheel, sensible or sorption
- > Plate heat exchanger
- > Run-around coils



OTHER SECTION

- > Attenuator section
- > Mixing box section
with actuators
or
- > manual controlled dampers
- > Empty section
- > Gas burner section





FILTERS

- > Synthetic pleated filter
- > Flat filter aluminium mesh
- > Rigid bag filter
- > Soft bag filter
- > High efficiency filter
- > Carbon absorption filter
- > Carbon deodorizing filter



FILTERS

flat synthetic filters
EN 779 class: G2 - G3



plated synthetic filters
EN 779 class: G3 - G4



moisture resistant plated synthetic filters
EN 779 class: G3 - G4



bag filters
EN 779 class: F6 - F8



deep pleated filters
EN 779 class: F6 - F8



extended surface mini-pleat filters
EN 779 class: F6 - F8



high capacity rigid pocket filters
EN 779 class: F6 - F9



absolute mini-pleat filters
EN 1886 class: H12 - H13



absolute high capacity filters
EN 1886 class: H12 - H13



ACCESSORIES

- > Frost protection
- > Manometers
- > Drive guard
- > Roof
- ...



Pre defined sizes - Overall dimension

| Size | Air Flow (m ³ /h) | Height - mm | Width - mm |
|------|------------------------------|-------------|------------|
| 1 | 1.105 | 550 | 850 |
| 2 | 1.550 | 600 | 900 |
| 3 | 1.980 | 650 | 950 |
| 4 | 2.600 | 780 | 1.100 |
| 5 | 3.170 | 780 | 1.150 |
| 6 | 3.550 | 800 | 1.150 |
| 7 | 4.000 | 800 | 1.250 |
| 8 | 4.800 | 850 | 1.300 |
| 9 | 5.560 | 900 | 1.350 |
| 10 | 6.600 | 900 | 1.550 |
| 11 | 7.950 | 1.100 | 1.550 |
| 12 | 9.320 | 1.100 | 1.650 |
| 13 | 10.050 | 1.150 | 1.650 |

| Size | Air Flow (m ³ /h) | Height - mm | Width - mm |
|------|------------------------------|-------------|------------|
| 14 | 13.200 | 1.400 | 1.850 |
| 15 | 19.200 | 1.500 | 2.100 |
| 16 | 25.300 | 1.580 | 2.650 |
| 17 | 31.500 | 1.750 | 2.750 |
| 18 | 37.000 | 1.800 | 3.240 |
| 19 | 43.400 | 2.100 | 3.090 |
| 20 | 51.300 | 2.250 | 3.340 |
| 21 | 58.000 | 2.250 | 3.820 |
| 22 | 67.500 | 2.400 | 4.040 |
| 23 | 78.000 | 2.450 | 4.490 |
| 24 | 84.700 | 2.700 | 4.490 |
| 25 | 98.000 | 2.850 | 4.890 |
| 26 | 111.000 | 2.850 | 5.490 |
| 27 | 124.000 | 3.000 | 5.990 |

INFINITELY VARIABLE SIZES

Flexible sizing for AHU optimization

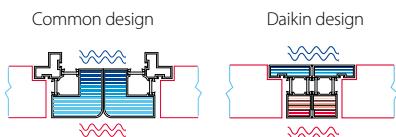
- 1 cm increment for width & height dimensions
- No additional cost for customized unit size
- No additional lead time

Example

| Air Flow (m ³ /h) | Unit Size | Height - mm | Width - mm | Face Velocity m/s |
|------------------------------|-------------|-------------|------------|-------------------|
| 15.000 | STD 15 | 1.500 | 2.100 | 1.95 |
| | 1.500x1.750 | 1.500 | 1.750 | 2.46 |

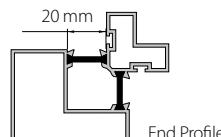
UNIQUE SECTION TO SECTION THERMAL BREAK PROFILE

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

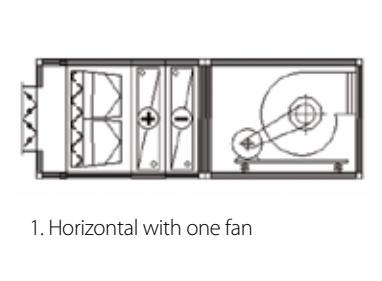
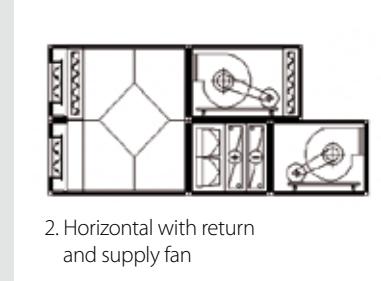
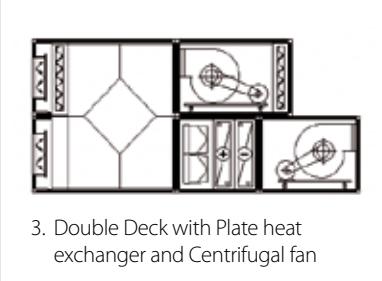
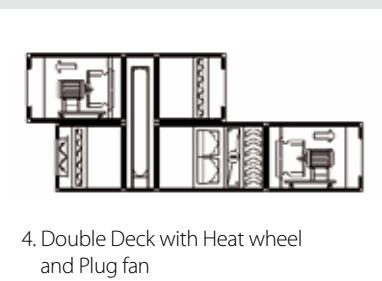
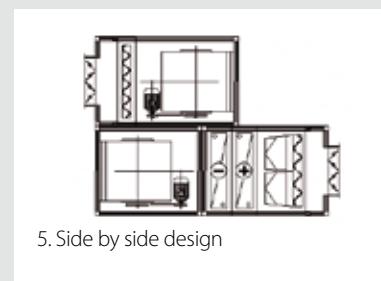


EXCLUSIVE & INNOVATIVE REAL THERMAL BREAK PROFILE

- Real thermal break profile
- Reduce section to section length



CONFIGURATIONS

| | | |
|--|---|---|
|  1. Horizontal with one fan |  2. Horizontal with return and supply fan |  3. Double Deck with Plate heat exchanger and Centrifugal fan |
|  4. Double Deck with Heat wheel and Plug fan |  5. Side by side design |  6. Customized solution |

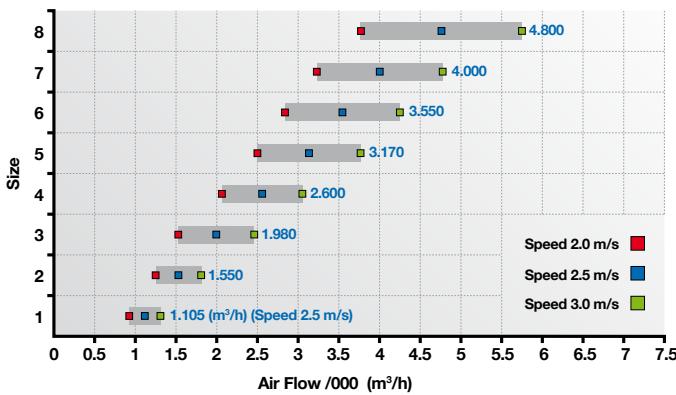
D-AHU Easy



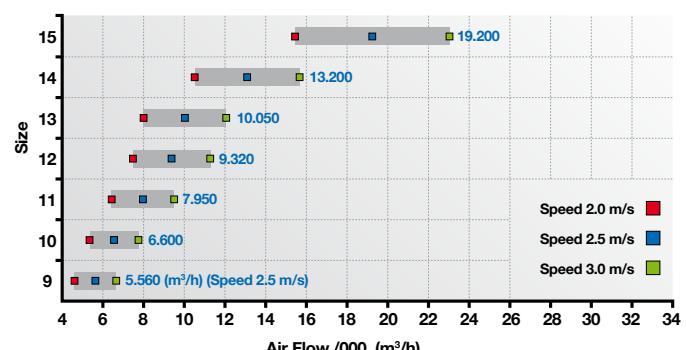
TECHNICAL DATA

| Construction type | DS 50 | DS 25 |
|--|--|--|
| Profile | | |
| Material | | |
| Aluminium | standard | standard |
| Corner | | |
| Material | | |
| Glass fibre reinforced nylon | standard | standard |
| Panel | | |
| Insulation | | |
| Polyurethane foam thermal conductivity 0.024 W/m*K | standard (density 45 kg/m ³) | standard (density 47 kg/m ³) |
| External sheet material | | |
| Pre-coated galvanized steel (RAL 9002) | standard | standard |
| Internal sheet material | | |
| Galvanized steel | standard | standard |
| Base frame | | |
| Material | | |
| Aluminium | standard | standard |
| Handle | | |
| Material | | |
| Glass fibre reinforced nylon | standard | standard |
| Type | | |
| Compression type | standard | standard |

D-AHU Easy 1-8



D-AHU Easy 9-15



D-AHU Easy

The range covers an area of air flow rates from 500 m³/h up to 30.000 m³/h*, with the possibility to choose the more appropriate face velocity, depending on the treatment required.

Pre defined sizes

Fifteen fixed sizes optimized to reach the best compromise between competitiveness and manufacturing standardization

Variable Dimensioning™

Designed to overcome installation constraints where space requirements of the section "height x width" must be adapted to the available space. The system gives the possibility to tailor the unit sizes through increments of 5 cm average.

Pre defined sizes - Overall dimension

| Size | Air Flow (m ³ /h) Speed 2.5 m/s | Height - mm | Width - mm |
|--------|---|-------------|------------|
| Std 1 | 1.105 | 550 | 850 |
| Std 2 | 1.550 | 600 | 900 |
| Std 3 | 1.980 | 650 | 950 |
| Std 4 | 2.600 | 780 | 1.100 |
| Std 5 | 3.170 | 780 | 1.150 |
| Std 6 | 3.550 | 800 | 1.150 |
| Std 7 | 4.000 | 800 | 1.250 |
| Std 8 | 4.800 | 850 | 1.300 |
| Std 9 | 5.560 | 900 | 1.350 |
| Std 10 | 6.600 | 900 | 1.550 |
| Std 11 | 7.950 | 1.100 | 1.550 |
| Std 12 | 9.320 | 1.100 | 1.650 |
| Std 13 | 10.050 | 1.150 | 1.650 |
| Std 14 | 13.200 | 1.400 | 1.850 |
| Std 15 | 19.200 | 1.500 | 2.100 |

Example

| Air Flow (m ³ /h) | Unit Size | Height - mm | Width - mm | Face Velocity m/s |
|---------------------------------|-------------|-------------|------------|----------------------|
| 15.000 | STD 15 | 1.500 | 2.100 | 1.95 |
| | 1.500x1.700 | 1.500 | 1.700 | 2.48 |

Infinitely variable sizes

Flexible sizing for AHU optimization

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

*Air Flow limits of 500 m³/h and 30.000 m³/h are calculated using non standard sizes (max dimensions 2.150x2.150) and considering 2,5 m/s coil face velocity

PANEL PERFORMANCE

Daikin polyurethane panels guarantee an excellent performance in terms of thermal insulation. For instance Daikin DS 25 perform the same as mineral wool panel of 50 mm thickness. While Daikin DS 50 will match the thermal performance of a mineral wool panel of 90mm panel thickness



Considering a λ of 0.024 [W/(m*K)] for Daikin Polyurethane panel and 0.047 [W/(m*K)] for Mineral wool panel



UNIT FEATURES

Ahu selection

AHU selection and offers directly issued from ASTRA selection software for both standard and non standard units

Range

Wide range of components and design selectable directly with our selection software ASTRA

Variable dimensioning

thanks to the exclusive Variable Dimensioning design method, clients will always enjoy an efficient and optimized dimensioning of the units

Construction

The exclusive fixing method used for panels and profiles will ensure an uniform pressure on the whole profile length. That feature will improve significantly the air leakage rate

INTERNAL SURFACE

Completely smooth internal surface

Autocad drawings

AutoCAD drawings (.dwg) immediately available with ASTRA selection software with both standard and non standard size, this will ease AHU integration within job site allocated space

Optimized air face velocity

automatic dimensioning of section in order to guarantee an optimal air face velocity on coils and optimized unit cost

Unit competitiveness

through Variable Dimensioning™ exclusive design our clients are sure to invest only for the most optimized panel surface needed to match their requirements

Delivery lead time

same delivery lead-time for both standard and non standard units thanks to our exclusive design and production software MECCANO

Special gaskets

utilization of special gasket will ensure internal insulation of the profiles and will help to improve the thermal bridging factor

MEASURING CONDITIONS

CHILLERS

| | | | |
|-----------------------|------------------------|-------------------------------|-------------------------------|
| Air cooled | Cooling | Water 7°C / 12°C | Ambient temperature : 35°C |
| | Heating | Water 45°C / 50°C | Ambient temperature : 7°C |
| Condensing unit | Suction dewpoint : 5°C | | Ambient temperature : 35°C |
| Condenserless chiller | Cooling | Water 7°C / 12°C | Condensing temp : 45°C |
| | | | Liquid temp. : 40°C |
| Water cooled | Cooling | Evaporator water : 7°C / 12°C | Water condenser : 30°C / 35°C |
| | Heating | Evaporator water : 7°C / 12°C | Water condenser : 40°C / 45°C |

FAN COILS

Measuring conditions (at nominal air flow and ESP): COOLING: air temperature entering the unit: 27°C/19°C, water temperature entering the unit 7°C, water temperature leaving the unit 12°C - HEATING: room air temperature 20°C, for 2-pipe units: water temperature entering 50°C - water flow rate same as for the cooling test, for 4-pipe units: water temperature entering 70°C - water temperature leaving 60°C

NOTES

NOTES





Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



Daikin Europe N.V. participates in the Eurovent Certification programme for Air conditioners (AC), Liquid Chilling Packages (LCP), Air handling units (AHU) and Fan coil units (FCU). Check ongoing validity of certificate online: www.eurovent-certification.com or using: www.certiflash.com*

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