



# Air handling units & ventilation

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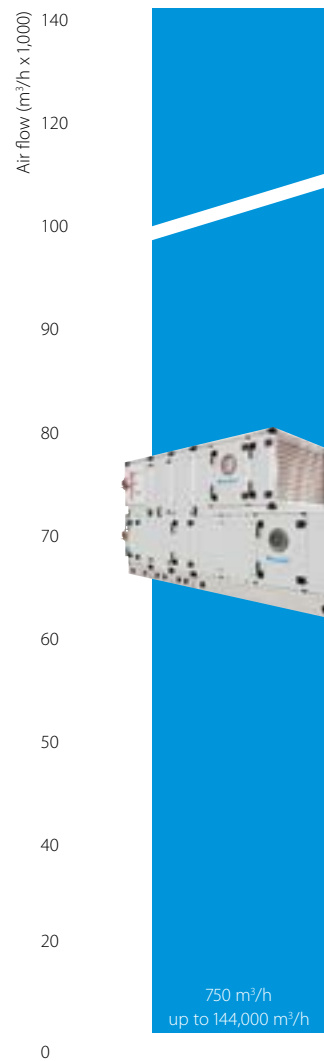
**PRIS PÅ  
FORESPØRSEL**

# Products overview



## Centralized and decentralized ventilation

### D-AHU Professional



#### Professional

- › Infinite variable sizes
- › **Tailored to the individual customer**
- › Modular construction

#### Modular R

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



D-AHU Modular R

500 m³/h  
up to 25,000 m³/h

#### Modular P

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



D-AHU Modular P

500 m³/h  
up to 15,000 m³/h

#### › Modular L / Modular L Smart

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



D-AHU Modular L / Modular L Smart

150 m³/h  
up to 3,450 m³/h

# Professional

Flexible solution for custom applications

## Flexible design

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

- › Air flow from 500 m³/h up to 144,000 m³/h.
- › All the units can be modularly designed to facilitate the transport and the assembly on site.



## Variable dimensioning

| Size | Airflow (m³/h) | Height - mm | Width - mm |
|------|----------------|-------------|------------|
| 1    | 1,800          | 640         | 720        |
| 2    | 2,200          | 640         | 810        |
| 3    | 3,500          | 740         | 980        |
| 4    | 5,400          | 840         | 1,190      |
| 5    | 6,600          | 840         | 1,390      |
| 6    | 7,600          | 940         | 1,390      |
| 7    | 9,000          | 1,090       | 1,380      |
| 8    | 11,000         | 1,150       | 1,550      |
| 9    | 14,000         | 1,270       | 1,720      |
| 10   | 18,300         | 1,390       | 1,970      |
| 11   | 23,800         | 1,570       | 2,190      |

| Size | Airflow (m³/h) | Height - mm | Width - mm |
|------|----------------|-------------|------------|
| 12   | 29,800         | 1,690       | 2,480      |
| 13   | 33,800         | 1,870       | 2,510      |
| 14   | 43,200         | 1,990       | 2,940      |
| 15   | 51,000         | 2,110       | 3,230      |
| 16   | 63,000         | 2,290       | 3,620      |
| 17   | 68,000         | 2,290       | 3,890      |
| 18   | 77,000         | 2,290       | 4,410      |
| 19   | 87,000         | 2,410       | 4,660      |
| 20   | 95,400         | 2,470       | 4,960      |
| 21   | 111,200        | 2,590       | 5,460      |
| 22   | 127,000        | 2,650       | 6,060      |

### Example

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

| Airflow (m³/h) | Unit Size              | Height (mm) | Width (mm) | Face Velocity (m/s) |
|----------------|------------------------|-------------|------------|---------------------|
| 47,000         | Size 15<br>1,920x2,720 | 2,110       | 3,230      | 2.27                |
|                |                        | 2,110       | 2,950      | 2.5                 |

## Plug and play: More control, more flexibility

The plug and play control system allows for more precise control than ever before, allowing the user to determine a wide range of settings, resulting in excellent operational flexibility. The factory-fitted electrical control panel, complete with Direct Digital Control (DDC) is combined with in-built temperature, humidity and CO<sub>2</sub> sensors to control mixing dampers, heat recovery wheels, water valves, pressure switches

for filters and fans, fan motors and inverters. All these components are wired internally and individual AHU modules are linked by fast connectors. The AHU control system can manage the chilled water coil, hot water coil, DX cooling and/or heating coil(s) (in conjunction with ERQ/VRV) of single or multiple refrigerant circuits (up to a maximum of four circuits per DX coil).



# Modular R

High-end solution with heat recovery

## Energy efficiency and indoor air quality

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



## EC Fan

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



## Simple, quick installation

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

| D-AHU Modular R          |                      | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9      | 10     |
|--------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Airflow                  | m <sup>3</sup> /h    | 1,200 | 1,700 | 2,700 | 4,100 | 5,500 | 6,100 | 7,000 | 9,100 | 11,500 | 15,000 |
| Temp. efficiency winter  | %                    | 82.4  | 82.4  | 82.4  | 82.6  | 82.2  | 82.4  | 83    | 82.6  | 82.5   | 82.7   |
| External static pressure | Nom. Pa              | 200   | 200   | 200   | 200   | 200   | 200   | 200   | 200   | 200    | 200    |
| Current                  | Nom. A               | 2.38  | 3.18  | 1.65  | 2.58  | 3.35  | 3.86  | 4.32  | 5.36  | 7.15   | 9.50   |
| Power input              | Nom. kW              | 0.55  | 0.73  | 1.14  | 1.79  | 2.32  | 2.68  | 2.99  | 3.72  | 4.95   | 6.58   |
| SFPv                     | kW/m <sup>3</sup> /s | 1.64  | 1.55  | 1.52  | 1.57  | 1.52  | 1.58  | 1.54  | 1.47  | 1.55   | 1.58   |
| Electrical supply        | Phase                | 1     | 1     | 3 + N | 3 + N | 3 + N | 3 + N | 3 + N | 3 + N | 3 + N  | 3 + N  |
|                          | Frequency            | Hz    | 50    | 50    | 50    | 50    | 50    | 50    | 50    | 50     | 50     |
|                          | Voltage              | V     | 230   | 230   | 400   | 400   | 400   | 400   | 400   | 400    | 400    |
| Dimensions unit          | Width                | mm    | 720   | 720   | 990   | 1,200 | 1,400 | 1,600 | 1,940 | 1,940  | 2,300  |
|                          | Height               | mm    | 1,320 | 1,320 | 1,540 | 1,740 | 1,740 | 1,920 | 1,920 | 2,180  | 2,460  |
|                          | Length               | mm    | 1,700 | 1,700 | 1,800 | 1,920 | 2,080 | 2,280 | 2,400 | 2,450  | 2,400  |
| Weight unit              | kg                   | 325   | 350   | 475   | 575   | 750   | 790   | 950   | 1,330 | 1,410  | 1,750  |

# Modular P

AHU with plate heat exchanger

## Highlights

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



## EC Fan

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

## Heat exchanger

- › Premium quality counter flow plate heat exchanger
- › Up to 92% of the thermal energy recovered
- › No cross contamination

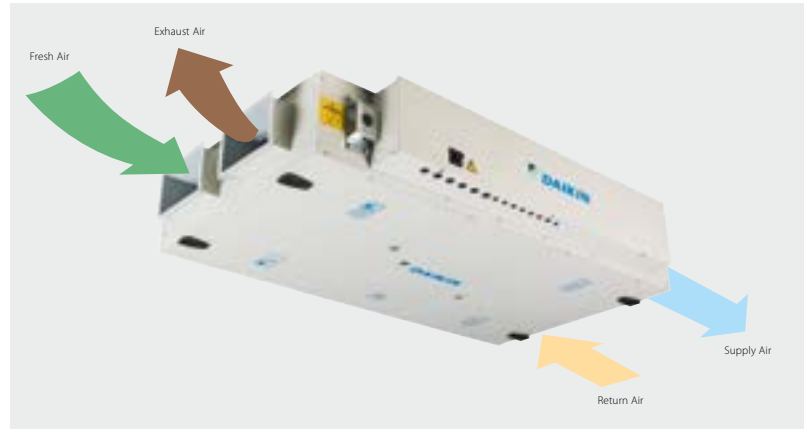
| D-AHU Modular P          |                      | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9      | 10     |
|--------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Airflow                  | m <sup>3</sup> /h    | 1,100 | 1,600 | 2,400 | 3,100 | 3,700 | 4,750 | 5,500 | 8,000 | 10,400 | 12,500 |
| Thermal efficiency       | %                    | 93.9  | 93.6  | 93.2  | 93.1  | 93.1  | 93.1  | 93.1  | 93.3  | 93.1   | 93.1   |
| External static pressure | Nom. Pa              | 200   | 200   | 200   | 200   | 200   | 200   | 200   | 200   | 200    | 200    |
| Current                  | Nom. A               | 1.75  | 2.51  | 1.28  | 1.67  | 2.09  | 2.69  | 3.04  | 4.14  | 5.88   | 6.97   |
| Power input              | Nom. kW              | 0.40  | 0.58  | 0.89  | 1.15  | 1.45  | 1.86  | 2.11  | 2.87  | 4.07   | 4.83   |
| SFPv                     | kW/m <sup>3</sup> /s | 1.32  | 1.30  | 1.33  | 1.34  | 1.41  | 1.41  | 1.38  | 1.29  | 1.41   | 1.39   |
| Electrical supply        | Phase                | 1     | 1     | 3 + N | 3 + N | 3 + N | 3 + N | 3 + N | 3 + N | 3 + N  | 3 + N  |
|                          | Frequency            | Hz    | 50    | 50    | 50    | 50    | 50    | 50    | 50    | 50     | 50     |
|                          | Voltage              | V     | 230   | 230   | 400   | 400   | 400   | 400   | 400   | 400    | 400    |
| Dimensions unit          | Width                | mm    | 720   | 820   | 990   | 1,200 | 1,400 | 1,400 | 1,600 | 1,940  | 1,940  |
|                          | Height               | mm    | 1,320 | 1,320 | 1,540 | 1,740 | 1,740 | 1,920 | 1,920 | 2,180  | 2,460  |
|                          | Length               | mm    | 2,030 | 2,200 | 2,610 | 2,660 | 2,800 | 3,210 | 3,340 | 3,840  | 4,060  |
| Weight unit              | kg                   | 343   | 358   | 512   | 604   | 785   | 852   | 964   | 1,449 | 1,700  | 2,071  |

# Modular L - For Applied

Premium efficiency heat recovery unit

## Highlights

- › 6 Predefined sizes
- › Compliant with VDI 6022 (for unit with air flow < 1000 m<sup>3</sup>/h)
- › Exceeding ERP 2018 requirement
- › Plug & Play Controls
- › Best choice when Compactness is needed (only 280 mm height up to 550 m<sup>3</sup>/h)
- › Easy installation and commissioning



## EC centrifugal fan

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

## Heat exchanger

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

## Technical details

| D-AHU Modular L                                |                      | 2                  | 3           | 4           | 5           | 6           | 7           |
|--|----------------------|--------------------|-------------|-------------|-------------|-------------|-------------|
| Airflow  | m <sup>3</sup> /h    | 300                | 600         | 1200        | 1500        | 2500        | 3000        |
| Heat exchanger thermal efficiency <sup>1</sup> | %                    | 93                 | 93          | 93          | 92          | 94          | 93          |
| External static pressure                       | Nom. Pa              | 100                | 100         | 100         | 100         | 100         | 100         |
| Current  | Nom. A               | 0,52               | 1,17        | 1,91        | 2,48        | 4,39        | 5,39        |
| Power input                                    | Nom. kW              | 0,12               | 0,27        | 0,44        | 0,57        | 1,01        | 1,24        |
| SFPv <sup>2</sup>                              | kW/m <sup>3</sup> /s | 1,24               | 1,49        | 1,25        | 1,31        | 1,42        | 1,46        |
| ERP compliant                                  |                      | ErP 2018 Compliant |             |             |             |             |             |
| Electrical supply                              | Phase                | ph                 | 1           | 1           | 1           | 1           | 1           |
|  | Frequency            | Hz                 | 50/60       | 50/60       | 50/60       | 50/60       | 50/60       |
|  | Voltage              | V                  | 220/240 Vac | 220/240 Vac | 220/240 Vac | 220/240 Vac | 220/240 Vac |
| Main unit dimensions                           | Width                | mm                 | 920         | 1100        | 1600        | 1600        | 2000        |
|  | Height               | mm                 | 280         | 350         | 415         | 415         | 500         |
|  | Length               | mm                 | 1660        | 1800        | 2000        | 2000        | 2000        |
| Rectangular duct flange                        | Width                | mm                 | 250         | 400         | 500         | 500         | 700         |
|  | Height               | mm                 | 150         | 200         | 300         | 300         | 400         |
| Unit Sound Power Level (Lwa)                   | dB                   | 50                 | 57          | 57          | 53          | 61          | 58          |
| Unit Sound Pressure Level <sup>3</sup>         | dBA                  | 33                 | 39          | 39          | 35          | 43          | 40          |
| Weight unit                                    | kg                   | 125                | 180         | 270         | 280         | 355         | 360         |

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

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

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

# Modular L Smart - For SkyAir & VRV

Premium efficiency heat recovery unit

## Highlights

- › Connects Plug&Play into the Sky Air and VRV control network
- › Easy installation and commissioning
- › Internal pre-filter stage (up to ePM<sub>1</sub> 50% (F7) + ePM<sub>1</sub> 80% (F9)) making the unit reach highest indoor air quality requirements.
- › Wide air flow coverage from 150m<sup>3</sup>/h to 3,450m<sup>3</sup>/h
- › Exceeding ErP 2018 requirements
- › Best choice when compactness is needed (only 280 mm height up to 550 m<sup>3</sup>/h)
- › 50 mm double skin panel (120 kg/m<sup>3</sup>) for a maximum sound and thermal insulation

## EC centrifugal fan

- › Maximum ESP available 600 Pa (depending on model sizes and airflow)
- › Inverter driven with IE4 premium efficiency motor
- › High-efficient blade profiling
- › Reduced energy consumption
- › Optimized SFP (Specific Fan Power) for an efficient unit operation

## Heat exchanger

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



Right drain connection (ALB-RBS)



Left drain connection (ALB-LBS)

## Technical details

| D-AHU Modular L Smart                          |           | ALB-RBS/LBS          | 02                 | 03          | 04          | 05          | 06          | 07          |
|--|-----------|----------------------|--------------------|-------------|-------------|-------------|-------------|-------------|
| Airflow  |           | m <sup>3</sup> /h    | 300                | 600         | 1200        | 1500        | 2300        | 3000        |
| Heat exchanger thermal efficiency <sup>1</sup> |           | %                    | 90                 | 91          | 90          | 90          | 92          | 91          |
| External static pressure                       | Nom.      | Pa                   | 100                | 100         | 100         | 100         | 100         | 100         |
| Temperature after heat exchanger <sup>1</sup>  | Nom.      | °C                   | 19,4               | 19,5        | 19,4        | 19,2        | 19,8        | 19,5        |
| Max ESP @ nom. airflow                         |           | Pa                   | 400                | 450         | 260         | 270         | 250         | 210         |
| Current  | Nom.      | A                    | 0,52               | 1,17        | 1,91        | 2,48        | 3,76        | 5,39        |
| Power input                                    | Nom.      | kW                   | 0,12               | 0,27        | 0,44        | 0,57        | 0,87        | 1,24        |
| SFPv <sup>2</sup>                              |           | kW/m <sup>3</sup> /s | 1,24               | 1,49        | 1,28        | 1,32        | 1,32        | 1,46        |
| ERP compliant                                  |           |                      | ErP 2018 Compliant |             |             |             |             |             |
| Electrical supply                              | Phase     | ph                   | 1                  | 1           | 1           | 1           | 1           | 1           |
|  | Frequency | Hz                   | 50/60              | 50/60       | 50/60       | 50/60       | 50/60       | 50/60       |
|  | Voltage   | V                    | 220/240 Vac        | 220/240 Vac | 220/240 Vac | 220/240 Vac | 220/240 Vac | 220/240 Vac |
| Main unit dimensions                           | Width     | mm                   | 920                | 1100        | 1600        | 1600        | 2000        | 2000        |
|  | Height    | mm                   | 280                | 350         | 415         | 415         | 500         | 500         |
|  | Length    | mm                   | 1660               | 1800        | 2000        | 2000        | 2000        | 2000        |
| Rectangular duct flange                        | Width     | mm                   | 250                | 400         | 500         | 500         | 700         | 700         |
|  | Height    | mm                   | 150                | 200         | 300         | 300         | 400         | 400         |
| Unit Sound Power Level (Lwa)                   |           | dB                   | 48                 | 54          | 57          | 53          | 60          | 57          |
| Unit Sound Pressure Level <sup>3</sup>         |           | dBA                  | 34                 | 39          | 41          | 37          | 44          | 41          |
| Weight unit                                    |           | kg                   | 125                | 180         | 270         | 280         | 355         | 360         |

1. Winter design condition: Outdoor: -5°C, 90% Indoor: 22°C, 50%

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

3. According to EN3744. Surrounding, Directivity (Q) = 2, @ 1,5m distance





## ALD-HEFB

## Electrical heater for Modular L Smart

- › Total solution for fresh air with Daikin supply of both Modular L Smart and electrical heaters
- › Increase comfort in low outdoor temperature thanks to the heated outdoor air
- › Integrated electrical heater concept (no additional accessories required)
- › Standard dual flow and temperature sensor
- › Heater only consumes what is required to pre-heat to the desired minimum fresh air temperature; thus saving energy



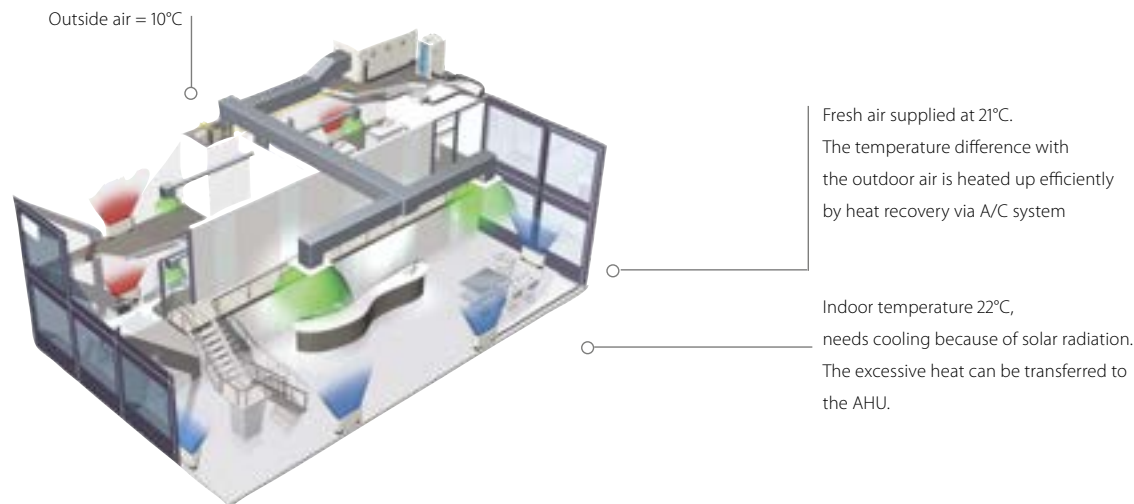
| Electrical heater for Modular L Smart (ALD) | 02HEFB                                    | 03HEFB                                   | 05HEFB                                   | 07HEFB                                   |
|---|---|--|--|--|
| Capacity kW                                 | 1,5                                       | 3  | 7,5                                      | 15                                       |
| Connectable Modular L Smart size            | 02  | 03                                       | 04, 05                                   | 06, 07                                   |
| Supply voltage                              | 230V,1ph                                  |  | 400V,3ph                                 |  |
| Output current (maximum) (A)                | 6,6                                       | 13,1                                     | 10,9                                     | 21,7                                     |
| Temperature sensor                          | 15k ohms at -20 °C<br>10k ohms at +10 °C  | 16k ohms at -20 °C<br>10k ohms at +10 °C | 17k ohms at -20 °C<br>10k ohms at +10 °C | 18k ohms at -20 °C<br>10k ohms at +10 °C |
| Temperature control range                   | - 20 °C to 10 °C                          |  |  |  |
| Control fuse                                | Mini Circuit Breaker 6 A                  |  |  |  |
| LED indicators                              | "Yellow = Airflow fault<br>Red = Heat ON" |  |  |  |
| Mounting holes                              | Depends on duct size                      |  |  |  |
| Maximum ambient adjacent to terminal box    | 30°C (during operation)                   |  |  |  |
| Auto high temperature cutout                | 75°C Pre-set                              |  |  |  |
| Manual reset high temperature cutout        | 120°C Pre-set                             |  |  |  |
| Width (mm)                                  | 470                                       | 620                                      | 720                                      | 920                                      |
| Depth (mm)                                  | 370                                       | 370                                      | 370                                      | 370                                      |
| Height (mm)                                 | 193                                       | 243                                      | 343                                      | 443                                      |

## Why use VRV and ERQ condensing units for connection to air handling units?

### High Efficiency

Daikin heat pumps are renowned for their high energy efficiency. Integrating the AHU with a heat recovery system is even more effective since an office system can frequently be in cooling mode

while the outdoor air is too cold to be brought inside in an unconditioned state. In this case heat from the offices is merely transferred to heat up the cold fresh air.



### Fast response to changing loads resulting in high comfort levels

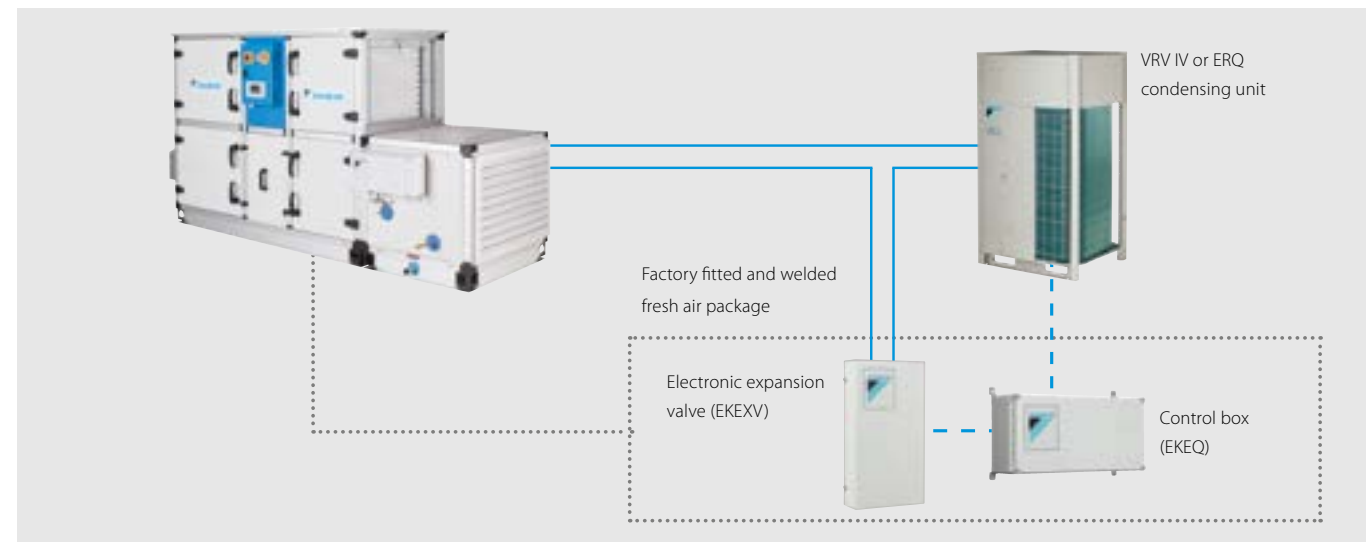
Daikin ERQ and VRV units respond rapidly to fluctuations in supply air temperature, resulting in a steady indoor temperature and resultant high comfort levels for the end user. The ultimate is the VRV range which improves comfort even more by offering continuous heating, also during defrost.

### Easy Design and Installation

The system is easy to design and install since no additional water systems such as boilers, tanks and gas connections etc. are required. This also reduces both the total system investment and running cost.

### Daikin Fresh air package

- › Plug & Play connection between VRV/ERQ and the entire D-AHU modular range.
- › Factory fitted and welded DX coil control and expansion valve kits.



## In order to maximise installation flexibility, 4 types of control systems are offered

**W control:** Off the shelf control of air temperature (discharge temperature, suction temperature, room temperature) via any DDC controller, easy to setup

**X control:** Precise control of air temperature (discharge temperature, suction temperature, room temperature) requiring a preprogrammed DDC controller (for special applications)

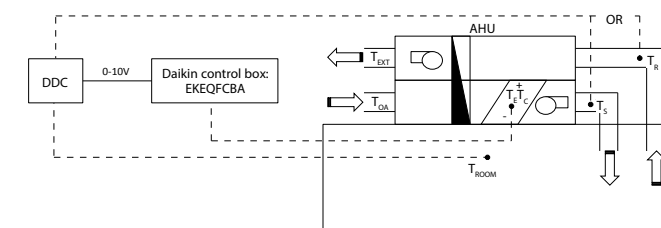
**Z control:** Control of air temperature (suction temperature, room temperature) via Daikin control (no DDC controller needed)

**Y control:** Control of refrigerant (Te/Tc) temperature via Daikin control (no DDC controller needed)

### 1. W control ( $T_s/T_r/T_{ROOM}$ control):

#### Air temperature control via DDC controller

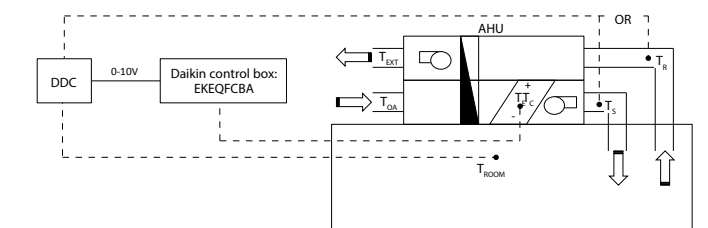
Room temperature is controlled as a function of the air handling unit suction or discharge air (customer selection). The DDC controller is translating the temperature difference between set point and air suction temperature (or air discharge temperature or room temperature) into a proportional 0-10V signal which is transferred to the Daikin control box (EKEQFCBA). This voltage modulates the capacity requirements of the outdoor unit.



### 2. X control ( $T_s/T_r/T_{ROOM}$ control):

#### Precise air temperature control via DDC controller

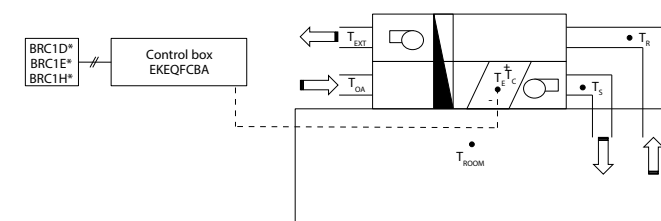
Room temperature is controlled as a function of the air handling unit suction or discharge air (customer selection). The DDC controller is translating the temperature difference between set point and air suction temperature (or air discharge temperature or room temperature) into a reference voltage (0-10V) which is transferred to the Daikin control box (EKEQFCBA). This reference voltage will be used as the main input value for the compressor frequency control.



### 3. Y control ( $T_e/T_c$ control):

#### By fixed evaporating /condensing temperature

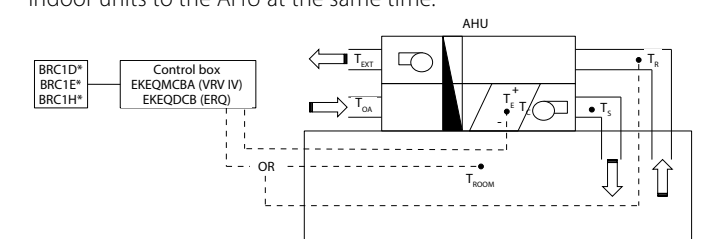
A fixed target evaporating or condensing temperature can be set by the customer. In this case, room temperature is only indirectly controlled. A Daikin wired remote control (BRC1\* - optional) have to be connected for initial set-up but not required for operation.



### 4. Z control ( $T_s/T_{ROOM}$ control):

#### Control your AHU just like a VRV indoor unit with up to 100% fresh air

Allows the possibility to control the AHU just like a VRV indoor unit. Meaning temperature control will be focused on return air temperature from the room into the AHU. Requires BRC1\* for operation. The only control that allows the combination of other indoor units to the AHU at the same time.



$T_s$  = Supply air temperature       $T_r$  = Return air temperature       $T_{OA}$  = Outdoor air temperature       $T_{ROOM}$  = Room air temperature  
 $T_{EXT}$  = Extraction air temperature       $T_e$  = Evaporating temperature       $T_c$  = Condensing temperature

|               | Option kit           | Features  |
|---------------|----------------------|---|
| Possibility W |                      | Off-the-shelf DDC controller that requires no pre-configuration   |
| Possibility X | EKEQFCBA             | Pre-configured DDC controller required  |
| Possibility Y |                      | Using fixed evaporating temperature, no set point can be set using remote control   |
| Possibility Z | EKEQDCB<br>EKFQMCBA* | Using Daikin infrared remote control BRC1*<br>Temperature control using air suction temperature or room temperature (via remote sensor) |

\* EKEQMCB (for 'multi' application)

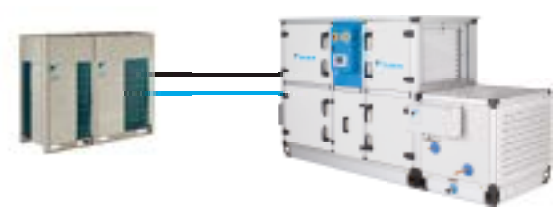


# VRV - for larger capacities (from 8 to 54HP)

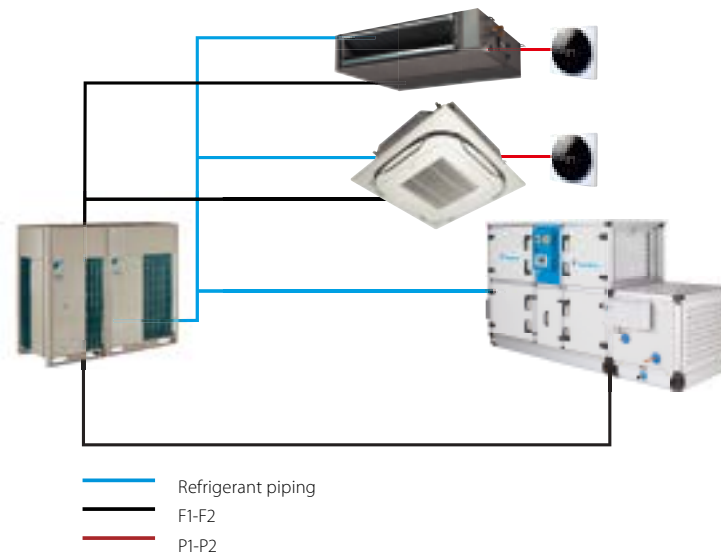
An advanced solution for both pair and multi application

- › Inverter controlled units
- › Heat recovery, heat pump
- › R-410A
- › Control of room temperature via Daikin control
- › Large range of expansion valve kits available
- › BRC1H519W/S/K is used to set the set point temperature (connected to the EKEQMCBA).
- › Connectable to all VRV heat recovery and heat pump systems

W, X, Y control for VRV IV heat pump



Z control for all VRV outdoor units



# ERQ - for smaller capacities (from 100 to 250 class)

A basic fresh air solution for pair application

- › Inverter controlled units
- › Heat pump
- › R-410A
- › Wide range of expansion valve kits available
- › Perfect for the Daikin Modular air handling unit

The "Daikin Fresh Air Package" provides a complete Plug & Play Solution including AHU, ERQ or VRV Condensing Unit and all unit control (EKEQ, EKEK, DDC controller) factory mounted and configured. The easiest solution with only one point of contact.



| Ventilation          |                         |                           |                     | ERQ | 100AV1                         | 125AV1                            | 140AV1 |
|----------------------|-------------------------|---------------------------|---------------------|-----|--------------------------------|-----------------------------------|--------|
| Capacity range       |                         |                           |                     | HP  | 4                              | 5                                 | 6      |
| Cooling capacity     | Nom.                    |                           |                     | kW  | 11.2                           | 14.0                              | 15.5   |
| Heating capacity     | Nom.                    |                           |                     | kW  | 12.5                           | 16.0                              | 18.0   |
| Power input          | Cooling                 | Nom.                      |                     | kW  | 2.81                           | 3.51                              | 4.53   |
|                      | Heating                 | Nom.                      |                     | kW  | 2.74                           | 3.86                              | 4.57   |
| EER                  |                         |                           |                     |     |                                | 3.99                              |        |
| COP                  |                         |                           |                     |     | 4.56                           | 4.15                              | 3.94   |
| Dimensions           | Unit                    | HeightxWidthxDepth        | mm                  |     | 1,345x900x320                  |                                   |        |
| Weight               | Unit                    |                           | kg                  |     | 120                            |                                   |        |
| Casing               | Material                |                           |                     |     | Painted galvanized steel plate |                                   |        |
| Fan-Air flow rate    | Cooling                 | Nom.                      | m <sup>3</sup> /min |     |                                | 106                               |        |
|                      | Heating                 | Nom.                      | m <sup>3</sup> /min |     | 102                            |                                   | 105    |
| Sound power level    | Cooling                 | Nom.                      | dB(A)               |     | 66                             | 67                                | 69     |
| Sound pressure level | Cooling                 | Nom.                      | dB(A)               |     | 50                             | 51                                | 53     |
|                      | Heating                 | Nom.                      | dB(A)               |     | 52                             | 53                                | 55     |
| Operation range      | Cooling                 | Min./Max.                 | °CDB                |     |                                | -5/46                             |        |
|                      | Heating                 | Min./Max.                 | °CWB                |     |                                | -20/15.5                          |        |
|                      | On coil temperature     | Heating/Min./Cooling/Max. | °CDB                |     |                                | 10/35                             |        |
| Refrigerant          | Type                    |                           |                     |     |                                | R-410A                            |        |
|                      | Charge                  |                           | kg                  |     |                                | 4.0                               |        |
|                      |                         |                           | TCO <sub>2eq</sub>  |     |                                | 8.4                               |        |
|                      | GWP                     |                           |                     |     |                                | 2,087.5                           |        |
|                      | Control                 |                           |                     |     |                                | Expansion valve (electronic type) |        |
| Piping connections   | Liquid                  | OD                        | mm                  |     |                                | 9.52                              |        |
|                      | Gas                     | OD                        | mm                  |     | 15.9                           |                                   | 19.1   |
|                      | Drain                   | OD                        | mm                  |     |                                | 26x3                              |        |
| Power supply         | Phase/Frequency/Voltage |                           | Hz/V                |     | 1N~/50/220-240                 |                                   |        |
| Current              | Maximum fuse amps (MFA) |                           | A                   |     | 32.0                           |                                   |        |

| Ventilation          |                         |                           |                     | ERQ  | 125AW1                         | 200AW1                     | 250AW1 |
|----------------------|-------------------------|---------------------------|---------------------|------|--------------------------------|----------------------------|--------|
| Capacity range       |                         |                           |                     | HP   | 5                              | 8                          | 10     |
| Cooling capacity     | Nom.                    |                           |                     | kW   | 14.0                           | 22.4                       | 28.0   |
| Heating capacity     | Nom.                    |                           |                     | kW   | 16.0                           | 25.0                       | 31.5   |
| Power input          | Cooling                 | Nom.                      | kW                  | 3.52 | 5.22                           | 7.42                       |        |
|                      | Heating                 | Nom.                      | kW                  | 4.00 | 5.56                           | 7.70                       |        |
| EER                  |                         |                           |                     |      | 3.98                           | 4.29                       | 3.77   |
| COP                  |                         |                           |                     |      | 4.00                           | 4.50                       | 4.09   |
| Dimensions           | Unit                    | HeightxWidthxDepth        | mm                  |      | 1,680x635x765                  | 1,680x930x765              |        |
| Weight               | Unit                    |                           | kg                  |      | 159                            | 187                        | 240    |
| Casing               | Material                |                           |                     |      | Painted galvanized steel plate |                            |        |
| Fan-Air flow rate    | Cooling                 | Nom.                      | m <sup>3</sup> /min |      | 95                             | 171                        | 185    |
|                      | Heating                 | Nom.                      | m <sup>3</sup> /min |      | 95                             | 171                        | 185    |
| Sound power level    | Nom.                    |                           | dB(A)               |      | 72                             | 78                         |        |
| Sound pressure level | Nom.                    |                           | dB(A)               |      | 54                             | 57                         | 58     |
| Operation range      | Cooling                 | Min./Max.                 | °CDB                |      |                                | -5/43                      |        |
|                      | Heating                 | Min./Max.                 | °CWB                |      |                                | -20/15                     |        |
|                      | On coil temperature     | Heating/Min./Cooling/Max. | °CDB                |      |                                | 10/35                      |        |
| Refrigerant          | Type                    |                           |                     |      |                                | R-410A                     |        |
|                      | Charge                  |                           | kg                  |      | 6.2                            | 7.7                        | 8.4    |
|                      |                         |                           | TCO <sub>2eq</sub>  |      | 12.9                           | 16.1                       | 17.5   |
|                      | GWP                     |                           |                     |      |                                | 2,087.5                    |        |
|                      | Control                 |                           |                     |      |                                | Electronic expansion valve |        |
| Piping connections   | Liquid                  | OD                        | mm                  |      |                                | 9.52                       |        |
|                      | Gas                     | OD                        | mm                  |      | 15.9                           | 19.1                       | 22.2   |
|                      | Drain                   | OD                        | mm                  |      |                                | 19.1                       |        |
| Power supply         | Phase/Frequency/Voltage |                           | Hz/V                |      | 3N~/50/400                     |                            |        |
| Current              | Maximum fuse amps (MFA) |                           | A                   |      | 16                             | 25                         |        |



Integration with third party air handling units

## Integration of ERQ and VRV in third party air handling units

a wide range of expansion valve kits and control boxes

### Combination table

|  | Control box |               |           | Expansion valve kit |          |          |           |           |           |           |           |           |           | Mixed connection with VRV indoor units |
|--|-------------|---------------|-----------|---------------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
|  | EKEQDCB     | EKEQFCBA      | EKEQMCBA  | EKE XV50            | EKE XV63 | EKE XV80 | EKE XV100 | EKE XV125 | EKE XV140 | EKE XV200 | EKE XV250 | EKE XV400 | EKE XV500 |  |
|  | Z control   | W,X,Y control | Z control | -                   | -        | -        | -         | -         | -         | -         | -         | -         | -         |  |
| 1-phase  | ERQ100      | P             | P         | -                   | P        | P        | P         | P         | -         | -         | -         | -         | -         |  |
|  | ERQ125      | P             | P         | -                   | P        | P        | P         | P         | -         | -         | -         | -         | -         |  |
|  | ERQ140      | P             | P         | -                   | P        | P        | P         | P         | -         | -         | -         | -         | -         |  |
|  | ERQ125      | P             | P         | -                   | P        | P        | P         | P         | -         | -         | -         | -         | -         |  |
| 3-phase  | ERQ200      | P             | P         | -                   | -        | -        | P         | P         | P         | P         | P         | -         | -         |  |
|  | ERQ250      | P             | P         | -                   | -        | -        | -         | P         | P         | P         | P         | -         | -         |  |
| VRV III  | -           | -             | n1        | n1                  | n1       | n1       | n1        | n1        | n1        | n1        | n1        | n1        | n1        |  |
| VRV IV H/P / VRV IV W-series / VRV IV S-series | -           | P (1->3)      | n2        | n2                  | n2       | n2       | n2        | n2        | n2        | n2        | n2        | n2        | n2        |  |
| VRV IV H/R / VRV IV i-series                   | -           | n1            | -         | n1                  | n1       | n1       | n1        | n1        | n1        | n1        | n1        | n1        | n1        |  |

- P (pair application): combination depends on the capacity of the air handling unit
- n1 (multi application) - Combination of AHUs and VRV DX indoors (mandatory). To determine the exact quantity please refer to the engineering data book.
- n2 (multi application) - Combination of AHUs and VRV DX indoors (not mandatory). To determine the exact quantity please refer to the engineering data book.
- Control box EKEQFA can be connected to some types of VRV IV outdoor units (with a maximum of 3 boxes per unit). Do not combine EKEQFA control boxes with VRV DX indoor units, RA indoor units or hydroboxes

### Capacity table

#### Cooling

| EKE XV Class | Allowed heat exchanger capacity (kW) |          |         | Allowed heat exchanger volume (dm <sup>3</sup> ) |         |
|--------------|--------------------------------------|----------|---------|--|---------|
|              | Minimum                              | Standard | Maximum | Minimum  | Maximum |
| 50           | 5.0                                  | 5.6      | 6.2     | 1.33   | 1.65    |
| 63           | 6.3                                  | 7.1      | 7.8     | 1.66   | 2.08    |
| 80           | 7.9                                  | 9.0      | 9.9     | 2.09   | 2.64    |
| 100          | 10.0                                 | 11.2     | 12.3    | 2.65   | 3.30    |
| 125          | 12.4                                 | 14.0     | 15.4    | 3.31   | 4.12    |
| 140          | 15.5                                 | 16.0     | 17.6    | 4.13   | 4.62    |
| 200          | 17.7                                 | 22.4     | 24.6    | 4.63   | 6.60    |
| 250          | 24.7                                 | 28.0     | 30.8    | 6.61   | 8.25    |
| 400          | 35.4                                 | 45.0     | 49.5    | 9.26   | 13.2    |
| 500          | 49.6                                 | 56.0     | 61.6    | 13.2   | 16.5    |

Saturated evaporating temperature: 6°C  
Air temperature: 27°C DB / 19°C WB

#### Heating

| EKE XV Class | Allowed heat exchanger capacity (kW) |          |         | Allowed heat exchanger volume (dm <sup>3</sup> ) |         |
|--------------|--------------------------------------|----------|---------|--|---------|
|              | Minimum                              | Standard | Maximum | Minimum  | Maximum |
| 50           | 5.6                                  | 6.3      | 7.0     | 1.33   | 1.65    |
| 63           | 7.1                                  | 8.0      | 8.8     | 1.66   | 2.08    |
| 80           | 8.9                                  | 10.0     | 11.1    | 2.09   | 2.64    |
| 100          | 11.2                                 | 12.5     | 13.8    | 2.65   | 3.30    |
| 125          | 13.9                                 | 16.0     | 17.3    | 3.31   | 4.12    |
| 140          | 17.4                                 | 18.0     | 19.8    | 4.13   | 4.62    |
| 200          | 19.9                                 | 25.0     | 27.7    | 4.63   | 6.60    |
| 250          | 27.8                                 | 31.5     | 34.7    | 6.61   | 8.25    |
| 400          | 39.8                                 | 50.0     | 55.0    | 9.26   | 13.2    |
| 500          | 55.1                                 | 63.0     | 69.3    | 13.2   | 16.5    |

Saturated condensing temperature: 46°C  
Air temperature: 20°C DB

### EKE XV - Expansion valve kit for air handling applications

| Ventilation          |            | EKE XV                   | 50   | 63 | 80 | 100 | 125              | 140 | 200 | 250  | 400  | 500 |
|----------------------|------------|--------------------------|------|----|----|-----|------------------|-----|-----|------|------|-----|
| Dimensions           | Unit       | mm                       |      |    |    |     | 401x215x78       |     |     |      |      |     |
| Weight               | Unit       | kg                       |      |    |    |     | 2.9              |     |     |      |      |     |
| Sound pressure level | Nom.       | dBA                      |      |    |    |     | 45               |     |     |      |      |     |
| Operation range      | On coil    | Heating Min.             |      |    |    |     | 10 (1)           |     |     |      |      |     |
|                      |            | temperature Cooling Max. |      |    |    |     | 35 (2)           |     |     |      |      |     |
| Refrigerant          | Type / GWP |                          |      |    |    |     | R-410A / 2,087,5 |     |     |      |      |     |
| Piping connections   | Liquid OD  | mm                       | 6.35 |    |    |     | 9.52             |     |     | 12.7 | 15.9 |     |

(1) The temperature of the air entering the coil in heating mode can be reduced to -5°CDB. Contact your local dealer for more information. (2) 45% Relative humidity.

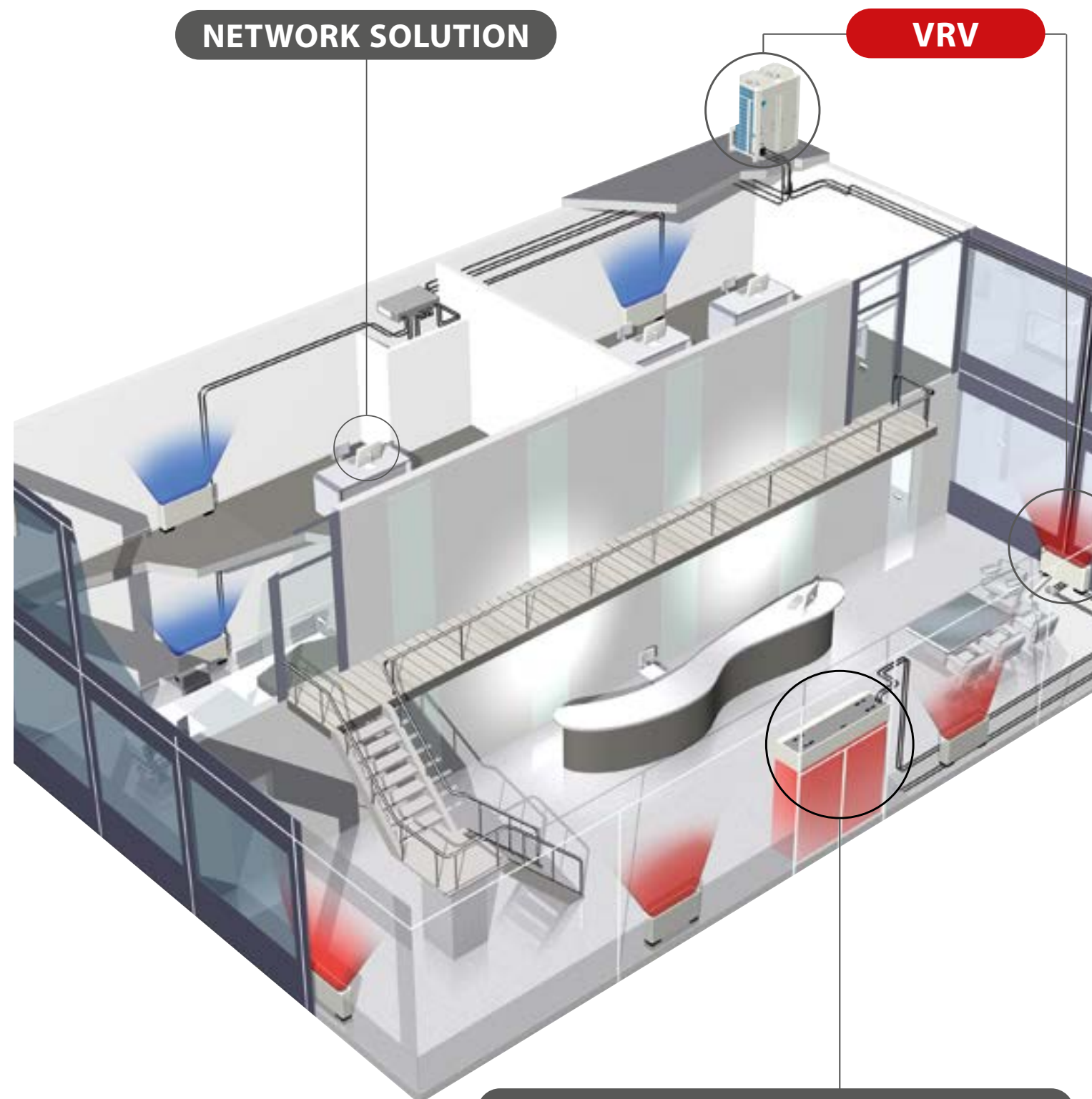
### EKEQ - Control box for air handling applications

| Ventilation  |                         | EKEQ | FCBA      | DCB         | MCBA  |
|--------------|-------------------------|------|-----------|-------------|-------|
| Application  |                         |      | See note  | Pair        | Multi |
| Outdoor unit |                         |      | ERQ / VRV | ERQ         | VRV   |
| Dimensions   | Unit                    | mm   |           | 132x400x200 |       |
| Weight       | Unit                    | kg   | 3.9       |             | 3.6   |
| Power supply | Phase/Frequency/Voltage | Hz/V |           | 1~/50/230   |       |

The combination of EKEQFCBA and ERQ is in pair application. The EKEQFCBA can be connected to some type of VRV IV outdoor units with a maximum of 3 control boxes. The combination with DX indoor units, hydroboxes, RA outdoor units, ... is not allowed. Refer to the combination table drawing of the outdoor unit for details.

## NETWORK SOLUTION

## VRV

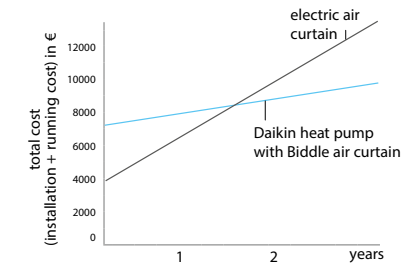


## BIDDLE COMFORT AIR CURTAIN (CA)



## Biddle air curtain for ERQ

- › Connectable to ERQ heat pump
- › ERQ is among the first DX systems suitable for connection to air curtains
- › Free-hanging model (F): easy wall mounted installation
- › Cassette model (C): mounted into a false ceiling leaving only the decoration panel visible
- › Recessed model (R): neatly concealed in the ceiling
- › A payback period of less than 1.5 years compared to installing an electric air curtain
- › Easy and quick to install at reduced costs since no additional water systems, boilers and gas connections are required
- › **PATENTED TECHNOLOGY:** Maximum energy efficiency stemming from almost zero down flow turbulence, optimised air flow and the application of advanced discharge rectifier technology
- › Around 85% air separation efficiency, greatly reducing both heat loss and required indoor unit heating capacity



## Biddle air curtain for VRV and Conveni-pack

- › Connectable to VRV heat recovery, heat pump and Conveni-pack
- › VRV is among the first DX systems suitable for connection to air curtains
- › Free-hanging model (F): easy wall mounted installation
- › Cassette model (C): mounted into a false ceiling leaving only the decoration panel visible
- › Recessed model (R): neatly concealed in the ceiling
- › A payback period of less than 1.5 years compared to installing an electric air curtain
- › Provides virtually free air curtain heating via recovered heat from indoor units in cooling mode (in case of VRV heat recovery)
- › Easy and quick to install at reduced costs since no additional water systems, boilers and gas connections are required
- › **PATENTED TECHNOLOGY:** Maximum energy efficiency stemming from almost zero down flow turbulence, optimised air flow and the application of advanced discharge rectifier technology
- › Around 85% air separation efficiency, greatly reducing both heat loss and required indoor unit heating capacity



|   |                  | Small  |              |                              | Medium                       |                              |                             |                             |                             |                             |       |
|---|------------------|--|--------------|------------------------------|------------------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------|
|   |                  | CYQS150DK80  | CYQS200DK100 | CYQS250DK140                 | CYQM100DK80                  | CYQM150DK80                  | CYQM200DK100                | CYQM250DK140                |                             |                             |       |
|   |                  | *BN/*SN  | *BN/*SN      | *BN/*SN                      | *BN/*SN                      | *BN/*SN                      | *BN/*SN                     | *BN/*SN                     |                             |                             |       |
| Heating capacity                                    | Speed 3          | kW   |              | 9.0                          | 11.6                         | 16.2                         | 9.2                         | 11.0                        | 13.4                        | 19.9                        |       |
| Power input   | Fan only         | Nom.   | kW           |                              | 0.35                         | 0.46                         | 0.58                        | 0.37                        | 0.56                        | 0.75                        | 0.94  |
|   | Heating          | Nom.   | kW           |                              | 0.35                         | 0.46                         | 0.58                        | 0.37                        | 0.56                        | 0.75                        | 0.94  |
| Delta T   | Speed 3          | K  |              | 15                           | 16                           | 17                           | 14                          | 13                          | 15                          |                             |       |
| Casing  | Colour           | BN: RAL9010 / SN: RAL9006  |              |                              |                              |                              |                             |                             |                             |                             |       |
| Dimensions  | Unit             | 270/270/270  |              |                              |                              |                              |                             |                             |                             |                             |       |
|   | Height F/C/R     | mm   |              | 1,500/1,500/1,548            |                              | 2,000/2,000/2,048            |                             | 2,500/2,500/2,548           |                             |                             |       |
|   | Width F/C/R      | mm   |              | 1,000/1,000/1,048            |                              | 1,500/1,500/1,548            |                             | 2,000/2,000/2,048           |                             | 2,500/2,500/2,548           |       |
| Depth F/C/R   | mm               |  | 590/821/561  |                              |                              |                              |                             |                             |                             |                             |       |
| Required ceiling void >                             |                  | 420  |              |                              |                              |                              |                             |                             |                             |                             |       |
| Door height   | Max.             | m  |              | 2.3 (1) / 2.15 (2) / 2.0 (3) | 2.3 (1) / 2.15 (2) / 2.0 (3) | 2.3 (1) / 2.15 (2) / 2.0 (3) | 2.5 (1) / 2.4 (2) / 2.3 (3) | 2.5 (1) / 2.4 (2) / 2.3 (3) | 2.5 (1) / 2.4 (2) / 2.3 (3) | 2.5 (1) / 2.4 (2) / 2.3 (3) |       |
| Door width  | Max.             | m  |              | 1.5                          | 2.0                          | 2.5                          | 1.0                         | 1.5                         | 2.0                         | 2.5                         |       |
| Weight  | Unit             | kg   |              | 66                           | 83                           | 107                          | 57                          | 73                          | 94                          | 108                         |       |
| Fan-Air flow rate                                   | Heating          | Speed 3  | m³/h         |                              | 1,746                        | 2,328                        | 2,910                       | 1,605                       | 2,408                       | 3,210                       | 4,013 |
| Sound pressure level                                | Heating          | Speed 3  | dBA          |                              | 49                           | 50                           | 51                          | 50                          | 51                          | 53                          | 54    |
| Refrigerant   | Type / GWP       | R-410A / 2,087.5   |              |                              |                              |                              |                             |                             |                             |                             |       |
| Piping connections                                  | Liquid/OD/Gas/OD | mm   |              | 9.52/16.0                    |                              | 9.52/19.0                    |                             | 9.52/16.0                   |                             | 9.52/19.0                   |       |
| Required accessories (should be ordered separately) |                  | Daikin wired remote control (BRC1H51(9)W/S/K / BRC1E53A/B/C / BRC1D52) |              |                              |                              |                              |                             |                             |                             |                             |       |
| Power supply  | Voltage          | V  |              |                              |                              |                              |                             |                             |                             | 230                         |       |

|   |                  | Large  |              |                              |                              |                              |                              |                   |  |                   |  |
|---|------------------|--|--------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------|--|-------------------|--|
|   |                  | CYQL100DK125   | CYQL150DK200 | CYQL200DK250                 | CYQL250DK250                 |                              |                              |                   |  |                   |  |
|   |                  | *BN/*SN  | *BN/*SN      | *BN/*SN                      | *BN/*SN                      |                              |                              |                   |  |                   |  |
| Heating capacity                                    | Speed 3          | kW   |              | 15.6                         | 23.3                         | 29.4                         | 31.1                         |                   |  |                   |  |
| Power input   | Fan only         | Nom.   | kW           |                              | 0.75                         | 1.13                         | 1.50                         | 1.88              |  |                   |  |
|   | Heating          | Nom.   | kW           |                              | 0.75                         | 1.13                         | 1.50                         | 1.88              |  |                   |  |
| Delta T   | Speed 3          | K  |              | 15                           | 14                           | 12                           |                              |                   |  |                   |  |
| Casing  | Colour           | BN: RAL9010 / SN: RAL9006  |              |                              |                              |                              |                              |                   |  |                   |  |
| Dimensions  | Unit             | 370/370/370  |              |                              |                              |                              |                              |                   |  |                   |  |
|   | Height F/C/R     | mm   |              | 1,000/1,000/1,048            |                              | 1,500/1,500/1,548            |                              | 2,000/2,000/2,048 |  | 2,500/2,500/2,548 |  |
|   | Width F/C/R      | mm   |              | 774/1,105/745                |                              |                              |                              |                   |  |                   |  |
| Depth F/C/R   | mm               |  | 520          |                              |                              |                              |                              |                   |  |                   |  |
| Required ceiling void >                             |                  | 520  |              |                              |                              |                              |                              |                   |  |                   |  |
| Door height   | Max.             | m  |              | 3.0 (1) / 2.75 (2) / 2.5 (3) | 3.0 (1) / 2.75 (2) / 2.5 (3) | 3.0 (1) / 2.75 (2) / 2.5 (3) | 3.0 (1) / 2.75 (2) / 2.5 (3) |                   |  |                   |  |
| Door width  | Max.             | m  |              | 1.0                          | 1.5                          | 2.0                          | 2.5                          |                   |  |                   |  |
| Weight  | Unit             | kg   |              | 76                           | 100                          | 126                          | 157                          |                   |  |                   |  |
| Fan-Air flow rate                                   | Heating          | Speed 3  | m³/h         |                              | 3,100                        | 4,650                        | 6,200                        | 7,750             |  |                   |  |
| Sound pressure level                                | Heating          | Speed 3  | dBA          |                              | 53                           | 54                           | 56                           | 57                |  |                   |  |
| Refrigerant   | Type / GWP       | R-410A / 2,087.5   |              |                              |                              |                              |                              |                   |  |                   |  |
| Piping connections                                  | Liquid/OD/Gas/OD | mm   |              | 9.52/16.0                    |                              | 9.52/19.0                    |                              | 9.52/22.0         |  |                   |  |
| Required accessories (should be ordered separately) |                  | Daikin wired remote control (BRC1H51(9)W/S/K / BRC1E53A/B/C / BRC1D52) |              |                              |                              |                              |                              |                   |  |                   |  |
| Power supply  | Voltage          | V  |              |                              |                              |                              | 230                          |                   |  |                   |  |

(1) Favorable conditions: covered shopping mall or revolving door entrance (2) Normal conditions: little direct wind, no opposite open doors, building with ground floor only  
(3) Unfavorable conditions: location at a corner or square, multiple floors and/or open stairway

|   |                  | Small  |             |                              | Medium                       |                              |                              |                             |                             |                             |                             |       |
|---|------------------|--|-------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------|
|   |                  | CYVS100DK80  | CYVS150DK80 | CYVS200DK100                 | CYVM100DK80                  | CYVM150DK80                  | CYVM200DK100                 | CYVM250DK140                |                             |                             |                             |       |
|   |                  | *BC/*SC  | *BC/*SC     | *BC/*SC                      | *BC/*SC                      | *BC/*SC                      | *BC/*SC                      | *BC/*SC                     |                             |                             |                             |       |
| Heating capacity                                    | Speed 3          | kW   |             | 7.40                         | 9.0                          | 11.6                         | 16.2                         | 9.2                         | 11.0                        | 13.4                        | 19.9                        |       |
| Power input   | Fan only         | Nom.   | kW          |                              | 0.23                         | 0.35                         | 0.46                         | 0.58                        | 0.37                        | 0.56                        | 0.75                        | 0.94  |
|   | Heating          | Nom.   | kW          |                              | 0.23                         | 0.35                         | 0.46                         | 0.58                        | 0.37                        | 0.56                        | 0.75                        | 0.94  |
| Delta T   | Speed 3          | K  |             | 19                           | 15                           | 16                           | 17                           | 14                          | 13                          | 15                          |                             |       |
| Casing  | Colour           | BN: RAL9010 / SN: RAL9006  |             |                              |                              |                              |                              |                             |                             |                             |                             |       |
| Dimensions  | Unit             | 270/270/270  |             |                              |                              |                              |                              |                             |                             |                             |                             |       |
|   | Height F/C/R     | mm   |             | 1,000/1,000/1,048            |                              | 1,500/1,500/1,548            |                              | 2,000/2,000/2,048           |                             | 2,500/2,500/2,548           |                             |       |
|   | Width F/C/R      | mm   |             | 590/821/561                  |                              |                              |                              |                             |                             |                             |                             |       |
| Depth F/C/R   | mm               |  | 420         |                              |                              |                              |                              |                             |                             |                             |                             |       |
| Required ceiling void >                             |                  | 420  |             |                              |                              |                              |                              |                             |                             |                             |                             |       |
| Door height   | Max.             | m  |             | 2.3 (1) / 2.15 (2) / 2.0 (3) | 2.3 (1) / 2.15 (2) / 2.0 (3) | 2.3 (1) / 2.15 (2) / 2.0 (3) | 2.3 (1) / 2.15 (2) / 2.0 (3) | 2.5 (1) / 2.4 (2) / 2.3 (3) | 2.5 (1) / 2.4 (2) / 2.3 (3) | 2.5 (1) / 2.4 (2) / 2.3 (3) | 2.5 (1) / 2.4 (2) / 2.3 (3) |       |
| Door width  | Max.             | m  |             | 1.0                          | 1.5                          | 2.0                          | 1.0                          | 1.5                         | 2.0                         | 2.5                         |                             |       |
| Weight  | Unit             | kg   |             | 56                           | 66                           | 83                           | 107                          | 57                          | 73                          | 94                          | 108                         |       |
| Fan-Air flow rate                                   | Heating          | Speed 3  | m³/h        |                              | 1,164                        | 1,746                        | 2,328                        | 2,910                       | 1,605                       | 2,408                       | 3,210                       | 4,013 |
| Sound pressure level                                | Heating          | Speed 3  | dBA         |                              | 47                           | 49                           | 50                           | 51                          | 50                          | 51                          | 53                          | 54    |
| Refrigerant   | Type / GWP       | R-410A / 2,087.5   |             |                              |                              |                              |                              |                             |                             |                             |                             |       |
| Piping connections                                  | Liquid/OD/Gas/OD | mm   |             | 9.52/16.0                    |                              | 9.52/19.0                    |                              | 9.52/16.0                   |                             | 9.52/19.0                   |                             |       |
| Required accessories (should be ordered separately) |                  | Daikin wired remote control (BRC1H51(9)W/S/K / BRC1E53A/B/C / BRC1D52) |             |                              |                              |                              |                              |                             |                             |                             |                             |       |
| Power supply  | Voltage          | V  |             |                              |                              |                              |                              |                             |                             | 230                         |                             |       |

|   |                  | Large  |                     |                              |                              |                              |                              |                   |  |                   |  |
|---|------------------|--|---------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------|--|-------------------|--|
|   |                  | CYVL100DK125*BC/*SC  | CYVL150DK200*BC/*SC | CYVL200DK250*BC/*SC          | CYVL250DK250*BC/*SC          |                              |                              |                   |  |                   |  |
| Heating capacity                                    | Speed 3          | kW   |                     | 15.6                         | 23.3                         | 29.4                         | 31.1                         |                   |  |                   |  |
| Power input   | Fan only         | Nom.   | kW                  |                              | 0.75                         | 1.13                         | 1.50                         | 1.88              |  |                   |  |
|   | Heating          | Nom.   | kW                  |                              | 0.75                         | 1.13                         | 1.50                         | 1.88              |  |                   |  |
| Delta T   | Speed 3          | K  |                     | 15                           | 14                           | 12                           |                              |                   |  |                   |  |
| Casing  | Colour           | BN: RAL9010 / SN: RAL9006  |                     |                              |                              |                              |                              |                   |  |                   |  |
| Dimensions  | Unit             | 370/370/370  |                     |                              |                              |                              |                              |                   |  |                   |  |
|   | Height F/C/R     | mm   |                     | 1,000/1,000/1,048            |                              | 1,500/1,500/1,548            |                              | 2,000/2,000/2,048 |  | 2,500/2,500/2,548 |  |
|   | Width F/C/R      | mm   |                     | 774/1,105/745                |                              |                              |                              |                   |  |                   |  |
| Depth F/C/R   | mm               |  | 520                 |                              |                              |                              |                              |                   |  |                   |  |
| Required ceiling void >                             |                  | 520  |                     |                              |                              |                              |                              |                   |  |                   |  |
| Door height   | Max.             | m  |                     | 3.0 (1) / 2.75 (2) / 2.5 (3) | 3.0 (1) / 2.75 (2) / 2.5 (3) | 3.0 (1) / 2.75 (2) / 2.5 (3) | 3.0 (1) / 2.75 (2) / 2.5 (3) |                   |  |                   |  |
| Door width  | Max.             | m  |                     | 1.0                          | 1.5                          | 2.0                          | 2.5                          |                   |  |                   |  |
| Weight  | Unit             | kg   |                     | 76                           | 100                          | 126                          | 157                          |                   |  |                   |  |
| Fan-Air flow rate                                   | Heating          | Speed 3  | m³/h                |                              | 3,100                        | 4,650                        | 6,200                        | 7,750             |  |                   |  |
| Sound pressure level                                | Heating          | Speed 3  | dBA                 |                              | 53                           | 54                           | 56                           | 57                |  |                   |  |
| Refrigerant   | Type / GWP       | R-410A / 2,087.5   |                     |                              |                              |                              |                              |                   |  |                   |  |
| Piping connections                                  | Liquid/OD/Gas/OD | mm   |                     | 9.52/16.0                    |                              | 9.52/19.0                    |                              | 9.52/22.0         |  |                   |  |
| Required accessories (should be ordered separately) |                  | Daikin wired remote control (BRC1H51(9)W/S/K / BRC1E53A/B/C / BRC1D52) |                     |                              |                              |                              |                              |                   |  |                   |  |
| Power supply  | Voltage          | V  |                     |                              |                              |                              | 230                          |                   |  |                   |  |

(1) Favorable conditions: covered shopping mall or revolving door entrance (2) Normal conditions: little direct wind, no opposite open doors, building with ground floor only  
(3) Unfavorable conditions: location at a corner or square, multiple floors and/or open stairway