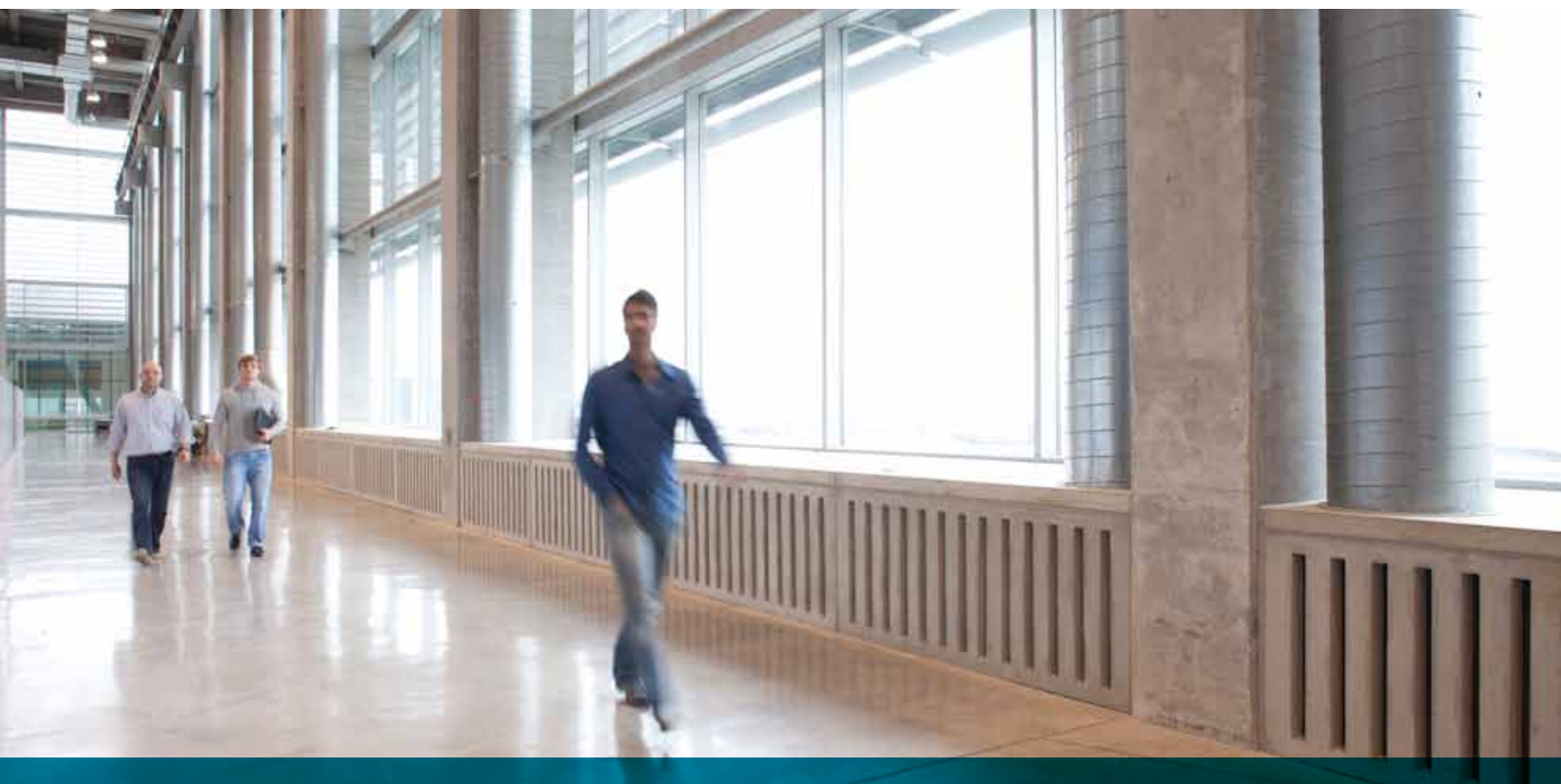
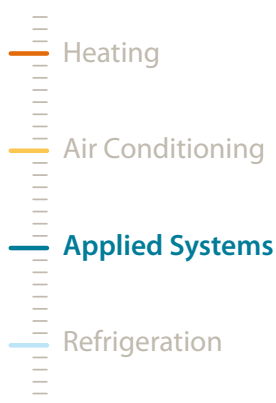




# Applied systems Catalogue

All Seasons  
CLIMATE COMFORT





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.

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# PRODUCT PORTFOLIO AIR COOLED

| Type       | Compr. | Refr.  | Mode                                                                               | Reference       | Packshot                                                                            | 0 | 17.5 | 200 |
|------------|--------|--------|------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------|---|------|-----|
| Air cooled | SWING  | R-410A |   | EWAQ005-007ACV3 |    |   |      |     |
|            | SCROLL |        |                                                                                    | EWAQ009-011ACV3 |    |   |      |     |
|            |        |        |                                                                                    | EWAQ009-013ACW1 |    |   |      |     |
|            | SWING  | R-410A |   | EWYQ005-007ACV3 |    |   |      |     |
|            | SCROLL |        |                                                                                    | EWYQ009-011ACV3 |    |   |      |     |
|            |        |        |                                                                                    | EWYQ009-013ACW1 |    |   |      |     |
|            | SCROLL | R-407C |   | EUWAC5-10FBZW1  |    |   |      |     |
|            |        |        |                                                                                    | EUWA*5-24KBZW1  |    |   |      |     |
|            |        |        |                                                                                    | EUWY*5-24KBZW1  |    |   |      |     |
|            |        | R-410A |  | EWAQ080-260DAYN |   |   |      |     |
|            |        |        |                                                                                    | EWYQ080-250DAYN |  |   |      |     |

# PRODUCT PORTFOLIO WATER COOLED

| Type                  | Compr. | Refr.  | Mode                                                                                | Reference                            | Packshot                                                                            | 0 | 17.5 | 200 |
|-----------------------|--------|--------|-------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|---|------|-----|
| Water cooled          | SCROLL | R-407C |  | EWWP014-065KBW1N<br>EWWP090-195KBW1N |  |   |      |     |
| Condenserless chiller | SCROLL | R-407C |  | EWLP012-65KBW1N                      |  |   |      |     |

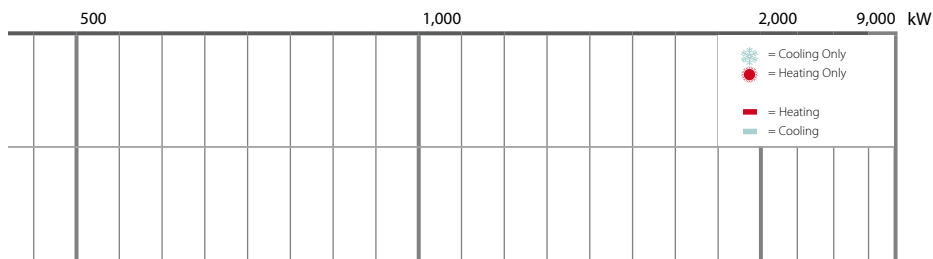
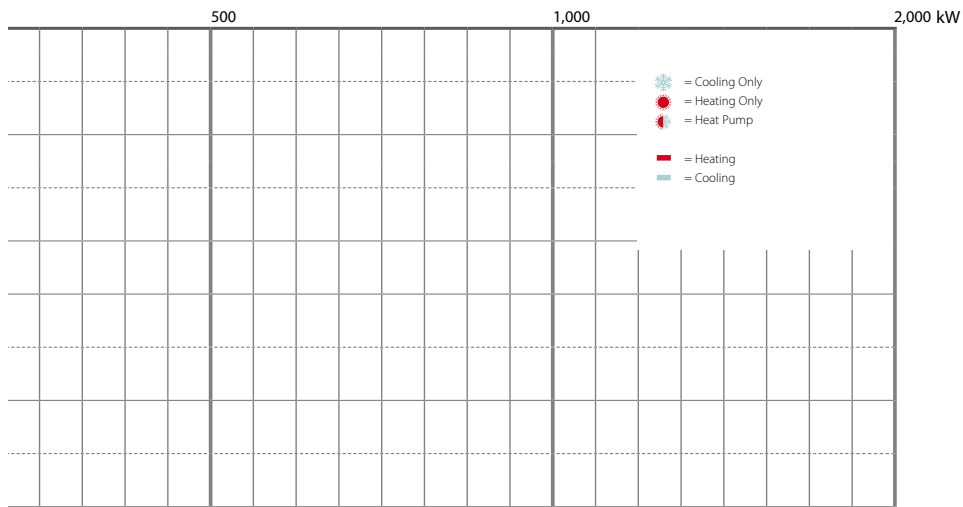
# OPTION PORTFOLIO

| Type                  | Compr. | Refr.  | Mode                                                                                | Reference   | Products                        | Integrated Hydronics |                   |             |           |               |
|-----------------------|--------|--------|-------------------------------------------------------------------------------------|-------------|---------------------------------|----------------------|-------------------|-------------|-----------|---------------|
|                       |        |        |                                                                                     |             |                                 | Single pump contact  | Twin pump contact | Single pump | Twin pump | High ESP pump |
|                       |        |        |                                                                                     |             |                                 | OPSC                 | OPTC              | OPSP        | OPTP      | OPHP          |
| Air Cooled            | SWING  | R-410A |  | EWAQ-ACV3   | 005-006-007                     |                      |                   | STD         |           |               |
|                       |        |        |  | EWYQ-ACV3   | 005-006-007                     |                      |                   | STD         |           |               |
|                       | SCROLL | R-410A |  | EWAQ-ACV3   | 009-010-011                     |                      |                   | STD         |           |               |
|                       |        |        |  | EWAQ-ACW1   | 009-011-013                     |                      |                   | STD         |           |               |
|                       |        |        |  | EWYQ-ACV3   | 009-010-011                     |                      |                   | STD         |           |               |
|                       |        |        |  | EWYQ-ACW1   | 009-011-013                     |                      |                   | STD         |           |               |
|                       |        | R-407C |  | EUWAC-FBZW1 | 5-8-10                          |                      |                   |             |           |               |
|                       |        |        |  | EUWAN-KBZW1 | 5-8-10-12-16-20-24              |                      |                   |             |           |               |
|                       |        |        |  | EUWAP-KBZW1 | 5-8-10-12-16-20-24              |                      |                   |             |           | •             |
|                       |        |        |  | EUWAB-KBZW1 | 5-8-10-12-16-20-24              |                      |                   |             |           | •             |
|                       |        |        |  | EUWYN-KBZW1 | 5-8-10-12-16-20-24              |                      |                   |             |           |               |
|                       |        |        |  | EUWYP-KBZW1 | 5-8-10-12-16-20-24              |                      |                   |             |           | •             |
|                       |        |        |  | EUWYB-KBZW1 | 5-8-10-12-16-20-24              |                      |                   |             |           | •             |
|                       |        | R-410A |  | EWAQ-DAYNN  | 080-100-130-150-180-210-240-260 | •                    | •                 | •           | •         | •             |
|                       |        |        |  | EWYQ-DAYNN  | 080-100-130-150-180-210-240-260 | •                    | •                 | •           | •         | •             |
| Water Cooled          | SCROLL | R-407C |  | EWWP-KBW1N  | 014-022-028-035-045-055-065     |                      |                   |             |           |               |
| Condenserless chiller | SCROLL | R-407C |  | EWLP-KBW1N  | 012-020-026-030-040-055-065     |                      |                   |             |           |               |

(s) OP12 & OP03 need to be added to meet Swedish national law 1992: 16

(1) Impossible option combination: OPZH+OPZL

(2) Not available with option OPLN



|             | Noise & Head Pressure Control |               |               | LWE         |            | Electrical             |             |             | Refrigerant                |                    | Condenser   |
|-------------|-------------------------------|---------------|---------------|-------------|------------|------------------------|-------------|-------------|----------------------------|--------------------|-------------|
| Buffer tank | Low noise                     | Inverter fans | High ESP fans | High Glycol | Low Glycol | Evaporator heater tape | Main switch | A / V meter | Dual pressure relief valve | Suction stop valve | Coil guards |
| OPBT        | OPLN                          | OPIF          | OPHF          | OPZH        | OPZL       | OP10                   | OP52        | OP57        | OP03                       | OP12               | OPCG        |
|             |                               |               |               |             |            | STD                    |             |             |                            |                    |             |
|             |                               |               |               |             |            | STD                    |             |             |                            |                    |             |
|             |                               |               |               |             |            | STD                    |             |             |                            |                    |             |
|             |                               |               |               |             |            | STD                    |             |             |                            |                    |             |
|             |                               |               |               |             |            | STD                    |             |             |                            |                    |             |
|             |                               |               |               |             |            | STD                    |             |             |                            |                    |             |
|             |                               |               |               | .           | .          |                        |             |             |                            |                    |             |
|             |                               |               | .             | .           | .          | .                      |             |             |                            |                    |             |
|             |                               |               | .             | .           | .          | .                      |             |             |                            |                    |             |
| STD         |                               |               | .             | .           | .          | .                      |             |             |                            |                    |             |
|             |                               |               | .             | .           | .          | .                      |             |             |                            |                    |             |
|             |                               |               | .             | .           | .          | .                      |             |             |                            |                    |             |
| STD         |                               |               | .             | .           | .          | .                      |             |             |                            |                    |             |
| .           | .                             | •(2)          |               |             | .          | .                      | STD         | .           | .                          | •(s)               | .           |
| .           | .                             | •(2)          |               |             | .          | .                      | STD         | .           | .                          | •(s)               | .           |
|             |                               |               |               | .           | .          |                        |             |             |                            |                    |             |
|             |                               |               |               | .           | .          |                        |             |             |                            |                    |             |

# ACCESSORIES PORTFOLIO

|                              | EWA/YQ009-011ACV3<br>EWA/YQ009-013ACW1 | Air-cooled Chillers |               |                                          | Water-cooled Chillers |             |         |
|------------------------------|----------------------------------------|---------------------|---------------|------------------------------------------|-----------------------|-------------|---------|
|                              |                                        | EUWAC-FBZW1         | EUWA/Y*-KBZW1 | EWA/YQ-DAYN                              | EWWP-KBW1N            | EWLP-KBW1N  | EWWD~BJ |
| Panels                       |                                        |                     |               |                                          |                       |             |         |
| EKDSSP                       |                                        |                     |               |                                          |                       |             | •       |
| EKDSSP-S***                  |                                        |                     |               |                                          |                       |             |         |
| EKDDSP                       |                                        |                     |               |                                          |                       |             | •       |
| EKPWPRO                      |                                        |                     |               |                                          |                       |             | •       |
| EKPWPROM                     |                                        |                     |               |                                          |                       |             | •       |
| Serial Cards & Comm. Modules |                                        |                     |               |                                          |                       |             |         |
| EKAC10C                      |                                        | •                   | •             |                                          | •                     | •           |         |
| EKACPG                       |                                        |                     |               | •                                        |                       |             |         |
| EKAC200A                     |                                        |                     |               |                                          |                       |             |         |
| EKAC200J                     |                                        |                     |               |                                          |                       |             | •       |
| EKACBAC                      |                                        |                     |               |                                          |                       |             | •       |
| EKACLON                      |                                        |                     |               |                                          |                       |             | •       |
| EKACLONP                     |                                        |                     |               |                                          |                       |             | •       |
| EKACRS232                    |                                        |                     |               |                                          |                       |             | •       |
| EKACWEB                      |                                        |                     |               |                                          |                       |             | •       |
| EKACBACMSTP                  |                                        |                     |               |                                          |                       |             | •       |
| EKACBACCERT                  |                                        |                     |               |                                          |                       |             |         |
| EKCM200J                     |                                        |                     |               |                                          |                       |             |         |
| EKCMLON                      |                                        |                     |               |                                          |                       |             |         |
| EKCMBACMSTP                  |                                        |                     |               |                                          |                       |             |         |
| EKCMBACIP                    |                                        |                     |               |                                          |                       |             |         |
| LON Gateway                  |                                        |                     |               |                                          |                       |             |         |
| EKLONPG                      |                                        |                     |               | •                                        |                       |             |         |
| Other Systems & Accessories  |                                        |                     |               |                                          |                       |             |         |
| EKCLWS                       |                                        |                     |               |                                          |                       |             |         |
| EKCON                        |                                        |                     |               |                                          |                       |             | •       |
| EKCONUSB                     |                                        |                     |               |                                          |                       |             | •       |
| EKMODEM                      |                                        |                     |               |                                          |                       |             | •       |
| EKGSMOD                      |                                        |                     |               |                                          |                       |             | •       |
| EKRP1HB                      | •                                      |                     |               |                                          |                       |             |         |
| EKRUPCJ                      |                                        |                     |               |                                          |                       |             |         |
| EKRUPCK                      |                                        |                     |               |                                          |                       |             | •       |
| EKRUPCS                      |                                        |                     |               |                                          |                       |             |         |
| EKPV2J                       |                                        |                     |               |                                          |                       |             | •       |
| EKPWPPOEXT                   |                                        |                     |               |                                          |                       |             | •       |
| EKGWWEB                      |                                        |                     |               |                                          |                       |             | •       |
| EKGWMODEM                    |                                        |                     |               |                                          |                       |             | •       |
| EKBNPG                       |                                        |                     |               | •                                        |                       |             |         |
| EKBMSBNA                     |                                        |                     |               |                                          |                       |             |         |
| EKBMSMBA                     |                                        |                     |               |                                          |                       |             |         |
| EKRUMCA                      |                                        | •                   |               |                                          | •                     | •           |         |
| EKRUPC                       |                                        |                     |               |                                          |                       |             |         |
| EKRUPG                       |                                        |                     |               | •                                        |                       |             |         |
| EHMC*AV1010                  |                                        | •                   |               |                                          | •                     |             |         |
| EHMC*AV1080                  |                                        | •                   |               |                                          | •                     |             |         |
| Gauges                       |                                        |                     |               |                                          |                       |             |         |
| EKGAU5/8KA                   |                                        |                     | • (5-8)       |                                          |                       |             |         |
| EKGAU10/12KA                 |                                        |                     | • (10-12)     |                                          |                       |             |         |
| EKGAU16KA                    |                                        |                     | • (16)        |                                          |                       |             |         |
| EKGAU20/24KA                 |                                        |                     | • (20-24)     |                                          |                       |             |         |
| Soft starter                 |                                        |                     |               |                                          |                       |             |         |
| EKSS                         |                                        |                     | •             |                                          | • (014-045)           | • (012-030) |         |
| Buffer tank                  |                                        |                     |               |                                          |                       |             |         |
| EKBT                         |                                        |                     | •             |                                          |                       |             |         |
| Waterpipe kit                |                                        |                     |               |                                          |                       |             |         |
| EKGN210                      |                                        |                     |               | • (080-210)                              |                       |             |         |
| EKGN260                      |                                        |                     |               | • (EWAQ240-260DAYN<br>& EWYO230-250DAYN) |                       |             |         |

\* To install EKRUMCA => EKAC10C needs to be installed on the unit.

\* EKAC10C allows direct connection to MODBUS BMS system

\* To install EKLONPG & EKBNPG => EKACPG needs to be installed on the unit.





Daikin Europe N.V.

# 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.

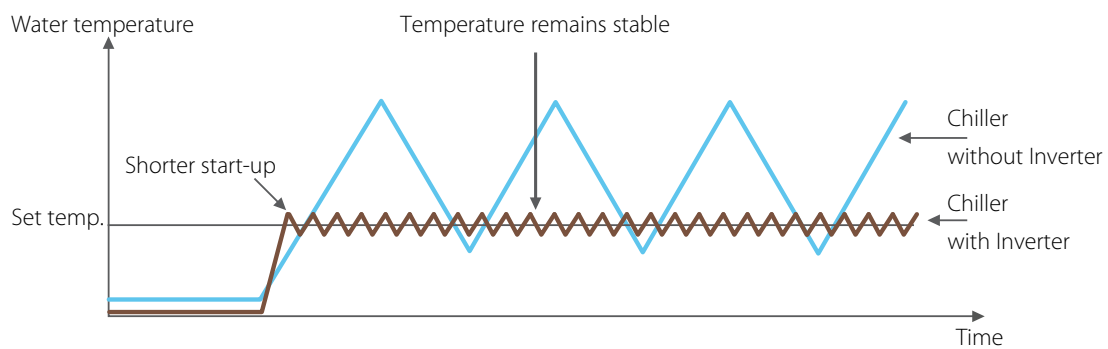
Hence, models with energy saving features and improved eco-production techniques have seen the light of day, making a significant contribution to limiting the impact on the environment.

## SMART CONTROL BRINGS COMFORT AND REDUCES ENERGY CONSUMPTION

Inverter technology used in the air cooled Mini Chiller (EWAQ-AC & EWYQ-AC) 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.



## 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.

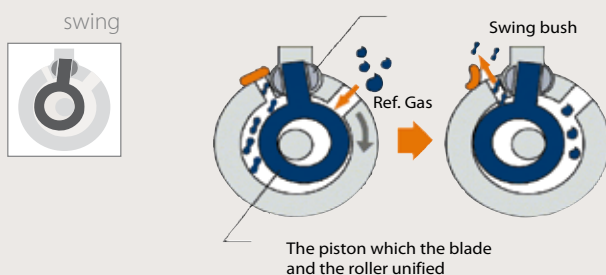
### Principal benefits

- **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

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 SWING COMPRESSOR:



The Mini Chiller series EWAQ005-007ACV3 & EWWQ005-007ACV3 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 9.1 and 281kW.

### 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

## 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:



Example of acrylic treatment

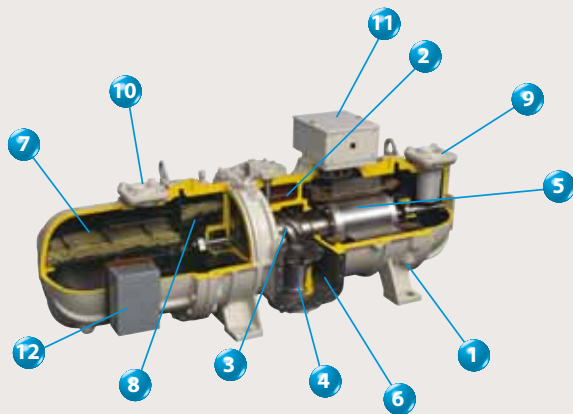
### Acrylic treatment (Daikin ref PE)

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

### Epoxy Treatment

The aluminium fins are black epoxy coated.

## THE SINGLE SCREW STEPLESS COMPRESSOR FOR HIGH CAPACITY:



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

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

# 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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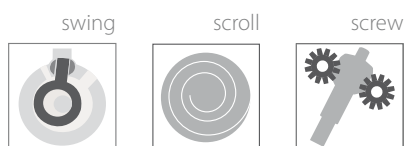
|                       |    |
|-----------------------|----|
| EWAQ-ACV3 & EWAQ-ACW1 | 16 |
| EWYQ-ACV3 & EWYQ-ACW1 | 18 |
| EUWAC-FBZW1           | 20 |
| EUWA*-KBZW1           | 22 |
| EUWY*-KBZW1           | 24 |
| EWAQ-DAYN             | 26 |
| EWYQ-DAYN             | 28 |

**R-410A**

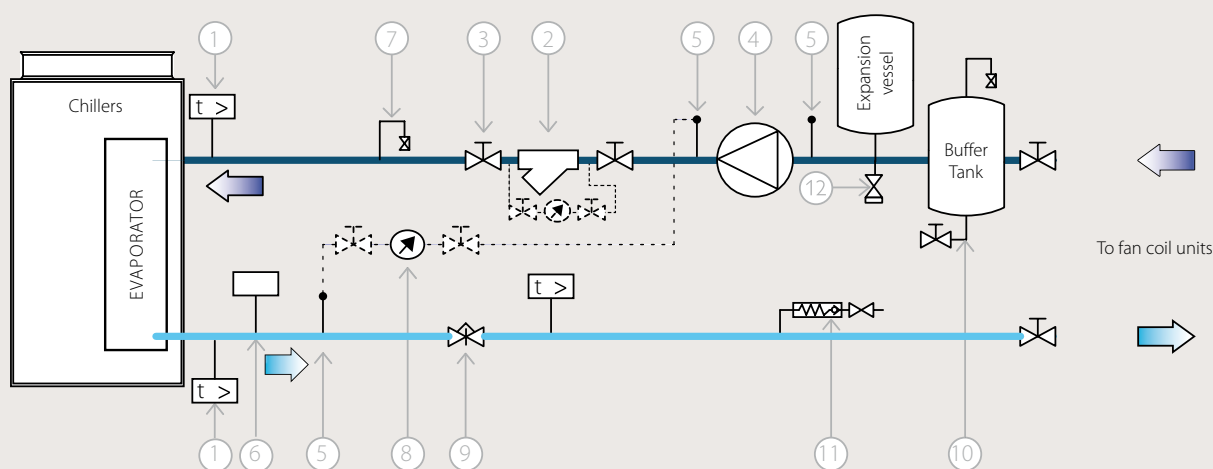
**R-134a**

**R-407C**

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.



## AIR COOLED CHILLER



### STRENGTHS

- › Optimised for use with R-410A
- › Inverter controlled swing compressor (size 005-007)
  - Precise temperature control
- › Inverter controlled scroll compressor (size 009-011)
- › Low operating sound level
- › Easy 'plug and play installation'
- › Wide operating range
- › Integrated hydronics

### OPTIONS (FACTORY MOUNTED)

- › Evaporator heater tape

### OPTION KIT

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

### CONTROL

- › Leaving water control

### AVAILABLE INPUTS

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



DIGITAL CONTROLLER

swing



scroll



**R-410A**





EWAQ005-007ACV3 +  
EWAQ009-011ACV3 / EWAQ009-013ACW1

## Cooling only

| Capacity class       |                                     |                    |                | EWAQ-ACV3                            |      |      |                                       |      |      | EWAQ-ACW1 |      |      |
|----------------------|-------------------------------------|--------------------|----------------|--------------------------------------|------|------|---------------------------------------|------|------|-----------|------|------|
|                      |                                     |                    |                | 005                                  | 006  | 007  | 009                                   | 010  | 011  | 009       | 011  | 013  |
| Cooling capacity     | Nom.                                |                    | kW             | 5.2                                  | 6.0  | 7.1  | 8.5                                   | 9.5  | 11.0 | 9.0       | 11.0 | 13.2 |
| Power input          | Cooling                             | Nom.               | kW             | 1.89                                 | 2.35 | 2.95 | 2.74                                  | 3.19 | 3.82 | 2.96      | 3.82 | 5.10 |
| EER                  |                                     |                    |                | 2.75                                 | 2.55 | 2.41 | 3.11                                  | 2.98 | 2.88 | 3.04      | 2.88 | 2.59 |
| ESEER                |                                     |                    |                | 3.75                                 | 3.83 | 3.87 | 4.57                                  | 4.52 | 4.46 | 4.68      | 4.63 | 4.52 |
| Dimensions           | Unit                                | HeightxWidthxDepth | mm             | 805x1,190x360                        |      |      | 1,435x1,418x382                       |      |      |           |      |      |
| Weight               | Unit                                |                    | kg             | 100                                  |      |      | 180                                   |      |      |           |      |      |
| Water heat exchanger | Type                                |                    |                | Brazed plate                         |      |      |                                       |      |      |           |      |      |
|                      | Water volume                        | l                  |                | -                                    |      |      | 1.01                                  |      |      |           |      |      |
|                      | Nominal water flow                  | Cooling            | l/min          | 14.9                                 | 17.2 | 20.4 | 24.4                                  | 27.2 | 31.5 | 25.8      | 31.5 | 37.8 |
| Air heat exchanger   | Type                                |                    |                | Tube type                            |      |      | Hi-XSS                                |      |      |           |      |      |
| Pump                 | Nominal ESP unit                    | Cooling            | kPa            | 49.4                                 | 45.1 | 38.3 | 58.0                                  | 54.6 | 49.1 | 56.4      | 49.1 | 40.9 |
| Hydraulic components | Expansion vessel                    | Volume             | l              | 6                                    |      |      | 10                                    |      |      | 10        |      |      |
| Fan                  | Air flow rate                       | Cooling            | Nom. m³/min    | -                                    |      |      | 96                                    | 100  | 97   | -         |      |      |
| Fan motor            | Speed                               | Cooling            | Nom. rpm       | -                                    |      |      | 780                                   |      |      |           |      |      |
|                      |                                     | Steps              |                | -                                    |      |      | 8                                     |      |      |           |      |      |
| Sound power level    | Cooling                             | Nom.               | dB(A)          | 62                                   |      | 63   | 64                                    |      |      |           |      | 66   |
| Sound pressure level | Cooling                             | Nom.               | dB(A)          | 48                                   |      | 50   | 51                                    |      |      |           |      | 52   |
|                      | Night quiet mode                    | Cooling            | dB(A)          | -                                    |      |      | 45                                    |      |      |           |      | 46   |
| Compressor           | Type                                |                    |                | Hermetically sealed swing compressor |      |      | Hermetically sealed scroll compressor |      |      |           |      |      |
| Operation range      | Water side                          | Cooling            | Min.~Max. °CDB | 5~20                                 |      |      | 5~22                                  |      |      |           |      |      |
|                      | Air side                            | Cooling            | Min.~Max. °CDB | 10~43                                |      |      | 10~46                                 |      |      |           |      |      |
| Refrigerant          | Type                                |                    |                | R-410A                               |      |      |                                       |      |      |           |      |      |
|                      | Charge                              | kg                 |                | 1.7                                  |      |      | 2.95                                  |      |      |           |      |      |
|                      | Control                             |                    |                | Electronic expansion valve           |      |      |                                       |      |      |           |      |      |
|                      | Circuits                            | Quantity           |                | 1                                    |      |      |                                       |      |      |           |      |      |
| Water circuit        | Piping connections diameter         |                    | inch           | -                                    |      |      | G 5/4" (female)                       |      |      |           |      |      |
|                      | Piping                              |                    | inch           | -                                    |      |      | 5/4"                                  |      |      |           |      |      |
| Piping connections   | Water heat exchanger inlet / outlet |                    |                | 1" MBSP                              |      |      | -                                     |      |      |           |      |      |
|                      | Water heat exchanger drain          |                    |                | Hose nipple 1/2" FBSP                |      |      | -                                     |      |      |           |      |      |
| Power supply         | Phase / Frequency / Voltage         |                    | Hz / V         | 1 ~ / 50 / 230                       |      |      | 3N ~ / 50 / 400                       |      |      |           |      |      |

### STRENGTHS

- › Optimised for use with R-410A
- › Inverter controlled swing compressor (size 005-007)
  - Precise temperature control
- › Inverter controlled scroll compressor (size 009-011)
- › Low operating sound level
- › Easy 'plug and play' installation
- › Integrated hydronics
- › Wide operating range

### 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



DIGITAL CONTROLLER

swing scroll



**R-410A**





EWYQ005-007ACV3 +  
EWYQ009-011ACV3/EWYQ009-013ACW1

## Heating & Cooling

| Capacity class       |                                     |                    |           | EWYQ-ACV3                            |               |      |      |                                       |                 | EWYQ-ACW1 |      |      |      |  |
|----------------------|-------------------------------------|--------------------|-----------|--------------------------------------|---------------|------|------|---------------------------------------|-----------------|-----------|------|------|------|--|
|                      |                                     |                    |           | 005                                  | 006           | 007  | 009  | 010                                   | 011             | 009       | 011  | 013  |      |  |
| Cooling capacity     | Nom.                                |                    |           | kW                                   | 5.2           | 6.0  | 7.1  | 8.5                                   | 9.5             | 11.0      | 9.0  | 11.0 | 13.2 |  |
| Heating capacity     | Nom.                                |                    |           | kW                                   | 5.65          | 6.35 | 7.75 | 10.0                                  | 11.5            | 13.0      | 11.0 | 12.5 | 14.0 |  |
| Power input          | Cooling                             | Nom.               |           | kW                                   | 1.89          | 2.35 | 2.95 | 2.74                                  | 3.19            | 3.82      | 2.96 | 3.82 | 5.10 |  |
|                      | Heating                             | Nom.               |           | kW                                   | 1.97          | 2.24 | 2.83 | 2.91                                  | 3.38            | 3.86      | 3.23 | 3.70 | 4.19 |  |
| EER                  |                                     |                    |           |                                      | 2.75          | 2.55 | 2.41 | 4.37                                  | 2.98            | 2.88      | 3.04 | 2.88 | 2.59 |  |
| COP                  |                                     |                    |           |                                      | 2.87          | 2.83 | 2.74 | 3.44                                  | 3.40            | 3.37      | 3.41 | 3.38 | 3.34 |  |
| ESEER                |                                     |                    |           |                                      | -             |      |      | 4.57                                  | 4.52            | 4.46      | 4.68 | 4.63 | 4.52 |  |
| Dimensions           | Unit                                | HeightxWidthxDepth | mm        | 805x1,190x360                        |               |      |      | 1,435x1,418x382                       |                 |           |      |      |      |  |
| Weight               | Unit                                |                    |           | kg                                   | 100           |      |      |                                       | 180             |           |      |      |      |  |
|                      | Operation weight                    |                    |           | kg                                   | 104           |      |      |                                       | -               |           |      |      |      |  |
| Water heat exchanger | Type                                |                    |           | Braze plate                          |               |      |      |                                       |                 |           |      |      |      |  |
|                      | Water volume                        |                    |           | l                                    | -             |      |      |                                       | 1.01            |           |      |      |      |  |
|                      | Nominal water flow                  | Cooling            | l/min     | 14.9                                 | 17.2          | 20.4 | 24.4 | 27.2                                  | 31.5            | 25.8      | 31.5 | 37.8 |      |  |
|                      |                                     | Heating            | l/min     | 17.5                                 | 19.5          | 23.5 | 28.7 | 33.0                                  | 37.3            | 31.5      | 35.8 | 40.1 |      |  |
| Air heat exchanger   | Type                                |                    |           | Tube type                            |               |      |      | Hi-XSS                                |                 |           |      |      |      |  |
| Pump                 | Nominal ESP unit                    |                    | Cooling   | kPa                                  | 49.4          | 45.1 | 38.3 | 58.0                                  | 54.6            | 49.1      | 56.4 | 49.1 | 40.9 |  |
| Hydraulic components | Expansion vessel                    |                    | Volume    | l                                    | 6             |      |      |                                       | 10              |           |      |      |      |  |
| Fan                  | Air flow rate                       | Cooling            | Nom.      | m³/min                               | -             |      |      |                                       | 96              | 100       | 97   | -    |      |  |
|                      |                                     | Heating            | Nom.      | m³/min                               | -             |      |      |                                       | 90              |           |      | -    |      |  |
| Fan motor            | Speed                               | Cooling            | Nom.      | rpm                                  | -             |      |      |                                       | 780             |           |      |      |      |  |
|                      |                                     | Heating            | Nom.      | rpm                                  | -             |      |      |                                       | 760             |           |      |      |      |  |
|                      |                                     | Steps              |           |                                      | -             |      |      |                                       | 8               |           |      |      |      |  |
|                      |                                     |                    |           |                                      |               |      |      |                                       |                 |           |      |      |      |  |
| Sound power level    | Cooling                             | Nom.               |           | dBA                                  | 62            |      | 63   | 64                                    |                 |           |      | 66   |      |  |
|                      | Heating                             | Nom.               |           | dBA                                  | -             |      |      |                                       | 64              |           |      |      |      |  |
| Sound pressure level | Cooling                             | Nom.               |           | dBA                                  | 48            |      | 50   | 51                                    |                 |           |      | 52   |      |  |
|                      | Heating                             | Nom.               |           | dBA                                  | 48            |      | 49   | 51                                    |                 |           |      |      |      |  |
|                      | Night quiet mode                    | Cooling            |           | dBA                                  | -             |      |      |                                       | 45              |           |      |      | 46   |  |
|                      |                                     | Heating            |           | dBA                                  | -             |      |      |                                       | 42              |           |      |      | 43   |  |
| Compressor           | Type                                |                    |           | Hermetically sealed swing compressor |               |      |      | Hermetically sealed scroll compressor |                 |           |      |      |      |  |
| Operation range      | Water side                          | Cooling            | Min.~Max. | °CDB                                 | 5~20          |      |      |                                       | 5~22            |           |      |      |      |  |
|                      |                                     | Heating            | Min.~Max. | °CDB                                 | 25~50         |      |      |                                       | 25~50           |           |      |      |      |  |
|                      | Air side                            | Cooling            | Min.~Max. | °CDB                                 | 10~43         |      |      |                                       | 10~46           |           |      |      |      |  |
|                      |                                     | Heating            | Min.~Max. | °CDB                                 | -15~25        |      |      |                                       | -15~35          |           |      |      |      |  |
| Refrigerant          | Type                                |                    |           | R-410A                               |               |      |      |                                       |                 |           |      |      |      |  |
|                      | Charge                              |                    |           | kg                                   | 1.7           |      |      |                                       | 2.95            |           |      |      |      |  |
|                      | Control                             |                    |           | Electronic expansion valve           |               |      |      |                                       |                 |           |      |      |      |  |
|                      | Circuits                            |                    |           | Quantity                             | 1             |      |      |                                       |                 |           |      |      |      |  |
| Water circuit        | Piping connections diameter         |                    |           | inch                                 | -             |      |      |                                       | G 5/4" (female) |           |      |      |      |  |
|                      | Piping                              |                    |           | inch                                 | -             |      |      |                                       | 5/4"            |           |      |      |      |  |
| Piping connections   | Water heat exchanger inlet / outlet |                    |           | 1" MBSP                              |               |      |      | -                                     |                 |           |      |      |      |  |
|                      | Water heat exchanger drain          |                    |           | Hose nipple 1/2" FBSP                |               |      |      | -                                     |                 |           |      |      |      |  |
| Power supply         | Phase / Frequency / Voltage         |                    |           | Hz / V                               | 1~ / 50 / 230 |      |      |                                       | 3N~ / 50 / 400  |           |      |      |      |  |

### 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
- ›  $\mu C^2$  SE controller



scroll



**R-407C**

### OPTIONS (FACTORY MOUNTED)

- › Chilled water temperature down to - 5°C (OPZH) or -10°C (OPZL)

\* OPZH: Option LWE high glycol

OPZL: Option LWE low glycol

### 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      |                 | 48 |  |
|                                   | 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.               |           | m³/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)
- ›  $\mu C^2$  SE controller



$\mu C^2$  SE

scroll



**R-407C**

### OPTIONS (FACTORY MOUNTED)

- › Chilled water temperature down to -5°C (OPZH) or -10°C (OPZL)
- › High ESP fans (50Pa) (OPHF)
- › Pump size up (OPHP)

\* OPZH: Option LWE high glycol

OPZL: Option LWE low glycol

### 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 (EKSUMCA)

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

### CONTROL

- › Water inlet temperature control

### AVAILABLE

#### INPUTS / OUTPUTS

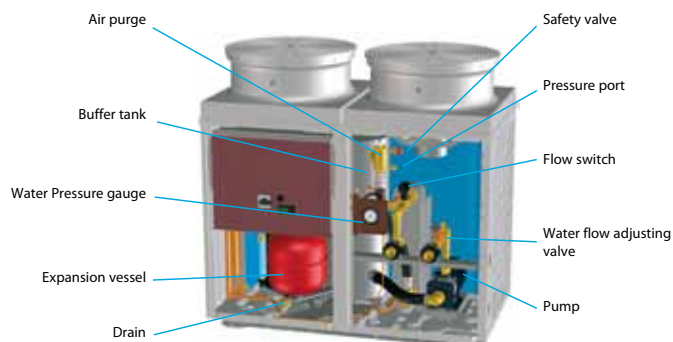
##### Input

- › 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.               |           | kW                                                         | 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 |           | mm                                                         | 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                        |                    |           |                                                            | Braze plate      |     |     |                  |     |     |                 |     |     |       |     |     |                 |     |     |       |          |     |                 |                  |     |  |     |  |  |     |  |  |
|                       | Water volume                |                    |           | l                                                          | 1.14             |     |     | 1.615            |     |     | 1.9             |     |     | 2.375 |     |     | 2.964           |     |     | 3.9   |          |     | 4.524           |                  |     |  |     |  |  |     |  |  |
|                       | Nominal water flow          |                    |           | l/min                                                      | 32               |     |     | 51               |     |     | 64              |     |     | 76    |     |     | 99              |     |     | 134   |          |     | 158             |                  |     |  |     |  |  |     |  |  |
|                       | Nominal water pressure drop |                    |           | Heat exchanger<br>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               |     |  |     |  |  |     |  |  |
| 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.               |           | dB(A)                                                      | 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                               |                  |     |     |                  |     |     |                 |     |     |       |     |     |                 |     |     |       |          |     |                 |                  |     |  |     |  |  |     |  |  |
|                       | Circuits                    |                    | Quantity  | 1                                                          |                  |     |     |                  |     |     |                 |     |     | 2     |     |     |                 |     |     |       |          |     |                 |                  |     |  |     |  |  |     |  |  |
| Refrigerant circuit   | Charge                      |                    |           | kg                                                         | 3.9              |     |     | 4.6              |     |     | 5.9             |     |     | 6.0   |     |     | 4.6             |     |     | 5.9   |          |     | 6.0             |                  |     |  |     |  |  |     |  |  |
| Refrigerant circuit 2 | Charge                      |                    |           | kg                                                         | -                |     |     |                  |     |     |                 |     |     |       |     |     |                 |     |     |       |          |     |                 | 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)
- ›  $\mu C^2$  SE controller



scroll



**R-407C**

### OPTIONS (FACTORY MOUNTED)

- › Chilled water temperature down to -5°C (OPZH) or -10°C (OPZL)
- › High ESP fans (50Pa) (OPHF)
- › Pump size up (OPHP)

\* OPZH: Option LWE high glycol

OPZL: Option LWE low glycol

### 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                        |                    |           | Braze plate                                                |                  |     |     |      |                  |     |     |      |                 |     |     |      |          |     |     |       |                  |     |     |      |       |  |  |      |                 |  |  |  |  |  |  |  |
|                       | Water volume                |                    |           | l                                                          | 1.140            |     |     |      | 1.615            |     |     |      | 1.900           |     |     |      | 2.375    |     |     |       | 2.964            |     |     |      | 3.900 |  |  |      | 4.524           |  |  |  |  |  |  |  |
|                       | Nominal water flow          | Cooling            |           | l/min                                                      | 26               |     |     |      | 49               |     |     |      | 60              |     |     |      | 72       |     |     |       | 98               |     |     |      | 115   |  |  |      | 143             |  |  |  |  |  |  |  |
|                       |                             | Heating            |           | l/min                                                      | 34               |     |     |      | 53               |     |     |      | 69              |     |     |      | 77       |     |     |       | 106              |     |     |      | 132   |  |  |      | 155             |  |  |  |  |  |  |  |
|                       | Nominal water pressure drop | Cooling            | Filter    | kPa                                                        | 10               |     |     |      | 25               |     |     |      | 24              |     |     |      | 33       |     |     |       | 12               |     |     |      |       |  |  |      | 19              |  |  |  |  |  |  |  |
|                       |                             | 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             |           | l                                                          | -                | 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) ~ 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                |     |     |      |                  |     |     |      |                 |     |     |      | 2        |     |     |       |                  |     |     |      |       |  |  |      |                 |  |  |  |  |  |  |  |
| Refrigerant circuit   | Charge                      |                    |           | kg                                                         | 4.6              |     |     |      | 4.7              |     |     |      | 5.4             |     |     |      | 5.1      |     |     |       | 5.4              |     |     |      | 5.6   |  |  |      |                 |  |  |  |  |  |  |  |
| Refrigerant circuit 2 | Charge                      |                    |           | kg                                                         | -                |     |     |      |                  |     |     |      |                 |     |     |      |          |     |     |       | 5.1              |     |     |      | 5.4   |  |  |      | 5.6             |  |  |  |  |  |  |  |
| Water circuit         | Piping connections diameter |                    |           | inch                                                       | G 1"1/4 (male)   |     |     |      |                  |     |     |      |                 |     |     |      |          |     |     |       | 2" male          |     |     |      |       |  |  |      |                 |  |  |  |  |  |  |  |
|                       | Piping                      |                    |           | inch                                                       | 1-1/4"           |     |     |      |                  |     |     |      |                 |     |     |      |          |     |     |       | 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 hydronics 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 (OPSC)
- › Twin pump contactor (OPTC)
- › Single pump (OPSP)
- › Twin pump (OPTP) (1 pump casing, dual motor)
- › High ESP pump (OPHP) (single pump only)
- › Buffer tank (OPBT)
- › Inverter fans (OPIF) (Not available with option OPLN)
- › Glycol 0°C / -10°C (OPZL)
- › Evaporator heater tape (OP10)
- › Option valves (discharge, liquid line and suction stop valve: OP12)
- › A-meter / V-meter (OP57)
- › Low Noise (OPLN) (=OPIF + compressor housing)
- › Condenser protection grills (OPCG)

### ACCESSORIES (KIT)

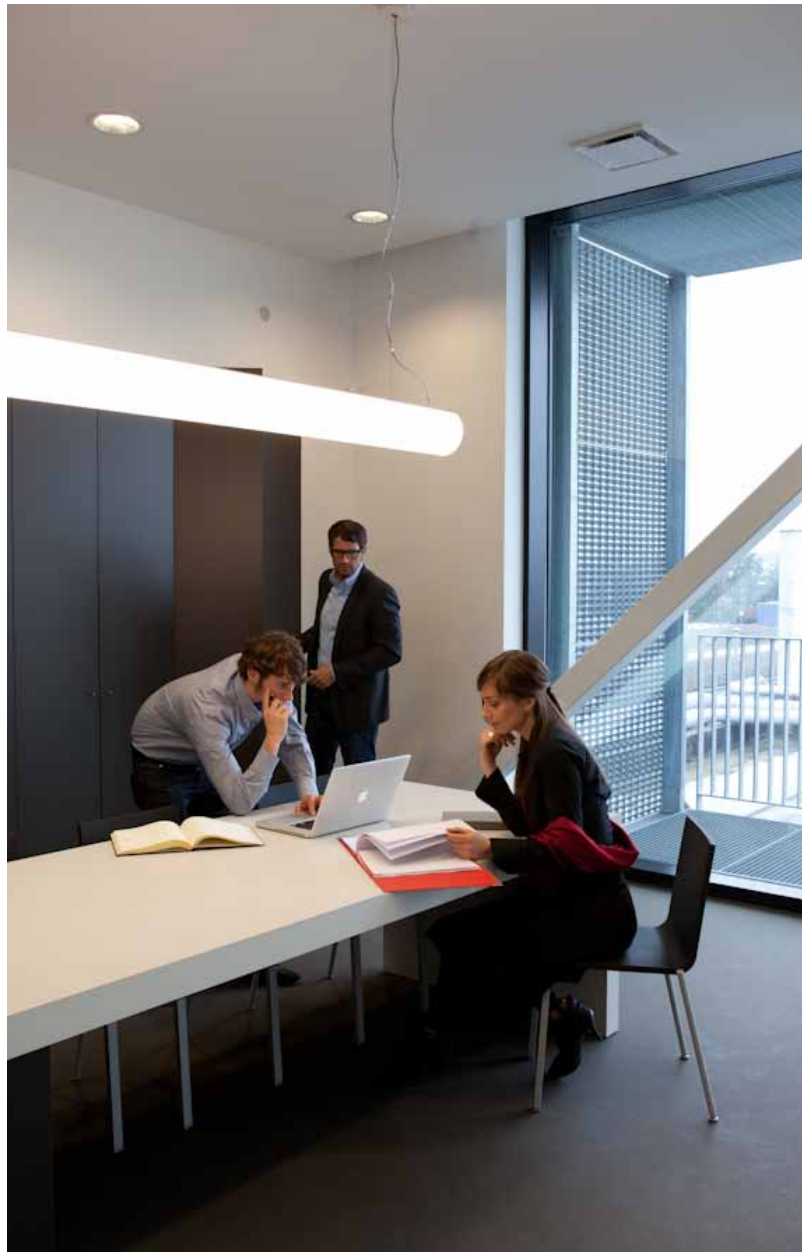
- › Gateway for LON (EKLONPG)
- › Gateway for BACNET (EKBNPG)
- › Address card (EKACPG)
- › Remote user interface (EKRUPG)



PCASO



**R-410A**





EWAQ130,150DAYN

## Cooling only

|                      |                                     |                    |           |                                                                  |                   |       |                   |       |                          |                |                          |                |    |
|----------------------|-------------------------------------|--------------------|-----------|------------------------------------------------------------------|-------------------|-------|-------------------|-------|--------------------------|----------------|--------------------------|----------------|----|
| Capacity class       |                                     |                    |           | 080                                                              | 100               | 130   | 150               | 180   | 210                      | 240            | 260                      |                |    |
| Cooling capacity     | Nom.                                |                    |           | kW                                                               | 80                | 105   | 131               | 152   | 182                      | 209            | 236                      | 254            |    |
| 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.               |           | kW                                                               | 26.4              | 36.2  | 46.6              | 56.3  | 64.5                     | 74.6           | 82.8                     | 94.0           |    |
| EER                  |                                     |                    |           |                                                                  | 3.03              | 2.90  | 2.81              | 2.70  | 2.82                     | 2.80           | 2.85                     | 2.70           |    |
| ESEER                |                                     |                    |           |                                                                  | 4.12              | 4.00  | 4.34              | 4.22  | 4.36                     | 4.32           | 4.20                     | 4.00           |    |
| 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                      | 728            |    |
|                      | Nominal water pressure drop         |                    | Cooling   | Total                                                            | kPa               | 59    | 58                | 52    | 49                       | 52             | 53                       | 51             | 47 |
| Air heat exchanger   | Type                                |                    |           | Cross fin coil/Hi-Xss tubes and poly ethylene coated waffle fins |                   |       |                   |       |                          |                |                          |                |    |
| Fan                  | Air flow rate                       |                    | Nom.      | m³/min                                                           | 780               |       | 800               |       | 860                      |                | 1,290                    |                |    |
|                      | Speed                               |                    |           | rpm                                                              | 880               |       | 900               |       | 970                      |                | 900                      |                |    |
| Sound power level    | Cooling                             | Nom.               |           | dB(A)                                                            | 86                |       | 88                |       | 89                       |                | 90                       |                |    |
| Compressor           | Type                                |                    |           | Scroll compressor                                                |                   |       |                   |       |                          |                |                          |                |    |
| Operation range      | Water side                          | Cooling            | Min.~Max. | °CDB                                                             | -10 (OPZL) ~ 25   |       |                   |       |                          |                |                          |                |    |
|                      | Air side                            | Cooling            | Min.~Max. | °CDB                                                             | -15 ~ 43          |       |                   |       |                          |                |                          |                |    |
| Refrigerant          | Type                                |                    |           | R-410A                                                           |                   |       |                   |       |                          |                |                          |                |    |
|                      | Charge                              |                    |           | kg                                                               | 33                |       | 19                |       | 25                       |                | 29                       |                |    |
|                      | Control                             |                    |           | Electronic expansion valve                                       |                   |       |                   |       |                          |                |                          |                |    |
|                      | Circuits                            |                    | Quantity  |                                                                  | 1                 |       | 2                 |       |                          |                |                          |                |    |
| 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     |       |                   |       |                          |                |                          |                |    |

### 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 hydronics 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 (OPSC)
- › Twin pump contactor (OPTC)
- › Single pump (OPSP)
- › Twin pump (OPTP) (1 pump casing, dual motor)
- › High ESP pump (OPHP) (single pump only)
- › Buffer tank (OPBT)
- › Inverter fans (OPIF) (Not available with option OPLN)
- › Glycol 0°C / -10°C (OPZL)
- › Dual pressure relief valve (OP03)
- › Evaporator heater tape (OP10)
- › Option valves (discharge, liquid line and suction stop valve: OP12)
- › A-meter / V-meter (OP57)
- › Low Noise (OPLN) (=OPIF + compressor housing)
- › Condenser protection grills (OPCG)

### ACCESSORIES (KIT)

- › Gateway for LON (EKLONPG)
- › Gateway for BACNET (EKBNPG)
- › Address card (EKACPG)
- › Remote user interface (EKRUPG)



PCASO



**R-410A**





EWYQ130,150DAYN

## Heating & Cooling

|                       |                                     |                                                                  |           |        |                   |       |                   |       |                          |                |                          |                |
|-----------------------|-------------------------------------|------------------------------------------------------------------|-----------|--------|-------------------|-------|-------------------|-------|--------------------------|----------------|--------------------------|----------------|
| Capacity class        |                                     |                                                                  |           |        | 080               | 100   | 130               | 150   | 180                      | 210            | 230                      | 250            |
| Cooling capacity      | Nom.                                |                                                                  | kW        |        | 77                | 100   | 136               | 145   | 183                      | 211            | 231                      | 252            |
| Heating capacity      | Nom.                                |                                                                  | kW        |        | 87.7              | 114   | 149               | 165   | 199                      | 225.00         | 258                      | 281            |
| Capacity steps        |                                     |                                                                  | %         |        | 0-50-100          |       | 0-25-50-75-100    |       | 21/29-43/50/57-71/79-100 | 0-25-50-75-100 | 22/28-44/50/56-72/78-100 | 0-25-50-75-100 |
| Power input           | Cooling                             | Nom.                                                             | kW        |        | 26.5              | 36.2  | 47.6              | 55.7  | 63.8                     | 75.3           | 82.2                     | 93.5           |
|                       | Heating                             | Nom.                                                             | kW        |        | 30.0              | 38.1  | 49.6              | 58.8  | 68.0                     | 77.0           | 84.2                     | 96.6           |
| EER                   |                                     |                                                                  |           |        | 2.91              | 2.76  | 2.86              | 2.60  | 2.87                     | 2.80           | 2.81                     | 2.70           |
| COP                   |                                     |                                                                  |           |        | 2.92              | 2.99  | 3.00              | 2.81  | 2.93                     | 2.92           | 3.06                     | 2.91           |
| ESEER                 |                                     |                                                                  |           |        | 4.00              | 3.81  | 4.31              | 4.07  | 4.33                     | 4.23           | 4.20                     | 4.00           |
| 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                    | 3,300          |
|                       | Operation weight                    |                                                                  |           | kg     | 1,415             | 1,465 | 1,567             | 1,619 | 1,875                    | 1,927          | 3,239                    | 3,342          |
| Water heat exchanger  | Type                                | Braze plate, one per unit                                        |           |        |                   |       |                   |       |                          |                |                          |                |
|                       | Nominal water flow                  | Cooling                                                          | l/min     |        | 221               | 287   | 390               | 416   | 525                      | 605            | 662                      | 722            |
|                       |                                     | Heating                                                          | l/min     |        | 251               | 327   | 427               | 473   | 570                      | 645            | 740                      | 806            |
|                       | Nominal water pressure drop         | Cooling                                                          | Total     | kPa    | 36                |       | 43                | 38    | 41                       | 44             | 39                       | 38             |
|                       |                                     | Heating                                                          | Total     | kPa    | 47                | 46    | 51                | 49    | 48                       | 50             | 48                       | 46             |
| Air heat exchanger    | Type                                | Cross fin coil/Hi-Xss tubes and poly ethylene coated waffle fins |           |        |                   |       |                   |       |                          |                |                          |                |
| Fan                   | Air flow rate                       | Nom.                                                             | m³/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 (OPZL) ~ 25   |       |                   |       |                          |                |                          |                |
|                       | Water side                          | Heating                                                          | Min.~Max. | °CDB   | 25 ~ 50           |       |                   |       |                          |                |                          |                |
|                       | Air side                            | Cooling                                                          | Min.~Max. | °CDB   | -15 ~ 43          |       |                   |       |                          |                |                          |                |
|                       | Air side                            | Heating                                                          | Min.~Max. | °CDB   | -10 ~ 21          |       |                   |       |                          |                |                          |                |
| Refrigerant           | Type                                | R-410A                                                           |           |        |                   |       |                   |       |                          |                |                          |                |
|                       | Control                             | Electronic expansion valve                                       |           |        |                   |       |                   |       |                          |                |                          |                |
|                       | Circuits                            | Quantity                                                         |           |        | 1                 |       | 2                 |       |                          |                |                          |                |
| Refrigerant circuit   | Charge                              |                                                                  |           | kg     | 33                | 37    | 22                |       | 32                       |                | 39                       |                |
| Refrigerant circuit 2 | Charge                              |                                                                  |           | kg     | -                 |       | 22                |       | 32                       |                | 39                       |                |
| Piping connections    | Water heat exchanger inlet / outlet |                                                                  |           | 3" OD  |                   |       |                   |       |                          |                |                          |                |
|                       | Water heat exchanger drain          |                                                                  |           | 1/2"G  |                   |       |                   |       |                          |                |                          |                |
| 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.

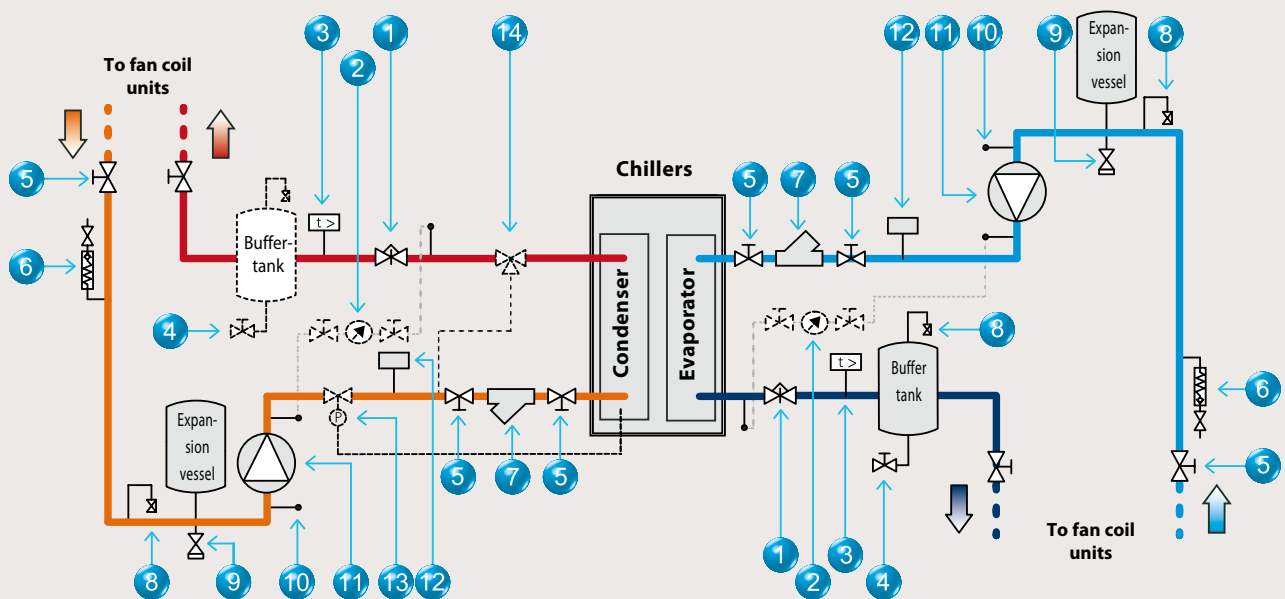
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| EWWD-BJYNN | 34 |

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 72HP
- › 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
- ›  $\mu C^2$  SE CONTROLLER
- › pCO<sup>3</sup> controller for assembly of 2 or 3 modules



scroll



**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 (OPZH) or -10°C (OPZL)

### ACCESSORIES (KIT)

- › Compressor soundproof material (-3dBA)
- › Hydraulic module (see page EHMC-page in this catalogue)
- › BMS gateway (MODBUS/J-BUS / BACNET protocol)
- › Remote user interface

### 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

## 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         |               |       |      | 4                 |                 |      |      | 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 |     |  |    |  |    |  |    |  |    |  |
|                                   | Operation weight                   |                    | kg             | -                                     |             |      |      |           |               |       |      |                   |                 |      |      |                   |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |
| Water heat exchanger - evaporator | Type                               |                    |                | Braze plate                           |             |      |      |           |               |       |      |                   |                 |      |      |                   |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |
|                                   | Minimum water volume in the system |                    |                | l                                     | 62          | 103  | 134  | 155       | 205           | 268   | 311  | 205               | 268             |      | 311  |                   | 205             |       | 268   |       |       | 311 |  |    |  |    |  |    |  |    |  |
|                                   | Water flow rate                    | Min.               | l/min          | 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                               |                    |                | Braze 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        |               |       |      | 74                |                 |      |      | 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          |             |      |      |           |               |       |      |                   |                 |      |      |                   |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |
|                                   | Circuits                           | Quantity           |                | 1                                     |             |      |      | 2         |               |       |      | 4                 |                 |      |      | 6                 |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |
| 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 x FBSP 38mm |                 |      |      | 3 x 2 x FBSP 38mm |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |
|                                   | Evaporator water drain             |                    |                | Field installation                    |             |      |      |           |               |       |      |                   |                 |      |      |                   |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |
|                                   | Condenser water inlet/outlet       |                    |                | FBSP 25mm                             |             |      |      | FBSP 40mm |               |       |      | 2 x 2 x FBSP 38mm |                 |      |      | 3 x 2 x FBSP 38mm |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |
|                                   | Condenser water drain              |                    |                | Field installation                    |             |      |      |           |               |       |      |                   |                 |      |      |                   |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |
| Power supply                      | Phase / Frequency / Voltage        |                    | Hz / V         | 3N~ / 50 / 400                        |             |      |      |           |               |       |      |                   |                 |      |      |                   |                 |       |       |       |       |     |  |    |  |    |  |    |  |    |  |

### STRENGTHS

- › Cooling range: 369–1,050kW
- › Super high efficiency: EER up to 5.8 ; A class energy label
- › Very high EER values at part loads condition (ESEER up to 7.4)
- › 1 and 2 stepless single-screw compressors
- › Optimised for use with R-134a
- › Flooded evaporator
- › Expansion valve with liquid level control
- › All models are PED pressure vessel approved

### STANDARD AVAILABLE

- › Main switch
- › Gauges
- › Electronic expansion valve

### OPTIONS (FACTORY MOUNTED)

- › Glycol application
- › Suction stop valve
- › A/V meter
- › Soft starter
- › Cu/Ni heat exchanger

### ACCESSORIES

- › Communication cards (EKAC200J – EKACBAC – EKACLON)
- › Remote user interface (EKRUPECK)
- › Buffer tanks (EKBT500N - EKBTC10N - EKBT500C - EKBTC500C)
- › Daikin serial sequencing panel (EKDSSP)
- › Modem (EKMODEM – EKGSMOD)
- › Converter RS485 to RS232 (EKCON) or to USB (EKCONUSB)



DIGITAL CONTROLLER

screw



**R-134a**





EWWDC11BJYNN

## Cooling only

|                                                |                                    |                    |                |          |                                       |                   |       |                     |       |                   |                   |       |
|------------------------------------------------|------------------------------------|--------------------|----------------|----------|---------------------------------------|-------------------|-------|---------------------|-------|-------------------|-------------------|-------|
| Capacity class                                 |                                    |                    |                |          | 380                                   | 460               | 550   | 750                 | 850   | 900               | C10               | C11   |
| Cooling capacity                               | Nom.                               |                    |                | kW       | 369                                   | 445               | 521   | 734                 | 816   | 895               | 976               | 1,050 |
| Capacity steps                                 |                                    |                    |                | %        | stepless 25 - 100                     |                   |       | Stepless 12.5 - 100 |       |                   |                   |       |
| Power input                                    | Cooling                            | Nom.               |                | kW       | 65                                    | 77.9              | 90    | 129                 | 142   | 155               | 167               | 180   |
| EER                                            |                                    |                    |                |          | 5.68                                  | 5.71              | 5.79  | 5.65                | 5.71  | 5.77              | 5.81              | 5.83  |
| ESEER                                          |                                    |                    |                |          | 6.44                                  | 6.47              | 6.56  | 7.16                | 7.23  | 7.32              | 7.37              | 7.40  |
| Dimensions                                     | Unit                               | HeightxWidthxDepth |                | mm       | 2,250x3,625x1,551                     | 2,250x3,860x1,551 |       | 2,300x4,145x1,743   |       | 2,300x4,145x1,808 | 2,300x4,145x1,910 |       |
| Weight                                         | Unit                               |                    |                | kg       | 3,089                                 | 3,370             | 3,603 | 5,546               | 5,636 | 6,007             | 6,448             | 6,598 |
|                                                | Operation weight                   |                    |                | kg       | 3,250                                 | 3,588             | 3,870 | 5,911               | 6,045 | 6,460             | 6,972             | 7,163 |
| Water heat exchanger - evaporator              | Type                               |                    |                |          | Flooded shell and tube                |                   |       |                     |       |                   |                   |       |
|                                                | Minimum water volume in the system |                    |                | l        | 78                                    | 107               | 134   | 184                 | 210   |                   | 281               | 302   |
|                                                | Water flow rate                    | Min.               |                | l/min    | 565                                   | 615               | 776   | 932                 | 1,216 | 1,209             | 1,382             | 1,632 |
|                                                |                                    | Nom.               |                | l/min    | 1,058                                 | 1,276             | 1,494 | 2,104               | 2,339 | 2,566             | 2,798             | 3,010 |
|                                                |                                    | Max.               |                | l/min    | 1,788                                 | 1,945             | 2,455 | 2,946               | 3,846 | 3,825             | 4,370             | 5,162 |
| Water heat exchanger - condenser               | Nominal water pressure drop        | Cooling            | Heat exchanger | kPa      | 35                                    | 43                | 37    | 51                  | 37    | 45                | 41                | 34    |
|                                                | Minimum water volume in the system |                    |                | l        | 83                                    | 111               | 133   | 181                 | 199   | 243               |                   | 263   |
|                                                | Water flow rate                    | Min.               |                | l/min    | 665                                   | 948               | 1,086 | 1,478               | 1,703 | 1,904             | 1,924             | 2,146 |
|                                                |                                    | Nom.               |                | l/min    | 1,244                                 | 1,499             | 1,752 | 2,474               | 2,746 | 3,010             | 3,277             | 3,526 |
|                                                |                                    | Max.               |                | l/min    | 2,103                                 | 2,998             | 3,435 | 4,675               | 5,386 | 6,020             | 6,085             | 6,786 |
| Water heat exchanger - heat recovery condenser | Nominal water pressure drop        | Heating            |                | kPa      | 35                                    | 25                | 26    | 28                  | 26    | 25                | 29                | 27    |
|                                                | Type                               |                    |                |          | Shell and tube                        |                   |       |                     |       |                   |                   |       |
| Sound pressure level                           | Cooling                            | Nom.               |                | dBA      | 78                                    | 79                | 80    | 81                  | 81.5  | 82                | 82.5              | 83    |
| Compressor                                     | Type                               |                    |                |          | Semi-hermetic single screw compressor |                   |       |                     |       |                   |                   |       |
| Operation range                                | Evaporator                         | Cooling            | Min.~Max.      | °CDB     | -8 ~ 15                               |                   |       |                     |       |                   |                   |       |
|                                                | Condenser                          | Cooling            | Min.~Max.      | °CDB     | 21 ~ 50                               |                   |       |                     |       |                   |                   |       |
| Refrigerant                                    | Type                               |                    |                |          | R-134a                                |                   |       |                     |       |                   |                   |       |
|                                                | Charge                             |                    |                | kg       | 130                                   | 165               | 180   | 200                 | 215   | 230               | 274               | 290   |
|                                                | Control                            |                    |                |          | Electronic expansion valve            |                   |       |                     |       |                   |                   |       |
|                                                | Circuits                           |                    |                | Quantity | 1                                     |                   |       |                     |       |                   |                   |       |
| Piping connections                             | Evaporator water drain             |                    |                |          | 1/2" gas                              |                   |       |                     |       |                   |                   |       |
| Power supply                                   | Phase / Frequency / Voltage        |                    |                | Hz / V   | 3~ / 50 / 400                         |                   |       |                     |       |                   |                   |       |

# 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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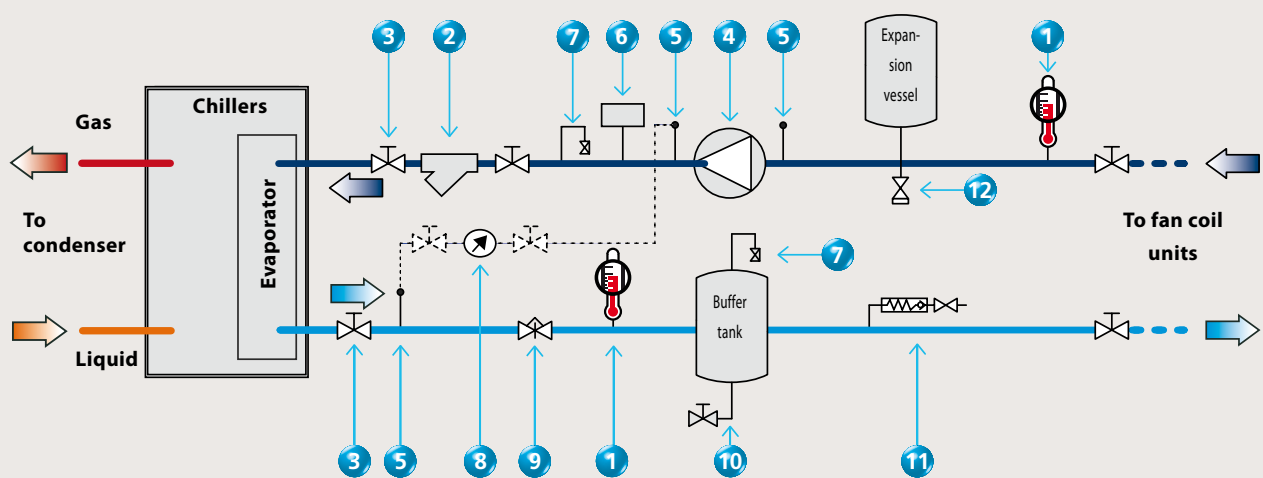
EWLP-KBW1N

38



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
- ›  $\mu$ C<sup>2</sup> SE controller

### OPTIONS (FACTORY MOUNTED)

- › Chilled water temperature down to -5°C (ZH) or -10°C (ZL)

### ACCESSORIES (KIT)

- › Hydraulic module (see EHMC-page in this catalogue)
- › Low noise operation EUW\*5KZW1 (EKLS1)
- › Low noise operation EUW\*8-24KZW1 (EKLS2)
- › Address card for connection to BMS or remote user interface (EKSUMCA)
- › Remote installed user interface (EKAC10C)

### CONTROL

- › Microprocessor control
- › Water inlet temperature control

### AVAILABLE

#### INPUTS / OUTPUTS

##### Input

- › Remote ON / OFF
- › Pump contact

##### Output

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



$\mu$ C<sup>2</sup> SE

scroll



**R-407C**



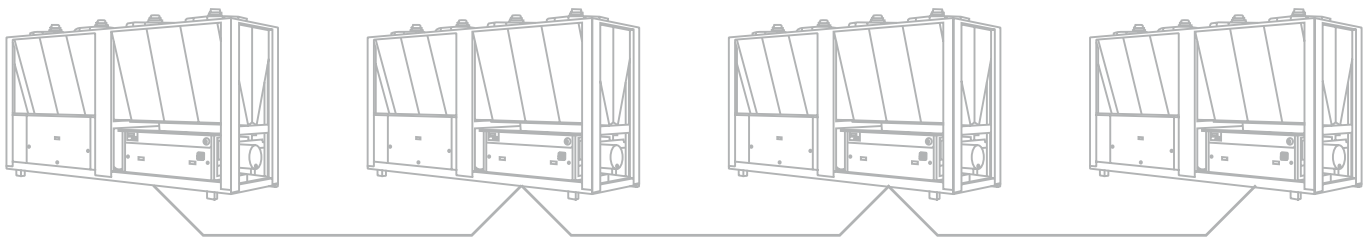
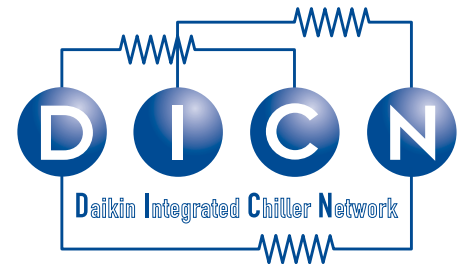


EWLP012-030KBW1N

## 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<br>Evaporator | Type                               |          | Brased plate                          |            |      |      |                   |      |      |
|                                    | Minimum water volume in the system |          | 62                                    | 103        | 134  | 155  | 205               | 268  | 311  |
|                                    | Water flow<br>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  | -10(OPZL) ~ 20                        |            |      |      |                   |      |      |
|                                    | Condensing temperature             | Min~Max  | 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      |      |      |

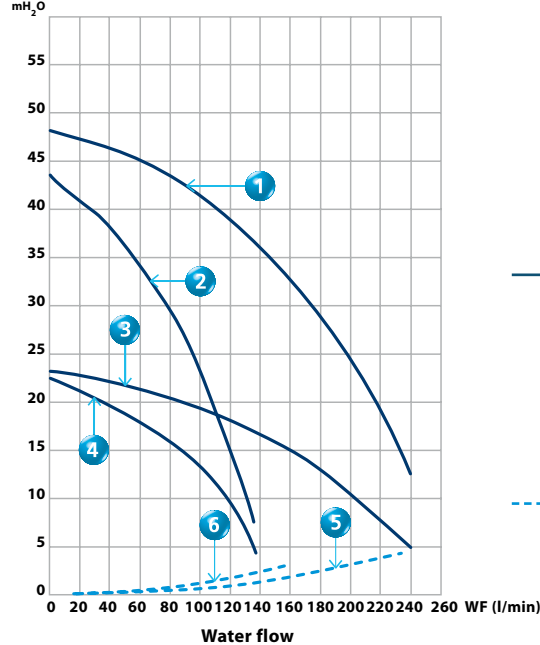
Daikin chillers can be equipped with Daikin Integrated Chiller Network (DICN) which allows the simultaneous operation of up to 4 chillers as if they were a single unit, in order to deliver the required cooling capacity. This results in precise and efficient capacity control and is also useful for back up purposes, ensuring that the necessary amount of cooling is available and guaranteeing reliable operation of the chiller plant. This function enables a Daikin 2MW 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)

## PUMP CHARACTERISTICS



## 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 static height |                    | mH <sub>2</sub> O 17 34 |      | 15 27         |      | 10 27       |      |
| Nominal input         |                    | W 630 1,050             |      | 650 1,070     |      | 1,070 2,090 |      |
| Dimensions (HxWxD)    |                    | mm                      |      | 1,284x635x688 |      |             |      |
| Machine weight        |                    | kg 99 101               |      | 102 104       |      | 105 111     |      |
| 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

| MODEL    | Description              | Volume | Dimensions        | Unit weight |
|----------|--------------------------|--------|-------------------|-------------|
| EKBT     | Buffer tank with cabinet | 200l   | 1,284x637x754     | 86,5        |
| EKBT500N | Buffer tank              | 500l   | 710x1,670         | 70          |
| EKBT10N  | Buffer tank              | 1,000l | 860x2,020         | 100         |
| EKBT500C | Buffer tank with cabinet | 500l   | 1,200x1,200x1,950 | 160         |
| EKBT10C  | 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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# PRODUCT PORTFOLIO

| Reference |         |                  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 16 | 18 | 20 | 22kW |
|-----------|---------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|
| FWT-BT    | 2-pipe  | cooling          |    | 02 | 03 | 04 | 05 | 06 |    |    |    |    |    |    |    |    |    |      |
|           |         | heating          |    |    | 02 | 03 | 04 | 05 | 06 |    |    |    |    |    |    |    |    |      |
| FWC-BT/BF | 2-pipe  | cooling          |    |    |    |    | 06 | 07 | 08 | 09 |    |    |    |    |    |    |    |      |
|           |         | heating          |    |    |    |    |    | 06 | 07 | 08 | 09 |    |    |    |    |    |    |      |
|           | 4-pipe  | cooling          |    |    |    |    | 06 | 07 | 08 | 09 |    |    |    |    |    |    |    |      |
|           |         | heating          |    |    |    |    |    | 06 | 07 | 08 | 09 |    |    |    |    |    |    |      |
| 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 |    |    |    |    |    |    |    |    |    |    |      |
| 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 |    |    |    |    |    |    |    |    |      |
| 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 |    |    |    |    |    |    |    |    |      |
| 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 |    |    |    |    |    |      |
| 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 |    |    |    |    |    |    |      |
| 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 | 09 | 10 |    |    |    |    |    |    |      |
|           |         | heating (4-pipe) | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |    |    |    |    |    |    |      |

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 • 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.  
 \* 4-pipe= 2-pipe + option additional heat exchanger

# FAN COIL UNIT - ACCESSORIES

| Type: FWM-DT/DF, FWL-DT/DF, FWV-DT/DF    | 1         | 2         | 3                      | 4         | 6       | 8 | 10 | FWV | FWL | FWM |
|------------------------------------------|-----------|-----------|------------------------|-----------|---------|---|----|-----|-----|-----|
| Description                              |           |           |                        |           |         |   |    |     |     |     |
| Additional single row heat exchanger     | ESRH02A6  | ESRH03A6  | ESRH06A6               | ESRH10A6  |         |   |    | x   | x   | x   |
| Electric heater                          | EEH01A6   | EEH02A6   | EEH03A6                | EEH06A6   | EEH10A6 |   |    | x   | x   | x   |
| 2-pipe 3-way valve                       | E2MV03A6  | E2MV06A6  | E2MV10A6               |           |         |   |    | x   | x   | x   |
| 4-pipe 3-way valve                       | E4MV03A6  | E4MV06A6  | E4MV10A6               |           |         |   |    | x   | x   | x   |
| Fan stop thermostat                      |           |           | YFSTA6                 |           |         |   |    | x   | x   | x   |
| Air intake & discharge grille            | EAIDF02A6 | EAIDF03A6 | EAIDF06A6              | EAIDF10A6 |         |   |    | -   | -   | x   |
| Supporting feet                          |           | ESFV06A6  |                        | ESFV10A6  |         |   |    | x   | -   | x   |
| Supporting feet + grille                 | ESFVG2A6  | ESFVG3A6  | ESFVG6A6               | ESFVG10A6 |         |   |    | x   | -   | -   |
| Fresh air intake                         | EFA2A6    | EFA3A6    | EFA6A6                 | EFA10A6   |         |   |    | x   | -   | -   |
| Rear panel                               | ERP2A6    | ERP3A6    | ERP6A6                 | ERP10A6   |         |   |    | x   | x   | -   |
| Control electromechanical                |           |           | ECFWMB6                |           |         |   |    | x   | x   | x   |
| Electronic controller                    |           |           | FWEC1A, FWEC2A, FWEC3A |           |         |   |    | x   | x   | x   |
| Master slave option                      |           |           | EPIMSB6                |           |         |   |    | x   | x   | x   |
| Vertical drainpan                        |           |           | EDPVA6                 |           |         |   |    | x   | x   | x   |
| Horizontal drainpan                      |           |           | EDPHA6                 |           |         |   |    | -   | x   | x   |
| On board installation kit                |           |           | FWECKA                 |           |         |   |    | x   | x   | -   |
| Temperature sensor kit                   |           |           | FWTSKA                 |           |         |   |    | x   | x   | x   |
| Relative humidity sensor kit             |           |           | FWHska                 |           |         |   |    | x   | x   | x   |
| On board FCU controller installation kit |           |           | FWECKA                 |           |         |   |    | x   | x   | -   |

| Type: FWB-BT                 | 2-4       | 5-7             | 8-10      |
|------------------------------|-----------|-----------------|-----------|
| Description                  |           |                 |           |
| Additional heat exchanger    | EAH04A6   | EAH07A6         | EAH10A6   |
| 3-way valve add. h/e         | E2MV307A6 |                 | E2MV310A6 |
| 3-way valve cooling h/e      |           | Factory mounted |           |
| 2-way valve add. h/e         | E2MV207A6 |                 | E2MV210A6 |
| 2-way valve cooling h/e      |           | Factory mounted |           |
| Electric Heater              |           | Factory mounted |           |
| Fan stop thermostat          |           | YFSTA6          |           |
| Power interface              | -         | -               | EPIB6     |
| Master slave interface       |           | EPIMSB6         |           |
| Electronic controller        |           | FWEC1A          |           |
|                              |           | FWEC2A          |           |
|                              |           | FWEC3A          |           |
| Temperature sensor kit       |           | FWTSKA          |           |
| Relative humidity sensor kit |           | FWHska          |           |
| On board installation kit    |           | FWECKA          |           |

| Type: FWB-JT/JF    |       |
|--------------------|-------|
| Description        |       |
| 2-pipe 3-way valve | MCWCN |
| 4-pipe 3-way valve | MCWHN |

| Type: FWD-AT/AF              | 4             | 6         | 8           | 10            | 12        | 16 | 18 |
|------------------------------|---------------|-----------|-------------|---------------|-----------|----|----|
| Description                  |               |           |             |               |           |    |    |
| Electric heater: small       | EDEH04A6      | EDEH06A6  | EDEH10A6    | EDEH12A6      | EDEH18A6  |    |    |
| Electric heater: big         | (1) EDEH04A6  | EDEH06A6  | EDEH10A6    | EDEH12A6      | EDEH18A6  |    |    |
| 2-pipe 3-way valve           | ED2MV04A6     | ED2MV10A6 | ED2MV12A6   | ED2MV18A6     |           |    |    |
| 4-pipe 3-way valve           | (2) ED4MV04A6 | ED4MV10A6 | 2xED2MV12A6 | 2 x ED2MV18A6 |           |    |    |
| Vertical Drainpan            |               | EDDPV10A6 |             | EDDPV18A6     |           |    |    |
| Horizontal Drainpan          |               | EDDPH10A6 |             | EDDPH18A6     |           |    |    |
| Fan stop thermostat          |               |           | YFSTA6      |               |           |    |    |
| Fresh air intake             | EDMFA04A6     | EDMFA06A6 | EDMFA10A6   | EDMFA12A6     | EDMFA18A6 |    |    |
| Electronic controller        | (3)           |           | FWEC1A      |               |           |    |    |
|                              |               |           | FWEC2A      |               |           |    |    |
|                              |               |           | FWEC3A      |               |           |    |    |
| Power interface              |               |           | EPIB6       |               |           |    |    |
| Master slave interface       |               |           | EPIMSA6     |               |           |    |    |
| Temperature sensor kit       |               |           | FWTSKA      |               |           |    |    |
| Relative humidity sensor kit |               |           | FWHska      |               |           |    |    |

| TYPE                                                              | FWT     | FWC-BT/BF                               | FWF-BT/BF                   |
|-------------------------------------------------------------------|---------|-----------------------------------------|-----------------------------|
| Description                                                       |         |                                         |                             |
| Standard wired remote control                                     | MERCA   | -                                       | -                           |
| Simplified wired remote control                                   | SRC-COB | -                                       | -                           |
| Simplified wired remote control                                   | SRC-HPB | -                                       | -                           |
| Wireless control for cooling only                                 | WRC-COB | -                                       | -                           |
| Wireless control for heat pump                                    | WRC-HPB | -                                       | -                           |
| Decoration Panel (RAL 9010 - grey sealings) 4-way blow            | -       | -                                       | BYFQ60B                     |
| Decoration Panel - Standard (RAL 9010 - grey sealings) Round flow | -       | BYCQ140CW1                              |                             |
| Decoration Panel - White (RAL 9010 - white sealings) Round flow   | -       | BYCQ140CW1W                             |                             |
| Sealing member of air discharge outlet                            | -       | KDBHQ55C140                             | KDBH44BA60                  |
| Panel spacer                                                      | -       | -                                       | KDBQ44B60                   |
| Long-life filter                                                  | -       | KAFP551K160                             | KAQ441BA60                  |
| Fresh air intake kit - Direct installation type                   | -       | -                                       | KDDQ44XA60                  |
| Fresh air intake kit (20% fresh air) - Direct installation type   | -       | KDDQ55C140-1 (*20) / KDDQ55C140-2 (*20) | -                           |
| Remote controller - Wireless - H/P                                | -       | BRC7F532F (*18)                         | BRC7E530 (*18)              |
| Remote controller - Wireless - C/O                                | -       | BRC7F533F (*18)                         | BRC7E531 (*18)              |
| Remote controller - Wired                                         | -       | BRC315D7 (*4)                           |                             |
| Central remote controller                                         | -       | DCS302CA51 (*5)                         |                             |
| Electrical box with earth terminal (3 blocks)                     | -       | KJB311A                                 |                             |
| Unified on/off controller                                         | -       | DCS301BA51 (*9)                         |                             |
| Electrical box with earth terminal (2 blocks)                     | -       | KJB212A                                 |                             |
| Schedule timer                                                    | -       | DST301BA51 (*6)(*9)                     | DST301BA51 (*6)(*9)         |
| Wiring adapter for electrical appendices (1)                      | -       | KRP2A52 (*7) (*12)                      | KRP2A52 (*9) (*12)          |
| Wiring adapter for electrical appendices (2)                      | -       | KRP4AA53 (*7) (*12)                     | KRP4AA53 (*9) (*12)         |
| Installation box for adapter PCB                                  | -       | KRP1H98 (*13)                           | KRP1BA101 (*17)             |
| Remote sensor                                                     | -       | KRCS01-4                                | KRCS01-1                    |
| Intelligent touch controller                                      | -       | DCS601C51C(*6) (*11)                    | DCS601C51C (*6) (*11)       |
| Electrical installation box                                       | -       | KJB411A                                 |                             |
| Optional PCB for MOD-bus connection                               | -       | EKFCMBCB7 (*8) (*12)                    | EKFCMBCB7 (*8) (*12)        |
| 2-way valve - On/Off                                              | -       | EKMV2C09B7 (*8) (*10) (*15)             | EKMV2C09B7 (*8) (*10) (*16) |
| 3-way valve - On/Off                                              | -       | EKMV3C09B7 (*8) (*10) (*15)             | EKMV3C09B7 (*8) (*10) (*16) |
| Valve control PCB                                                 | -       | EKR1C11                                 |                             |
| Remote "On/Off" and "forced off" kit                              | -       |                                         | EKROROA (*17)               |

- Requires electronic controller
- For FWD 12,16,18AT/AF only motor valve (piping not included)
- Water probe included
- Optional, electrical installation box with earth terminal KJB212A is required, if controller wires need to be installed in the wall.
- Requires electrical installation box with earth terminal KJB311A.
- Requires electrical installation box KJB411A.
- Requires installation box KRP1H98. (FWC)
- Requires installation box KRP1BA101 (FWF)
- Requires electrical installation box with earth terminal KJB212A, if built in the wall.
- Requires valve control PCB EKR1C11
- i-touch:
  - Not allowed to use the i-touch for an installation with both fan coils and VRV units.
  - Can not be used in combination with fan coil units, that use MOD bus communication.
  - No Airnet or telephone connection possible.

- Only 1 of these 4 options can be installed on 1 indoor unit.
- Max. 1 KRP1H98 box can be mounted on the unit. Max. 2 PCB's can be mounted in 1 KRP1H98 box. (FWC)
- Max. 2 KRP1BA101 boxes can be mounted on the unit. Max. 1PCB can be mounted in 1 KRP1BA101 box. (FWF)
- 2-pipe unit: 1 x valve kit + 1 x installation box for PCB KRP1H98 + 1 x valve control PCB EKR1C11
- 4-pipe unit: 2 x valve kit + 1 x installation box for PCB KRP1H98 + 1 x valve control PCB EKR1C11 (FWC)
- 2-pipe unit: 1 x valve kit + 1 x installation box for PCB KRP1BA101 + 1 x valve control PCB EKR1C11
- 4-pipe unit: 2 x valve kit + 1 x installation box for PCB KRP1BA101 + 1 x valve control PCB EKR1C11 (FWF)
- This option is needed to create T1 T2 wire.
- It is possible to change the operation mode, but this will not have an impact on the water temperature. (No feed back to water source) It is not possible to select the "auto airflow" setting.
- Dry operation can be selected with this remote control, but this function is not available on the FWC model.
- All options are supplied as kit.
- Both parts of the fresh air intake are needed for each unit.



# 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



BRC315D7

## WIRED REMOTE CONTROLLER

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



BRC7E532F

## 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 FWEC1AA 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, inwhich one of the controls plays the role of master and manages all the other slave units. ( modbus protocol )



FWEC2A



FWEC3A

- › Composed by:
  - lc display
  - keyboard
- › On board and wall mounted installation.
- › Same as FWEC2AA with following additional functions:
  - 1) Back light
  - 2) Proportional valve control (two voltage outputs for the proportional valves)
  - 3) Voltage contact 0-10V (same as 2)
  - 4) Time clock and weekly schedule (on / off or setpoint air)
  - 5) Integration in BMS (already included in the FWEC2AA 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-COB**



**SRC-HPB**

#### **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/OFF 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            |      | 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  |               | 0.6   |      |  |
| 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 |
| 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             |                             |                    | 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 |             |      |             |      |               |       |               |  |
|                           | 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   | 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  |               |  |



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-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             |                             |                    | 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-COB/HPB



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      | 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                        |                    | dB(A)  | 56                                                           |      |      | 59            |       |       | 69            |       |       |
| Sound pressure level      | High                        |                    | dB(A)  | 44.5                                                         |      |      | 47.5          |       |       | 57.5          |       |       |
| Piping connections        | Drain                       | OD                 | mm     | 16                                                           |      |      |               |       |       |               |       |       |
| Water connections         | Std. heat exchanger         |                    | inch   | 3/4                                                          |      |      |               |       |       |               |       |       |
|                           | Add. heat exchanger         |                    | inch   | 3/4                                                          |      |      |               |       |       | 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
- › Standard Plenum
- › 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                 |                             |                    |        | 2-PIPE                                                                    |             |               |       |               |               |       |               |               |       |             | 4-PIPE            |               |               |               |               |               |       |  |
|                              |                             |                    |        | 02                                                                        | 03          | 04            | 05    | 06            | 07            | 08    | 09            | 10            | 11    | 02          | 03                | 04            | 06            | 07            | 08            | 10            |       |  |
| 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          |       |  |
|                              | 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          |       |  |
| 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         |       |  |
|                              | 4-Pipe                      | High               | kW     | -                                                                         |             |               |       |               |               |       |               |               |       |             | 2.49              | 3.92          | 4.43          | 6.70          | 8.16          | 9.56          | 11.68 |  |
| Power input                  | High                        |                    | W      | 34                                                                        | 53          | 57            | 54    | 86            | 121           | 117   | 134           | 164           | 166   | 34          | 51                | 54            | 84            | 117           | 137           | 163           |       |  |
| Dimensions                   | Unit                        | HeightxWidthxDepth | mm     | 251x814x590                                                               | 251x984x590 | 251x1,114x590 |       | 251x1,314x590 | 251x1,564x590 |       | 251x1,664x590 | 251x1,924x590 |       | 251x814x590 | 251x984x590       | 251x1,114x590 | 251x1,314x590 | 251x1,564x590 | 251x1,664x590 | 251x1,924x590 |       |  |
| 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          |       |  |
|                              | 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          |       |  |
| Heat exchanger<br>Water flow | 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          |       |  |
|                              | 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         |       |  |
|                              | 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         |       |  |
|                              | Additional heat exchanger   |                    | l/h    | -                                                                         |             |               |       |               |               |       |               |               |       |             | 269               | 391           | 493           | 663           | 820           | 924           | 1,142 |  |
| 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         |       |  |
|                              | 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         |       |  |
|                              | Additional heat exchanger   |                    | kPa    | -                                                                         |             |               |       |               |               |       |               |               |       |             | 10.66             | 24.73         | 41.72         | 81.63         | 25.31         | 31.33         | 50.03 |  |
| Fan                          | Type                        |                    |        | Direct driven centrifugal fan (forward-curved blades)hot-galvanised steel |             |               |       |               |               |       |               |               |       |             |                   |               |               |               |               |               |       |  |
|                              | 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         |       |  |
|                              | Available pressure          | High               | Pa     | 30                                                                        |             |               |       |               |               |       |               |               |       |             |                   |               |               |               |               |               |       |  |
| 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            |       |  |
| Piping connections           | Drain                       | OD                 | mm     | 714                                                                       | 884         | 1,014         |       | 1,214         | 1,464         |       | 1,564         | 1,824         |       | 714         | 884               | 1,014         | 1,214         | 1,464         | 1,564         | 1,824         |       |  |
| 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 |               |               |               |               |               |       |  |
| Current input                | High                        |                    | A      | 0.15                                                                      | 0.24        | 0.26          | 0.25  | 0.39          | 0.55          | 0.53  | 0.61          | 0.75          |       | 0.15        | 0.23              | 0.25          | 0.38          | 0.53          | 0.62          | 0.74          |       |  |



FWC-BT/BF



BRC315D7



BRC7E532F



- › 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



BRC7E532F

- › 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   | -                  |         |         |         |                    |         |         |         |
| 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 |         |         |         |

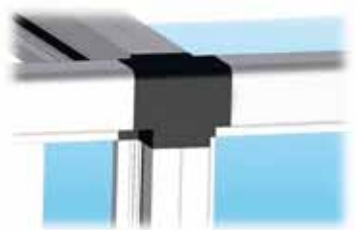


## D-AHU Professional

The D-AHU Professional is based on a completely modular design, capable of adapting to the needs of a variety of installation types. A wide standard range covers air flow rates from 1,100m<sup>3</sup>/h up to 124,000m<sup>3</sup>/h while paying special attention to energy efficiency.

### System highlights

- › Custom modular design with variable dimensioning
- › Rigid 40mm and 60mm extruded aluminium profile structure
- › Double wall 25mm and 50mm foam or rockwool filled panels
- › Component flexibility for total air treatment: Heat Recovery & Humidification
- › Air flow rates from 1,100 up to 124,000m<sup>3</sup>/h



Aluminium profile with thermal break



### Robust thermal-break construction

The air handling unit is constructed of aluminium, using anodised aluminium profiles and double-walled panels.

The profiles have a section of 40x40mm or 60x60mm.

The 60x60mm profiles are also available in a thermal-break version.

The panels are available as flat panels or as step panels, which permit to obtain a flat surface inside the unit.

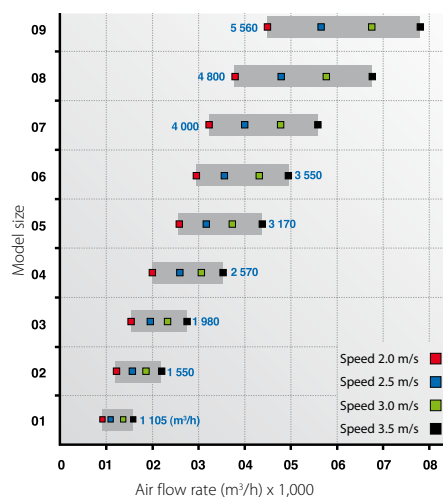
The inner and outer sheet of the panel can be made with the following materials:

The following insulation material is used between the sheets:

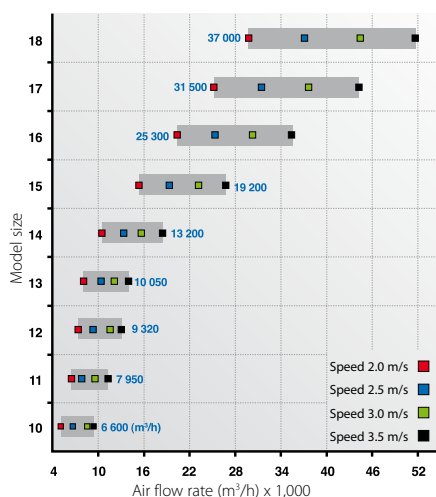
- › Polyurethane foam (40-50 kg/m<sup>3</sup>)
- › Mineral wool, glued to the panel (90 kg/m<sup>3</sup>)

- › Plastisol
- › Galvanised steel
- › Aluminium
- › Stainless steel
- › Pre-painted

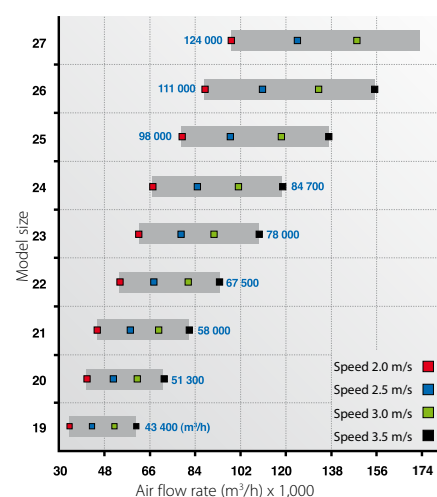
STANDARD 01-09



STANDARD 10-18



STANDARD 19-27



« Offering a complete range: from standard model sizes to customised solutions. »

## COMPONENTS OF THE D-AHU PROFESSIONAL



### Humidifiers

- › Surface evaporation humidifier
- › Water spray humidifier
- › Steam humidifier (on network with generator)
- › Atomized water spray humidifier



### Centrifugal fans

- › Forward bladed fans
- › Backward bladed fans
- › Centrifugal fan
- › Belt or direct drive



### Heat exchangers

- › Material:
  - Cu/Al
  - Cu/Al prepaint
  - Cu/Cu
  - galvanised Fe
  - RVS304
  - RVS316
- › Water coil
- › Steam coil
- › Direct expansion coil
- › Superheated water coil
- › Electric coils



Damper

### Other

- › Damper
- › Mixed section
- › Empty section
- › Gas burner section
- › Drip tray



Heat recovery wheel

### Heat recovery

- › Heat wheel ( efficiency 70 - 75%)
- › Plate heat exchanger (efficiency 50 - 60%)
- › Twincoil heat exchanger (efficiency 50 - 60%)



### Filters

- › Pre-filters:
  - Pleated filter (G3,G4)
  - Flat filter (G1,G2)
- › Medium efficiency filter:
  - Bag filters (rigid or soft) (F5 - F9)
- › High efficiency filters (up to H13)
- › Active carbon filters
  - Adsorption filters
  - Deodorizing filters

## BASIC SPECIFICATIONS

| MODEL SIZE | AIR FLOW RATE AT 2.5M/S | LENGTH | HEIGHT |
|------------|-------------------------|--------|--------|
| 1          | 1,105                   | 850    | 550    |
| 2          | 1,550                   | 900    | 600    |
| 3          | 1,980                   | 950    | 650    |
| 4          | 2,570                   | 1,000  | 780    |
| 5          | 3,170                   | 1,150  | 780    |
| 6          | 3,550                   | 1,150  | 800    |
| 7          | 4,000                   | 1,250  | 800    |
| 8          | 4,800                   | 1,300  | 850    |
| 9          | 5,560                   | 1,350  | 900    |
| 10         | 6,600                   | 1,550  | 900    |
| 11         | 7,950                   | 1,550  | 1,100  |
| 12         | 9,320                   | 1,650  | 1,100  |
| 13         | 10,050                  | 1,650  | 1,150  |
| 14         | 13,200                  | 1,850  | 1,400  |
| 15         | 19,200                  | 2,100  | 1,500  |
| 16         | 25,300                  | 2,650  | 1,500  |
| 17         | 31,500                  | 2,750  | 1,750  |
| 18         | 37,000                  | 3,220  | 1,800  |
| 19         | 43,400                  | 3,090  | 2,100  |
| 20         | 51,300                  | 3,340  | 2,250  |
| 21         | 58,000                  | 3,820  | 2,250  |
| 22         | 67,500                  | 4,040  | 2,400  |
| 23         | 78,000                  | 4,490  | 2,450  |
| 24         | 84,700                  | 4,490  | 2,700  |
| 25         | 98 000                  | 4,890  | 2,850  |
| 26         | 111,000                 | 5,490  | 2,850  |
| 27         | 124,000                 | 5,990  | 3,000  |

## D-AHU Easy

### RANGE

The range covers an area of air flow rates from 500 m<sup>3</sup>/h up to 30.000 m<sup>3</sup>/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 <sup>3</sup> /h)<br>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 <sup>3</sup> /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              |

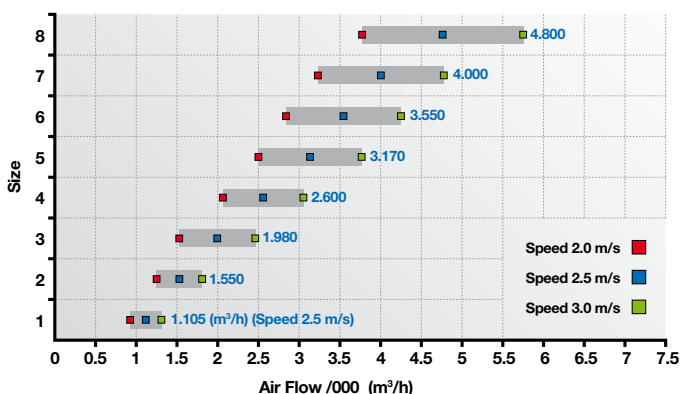
#### Infinitely variable sizes

##### Flexible sizing for AHU optimization

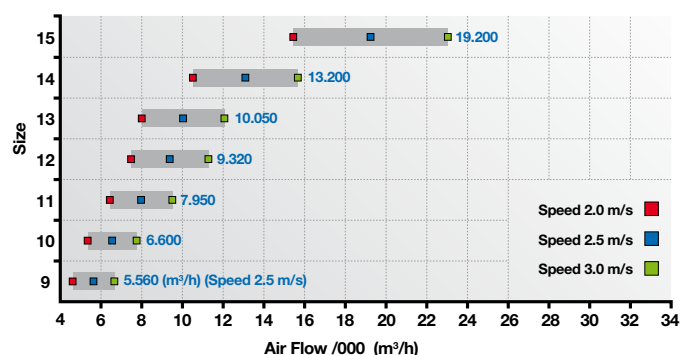
- 5 cm increment for width & height dimensions
- No additional cost for non-standard unit size
- No additional lead time

\*Air Flow limits of 500 m<sup>3</sup>/h and 30.000 m<sup>3</sup>/h are calculated using non standard sizes (max dimensions 2.150x2.150) and considering 2,5 m/s coil face velocity

#### D-AHU Easy 1-8



#### D-AHU Easy 9-15





D-AHU EASY

## UNIT FEATURES

### Panels

Hot injected Polyurethane panels to achieve excellent performance in terms of thermal insulation.

### Optimized air face velocity

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

### 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.

### Special gaskets

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

### 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.

# 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     |
| 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





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.

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