DAIKIN

# VRV III-S

VRV SYSTEMS R-410A

www.daikin.eu

HIGH TECH, ENERGY SAVING AIR CONDITIONERS, ENSURING COMFORT IN LIGHT COMMERCIAL APPLICATIONS

# ABOUT DAIKIN

Daikin has a worldwide reputation based on over 80 years' experience in the successful manufacture of high quality air conditioning equipment for industrial, commercial and residential use.

Daikin Europe N.V.

# ENVIRONMENTAL AWARENESS

## Air Conditioning 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 enormous efforts 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.

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VRV® III-S

→ Space saving

→ Small capacity

→ Slim design

→ Silent operation

→ Super wide range of indoor units

# FEATURES

## 1. WIDE APPLICATION RANGE

### › VRV®III-S OUTDOOR UNIT RANGE

| VRV®III-S Heat pump | Maximum number of connectableindoor units | Minimum capacity index | Maximum capacity index | Capacity steps |
|---|---|---|---|---|
| RXYSQ4PAV1/RXYSQ4PAY1 | 6 | 50 | 130 | 31 |
| RXYSQ5PAV1/RXYSQ5PAY1 | 8 | 62.5 | 162.5 | 31 |
| RXYSQ6PAV1/RXYSQ6PAY1 | 9 | 70 | 182 | 31 |

### › INDOOR UNIT CAPACITY INDEX

| Model | 20 | 25 | 32 | 40 | 50 | 63 | 71 | 80 | 100 | 125 | 200 | 250 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity Index | 20 | 25 | 31.5 | 40 | 51 | 62,5 | 71 | 80 | 100 | 125 | 200 | 250 |

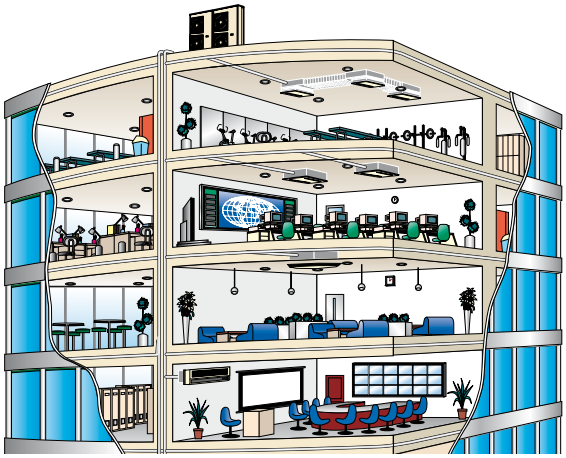
eg. Selected indoor units:
FXCQ25 + FXFQ50 + FXDQ25 + FXDQ50

Connection ratio: 25 + 50 + 25 + 50 = 150

Possible outdoor unit: RXYSQ5PAV1

## › FLEXIBLE PIPING DESIGN

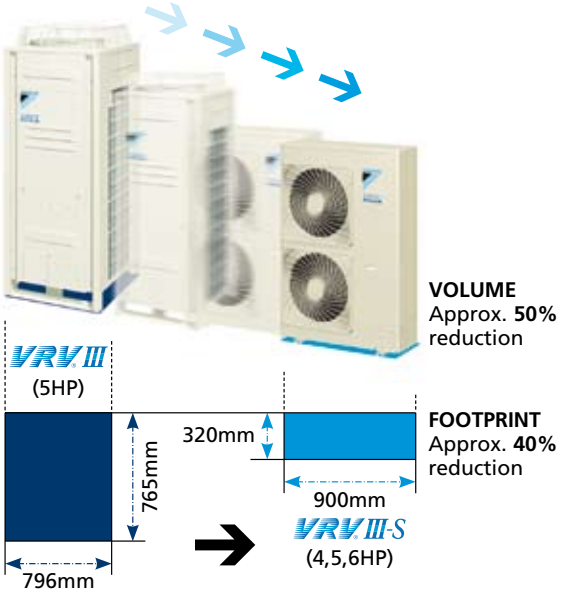
The VRV®III-S provides the long piping length possibility of 150m[1] (175m equivalent piping length), with a total piping length of 300m. If the outdoor unit is installed above the indoor units, the height difference can be up to a maximum of 50m[2].
These generous allowances facilitate an extensive variety of system designs.



Notes:
1. 40 m when the outdoor unit is installed below indoor units.
2. Maximum piping length between the indoor unit and the first branch is 40 m.

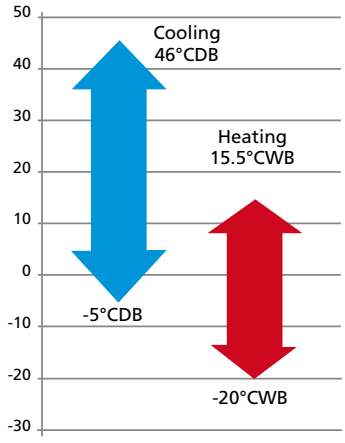
## › SPACE SAVING DESIGN

The VRVIII®-S is slimmer and more compact, resulting in significant savings in installation space.




## › WIDE OPERATION RANGE

The VRVIII®-S system can be installed practically anywhere. The incorporation of a high pressure "dome" type compressor results in a remarkable outdoor operating temperature range from as low as -20°C in heating mode to as high as 46°C in cooling mode.




Outdoor temperature operating range

## › SUPER WIDE RANGE OF INDOOR UNITS

Whatever the air conditioning requirement, a Daikin indoor unit can provide the solution. The VRV®III-S can be combined with 13 DIFFERENT INDOOR UNIT MODELS in a total of 73 VARIATIONS.

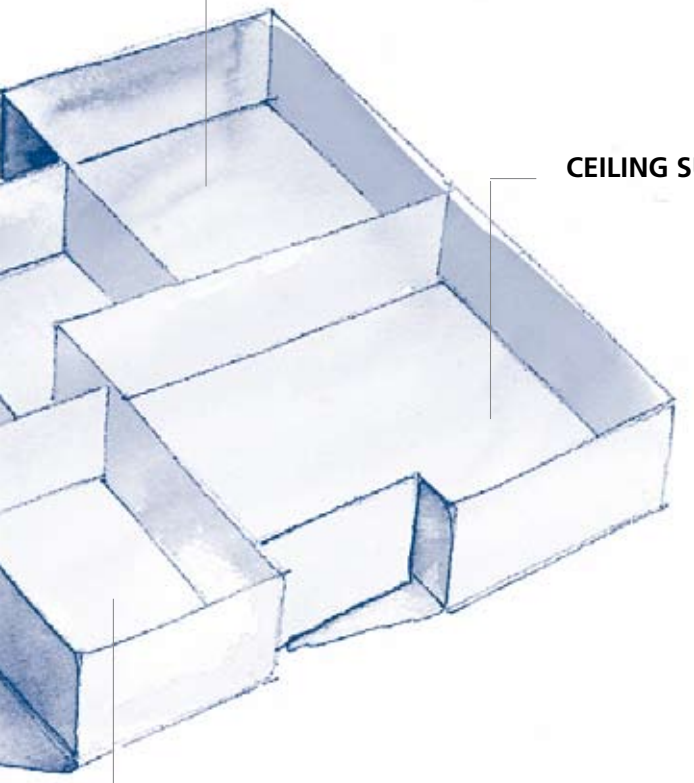
### CASSETTE TYPE UNIT

### CONCEALED CEILING UNIT

### FLOOR STANDING UNIT

| INDOOR UNITS | | 20 | 25 | 32 | 40 | 50 | 63 | 71 | 80 | 100 | 125 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Roundflow ceiling mounted cassette | FXFQ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | | ✗ | ✗ | ✗ |
| 600x600 4-way blow ceiling mounted cassette | FXZQ | ✗ | ✗ | ✗ | ✗ | ✗ | | | | | |
| 2-way blow ceiling mounted cassette | FXCQ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | | ✗ | | ✗ |
| Ceiling mounted corner cassette | FXKQ | | ✗ | ✗ | ✗ | | ✗ | | | | |
| Small concealed ceiling unit | FXDQ | ✗ | ✗ | | | | | | | | |
| Slim concealed ceiling unit | FXDQ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | | | | |
| Concealed ceiling unit | FXSQ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | | ✗ | ✗ | ✗ |
| NEW Concealed ceiling unit | FXMQ | | | | ✗ | ✗ | ✗ | | ✗ | ✗ | ✗ |
| Wall mounted unit | FXAQ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | | | | |
| Ceiling suspended unit | FXHQ | | | ✗ | | | ✗ | | | ✗ | |
| 4 way blow ceiling suspended unit | FXUQ | | | | | | | ✗ | | ✗ | ✗ |
| Floor standing unit | FXLQ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | | | | |
| Concealed floor standing | FXNQ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | | | | |

## CONCEALED FLOOR STANDING UNIT



## CEILING SUSPENDED UNIT

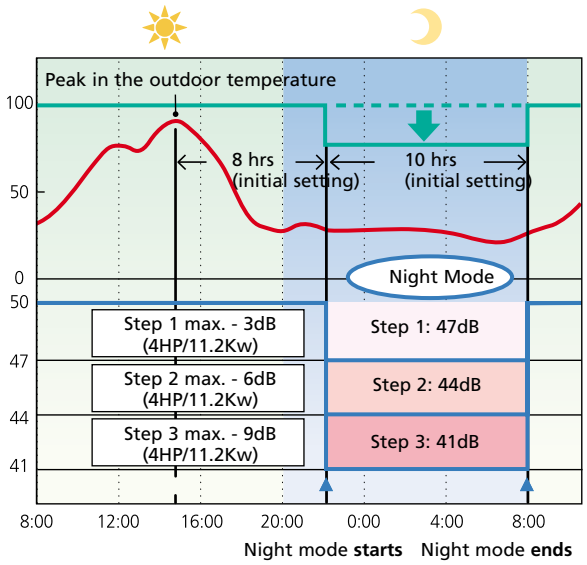
## WALL MOUNTED UNIT

| HRV | | 50 | 80 | 100 |
|---|---|---|---|---|
| Ventilation, DX coil & humidifier | VKM-GAM | X | X | X |
| Ventilation & DX coil | VKM-GA | X | X | X |

## › SUPER SILENT OPERATION

Quietness is another important feature. To reduce noise and ensure comfortable operation, the latest technologies and features have been applied to the outdoor units.

### Night quiet function (max. -9dBA)




Notes:
› This function is available for on site setting.
› The relationship between outdoor temperature (load) and time shown in the graph is merely an example.

During the night the sound level of the outdoor unit can be reduced for a certain period: starting time and ending time can be input

2 modes*1 with low sound level at night:

› **Mode 1 Automatic mode**
Set on the outdoor PCB. Time of maximum temperature is memorised. The low operating mode will become active 8 hours*2 after the peak temperature in the daytime and operation will return to normal after 9 hours*3.

› **Mode 2 Customized mode**
Starting and ending times can be input. (External control adapter for outdoor unit, DTA104A61 or DTA104A62 and a separately ordered timer are necessary.)

Notes:
*1. Determine which mode to select depending on the climatic characteristics of each country.
*2. Initial setting. Can be selected from 6, 8 and 10 hours.
*3. Initial setting. Can be selected from 8, 9 and 10 hours.

**Daikin indoor units operate at sound levels as low as 25 dBA**

| (dB(A | Perceived loudness | Sound |
|---|---|---|
| 0 | Treshold of hearing | - |
| 20 | Extremely soft | Rustling leaves |
| 40 | Very soft | Quiet room |
| 60 | Moderately loud | Normal conversation |
| 80 | Very loud | City traffic noise |
| 100 | Extremely loud | Symphonic orchestra |
| 120 | Threshold of feeling | Jet taking off |

Daikin indoor units

## › ANTI CORROSION TREATMENT

Special anti corrosion treatment of the heat exchanger provides5 to 6 times greater resistance ag nst acid rain and salt corrosion. The use of rust proof steel sheet on the underside of the unit gives additional protection.

### Improvement in corrosion resistance

Corrosion resistance rating

| | Non-treated | Anti-corrosion treated |
|---|---|---|
| Salt corrosion | 1 | 5 to 6 |
| Acid rain | 1 | 5 to 6 |

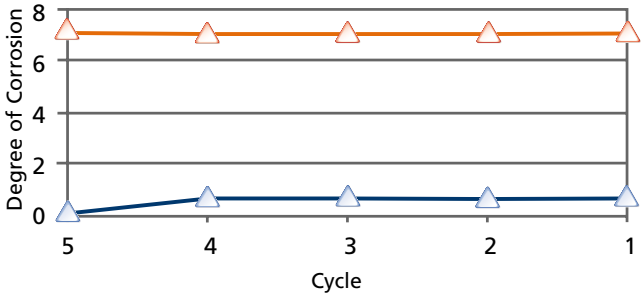
An anti-corrosion heat exchanger cutaway view


### Performed tests:

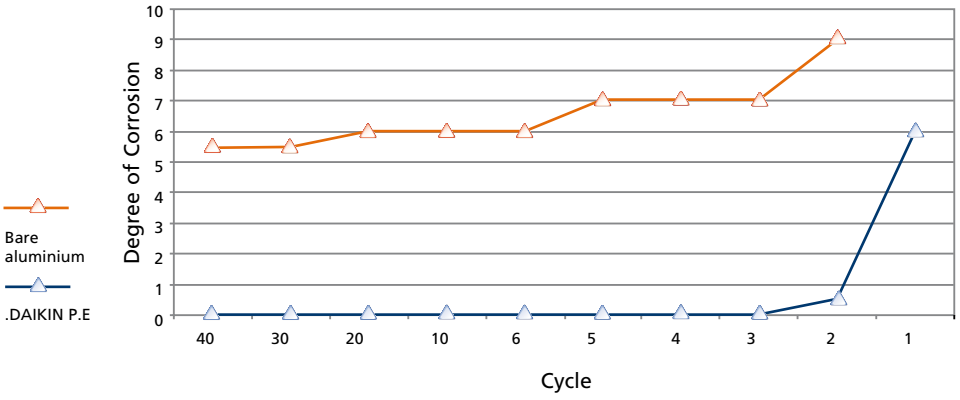
› **VDA Wechseltest**

Contents of single cycle (7 days):
- 24 hours salt spray test SS DIN 50021
- 96 hours humidity cycle test KFW DIN 50017
- 48 hours room temperature & room humidity

Testing period: 5 cycles




› **Kesternich test (SO2)**
- Contents of single cycle (48 hours) according to DIN50018 (0.21)
- Testing period: 40 cycles



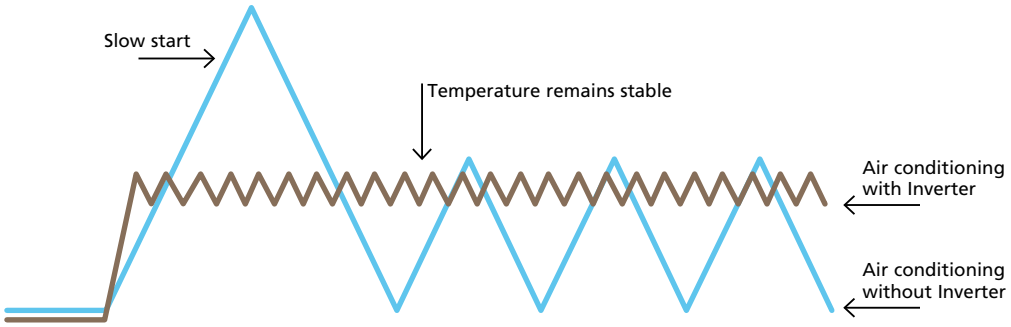

# 2. ENVIRONMENTAL AWARENESS

In all of us, a green heart

## › INVERTER CONTROL

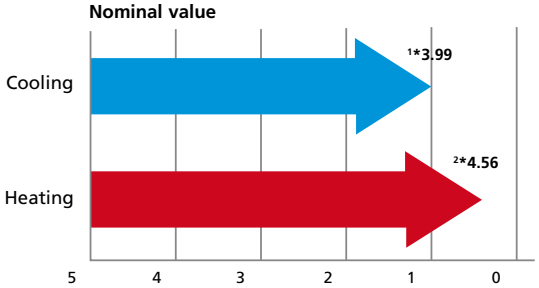
The application of inverter control saves energy for two basic reasons:

1. It enables compressor speed to vary according to the cooling/heating load and therefore consume only the power necessary to match that load. The 50 Hz frequency of the power supply is inverted to a higher or lower frequency according to the required capacity to heat or cool the room. If a lower capacity is needed, the frequency is decreased and less energy is used.
2. Under partial load conditions, the energy efficiency is higher. If the compressor rotates more slowly because less capacity is needed, the coil becomes virtually oversized. Improved efficiencies can therefore be achieved than are possible with non inverter compressors, which always run at the same speed.




## › HIGH COP VALUES

A major feature of VRV®III-S is its exceptional energy efficiency, the system achieving high COPs during both cooling and heating operation by the use of refined components and functions.




*[1] Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, inlet water temperature: 30°C, equivalent refrigerant piping: 7.5m, level difference: 0m.
**Unit: RXYSQ4PA7V1B**

*[2] Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 7.5m, level difference: 0m.
**Unit: RXYSQ4PA7V1B**

# 3. INSTALLATION & MAINTENANCE FRIENDLY DESIGN

## › AUTOMATIC CHARGE FUNCTION

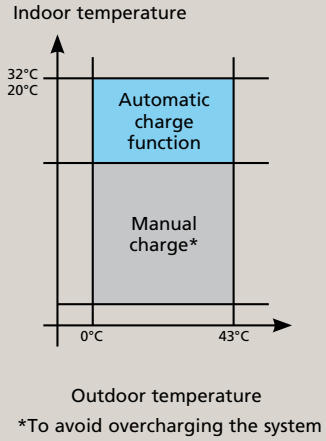
### › Conventional Way:

1. calculation of additional refrigerant charging volume
2. charging the unit with additional refrigerant
3. measuring the weight of the cylinder
4. judgment based on pressure (test operation)

### › VRV®III-S:

With VRV®III however, these 4 steps are omitted since VRVIII®-S can be charged with the necessary amount of refrigerant automatically via a push button on the PCB. Automatic charging will cease once the appropriate amount of refrigerant has been transferred.

If temperature drops below 20°C manual charging is necessary (to avoid overcharging the system). After having switched to heating and once the indoor temperature rises above 20°C, push the auto charge button to initialise auto charge function. Refrigerant containment is only available after performing the automatic charge function.

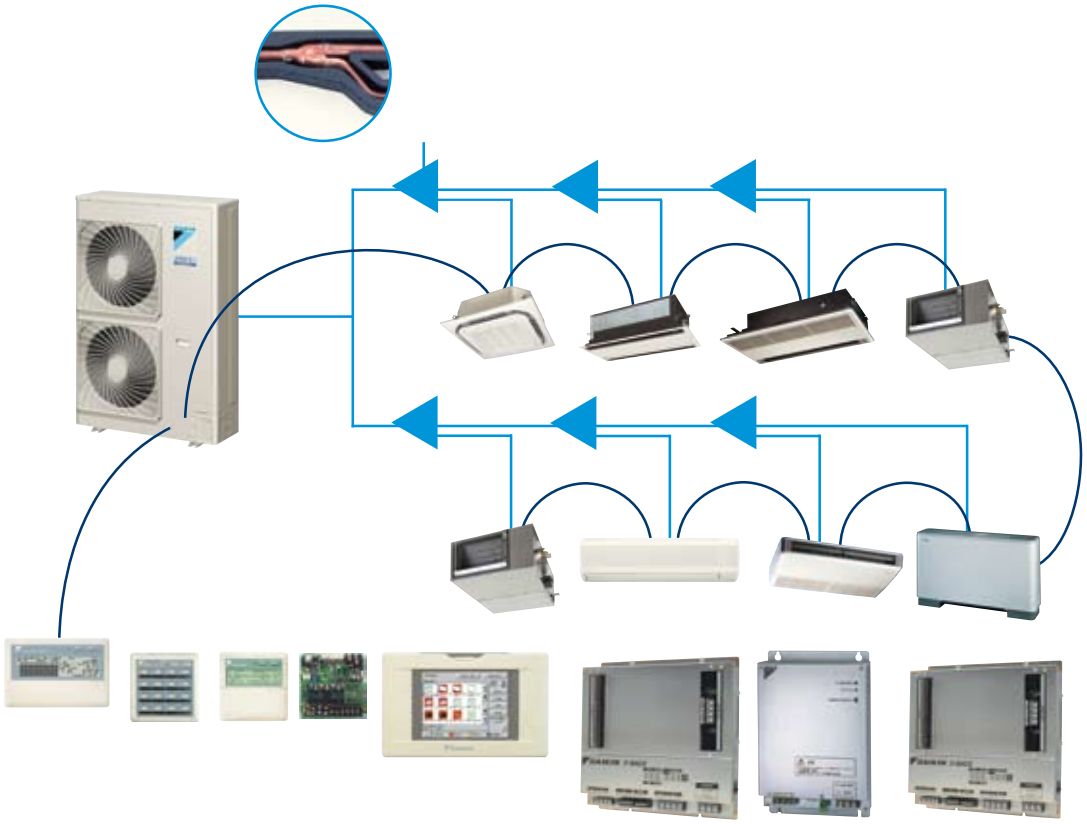



*To avoid overcharging the system

## › AUTOMATIC TEST

When refrigerant charging has ceased, pushing the test operation button on the PCB will initiate a check on the wiring, shut off valves, sensors and refrigerant volume. This test ceases automatically when completed.

## › SIMPLE WIRING AND PIPING CONNECTION



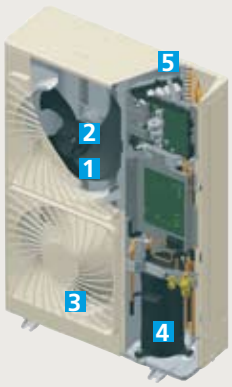
### – simple wiring

› Super Wiring allows the shared use of wiring between indoor units, outdoor units and the centralised remote controls.
› This system makes it easy for the user to retrofit the existing system with a centralised remote control, simply by connecting it to the outdoor units.
› The use of non polarity wiring, makes incorrect connection impossible and reduces installation time.

### – piping connection

› The unified Daikin REFNET piping system is specially designed for simple installation.
› REFNET joints and headers (both accessories) can cut down on installation work and increase system reliability.

# OUTDOOR UNITS



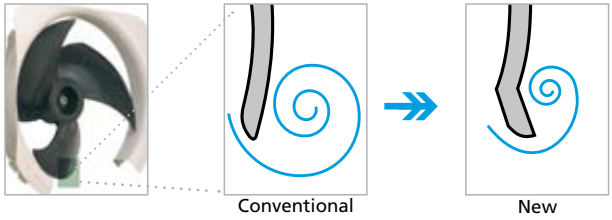

## 1. VRV®III-S TECHNOLOGY

**1 Smooth air inlet bell mouth and aero spiral fan**

These features assist in significantly reducing noise. Guides are added to the bell mouth intake to reduce turbulence in the air flow generated by fan suction.

The aero spiral fan features fan blades with bent blade edges, further reducing turbulence.

**Aero spiral fan blade tips**

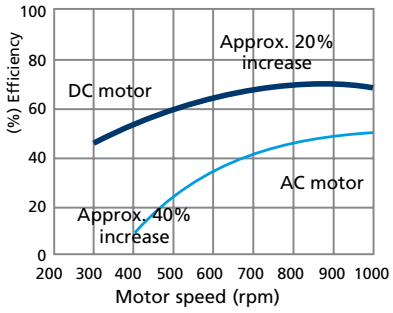



Escaping edges are sucked in by the bent blade edges, reducing overall turbulence.

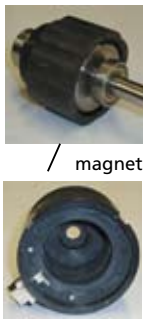
**2 DC fan motor**

The use of a DC fan motor offers substantial improvements in operating efficiency compared to conventional AC motors, especially during low speed rotation.

**DC motor efficiency**
**(comparison with a conventional AC motor)**




DC fan motor structure



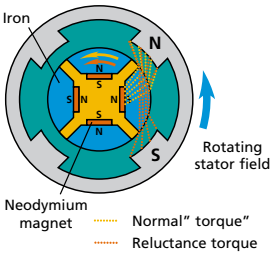

Note:
Data are based on studies conducted under controlled conditions at a Daikin laboratory

**3 Super aero grille**

The spiral shaped ribs are aligned with the direction of discharge flow in order to minimise turbulence and reduce noise.

**4 Reluctance brushless DC compressor**

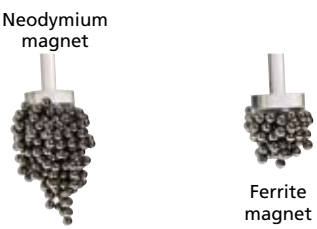
The reluctance brushless DC motor provides significant increases in efficiency compared to conventional AC inverter motors, simultaneously using two different forms of torque (normal and reluctance torque) to produce extra power from small electric currents.





› **Powerful magnets**

The motor comprises powerful neodymium magnets that create the reluctance torque. These magnets are approximately 12 times stronger than ferrite types and make a major contribution to its energy saving characteristics.



› **Smooth sine wave DC inverter**

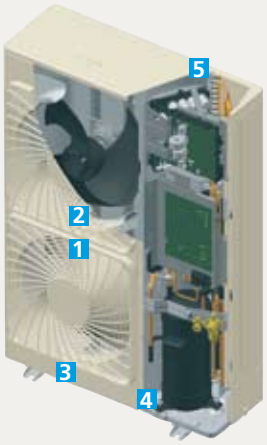
Optimizing the sine wave curve results in smoother motor rotation and improved motor efficiency.

› **Optimal refrigerant configuration**

Changes to the shape of the spiral and volume ratio result in optimal refrigerant layout.

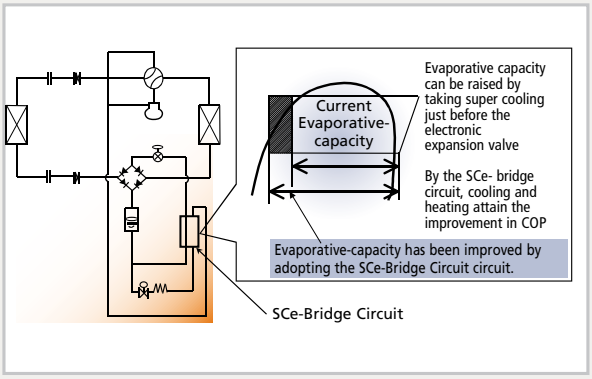
› **Stronger materials**

The strength of the casing has been increased by boosting the internal dome pressure.



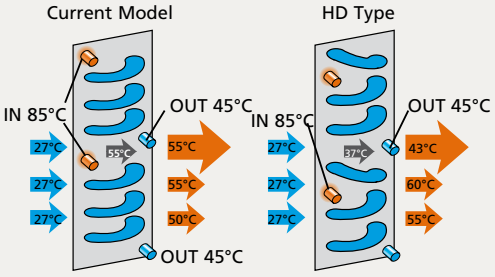

**5 e-Bridge circuit**

Prevents accumulation of liquid refrigerant in the condenser. This results in more efficient use of the condenser surface under all conditions and leads in turn to better energy efficiency. Increased evaporative capacity stems from the newly developed refrigeration circuit, the SCe-bridge circuit, which adds super cooling prior to the expansion cycle. By adopting this circuit, the COPs in both cooling and heating have been drastically improved.




**6 e-Pass heat exchanger**

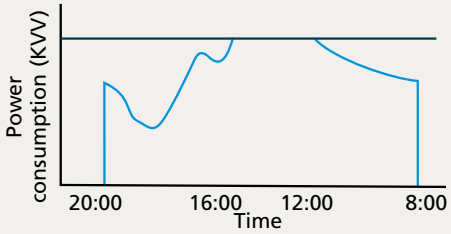
Optimization of the layout path of the heat exchanger prevents heat transferring from the overheated gas section towards the sub cooled liquid section, a more efficient use of the heat exchanger.




In cooling mode, the heat exchanger of the condensor is improved. This means an improvement of COP by 3%.

**7 i-Demand function**

The newly introduced current sensor minimizes the difference between actual power consumption and predefined power consumption.



# 2. SPECIFICATIONS

| | | | | RXYSQ4PA7V1B/RXYSQ4PA7Y1B | RXYSQ5PA7V1B/RXYSQ5PA7Y1B | RXYSQ6PA7V1B/RXYSQ6PA7Y1B |
|---|---|---|---|---|---|---|
| Nominal capacity | cooling | | kW | 11.2 | 14.0 | 15.5 |
| | heating | | kW | 12.5 | 16.0 | 18.0 |
| COP | cooling | | | 3.99/3.88 | 3.99/3.88 | 3.42/3.33 |
| | heating | | | 4.56/4.43 | 4.15/4.03 | 3.94/3.83 |
| Capacity range | | | HP | 4 | 5 | 6 |
| Max n° of indoor units to be connected | | | | 6 | 8 | 9 |
| Indoor index connection | minimum | | | 50 | 62.5 | 70 |
| | maximum | | | 130 | 162.5 | 182 |
| Casing | colour | | | daikin white | | |
| | material | | | painted galvanised steel | | |
| Power supply | | | V3 | 1~, 50Hz, 220-240V / 3~, 50Hz, 380-415V | | |
| Dimensions | unit | height | mm | 1,345 | 1,345 | 1,345 |
| | | width | mm | 900 | 900 | 900 |
| | | depth | mm | 320 | 320 | 320 |
| Weight | unit | | kg | 125/120 | 125/120 | 125/120 |
| Fan | type | | | Propeller | | |
| | air Flow Rate | cooling | m/min | 106 | 106 | 106 |
| | (nominal at 230V) | heating | m/min | 102 | 105 | 105 |
| Compressor | type | | | hermetically sealed scroll compressor | | |
| | starting method | | | direct on line | | |
| Operation range | cooling | minimum | °CDB | -5.0 | -5.0 | -5.0 |
| | | maximum | °CDB | 46 | 46 | 46 |
| | heating | minimum | °CWB | -20 | -20 | -20 |
| | | maximum | °CWB | 15.5 | 15.5 | 15.5 |
| Sound level (nominal) | cooling | sound power | dBA | 66 | 67 | 69 |
| | | sound pressure | dBA | 50 | 51 | 53 |
| | heating | sound pressure | dBA | 52 | 53 | 55 |
| Refrigerant | type | | | R-410A | | |
| | charge | | kg | 4.0 | 4.0 | 4.0 |
| | control | | | expansion valve (electronic type) | | |
| Refrigerant Oil | type | | | daphne FVC68D | | |
| | charged | Volume | l | 1.5 | 1.5 | 1.5 |
| Piping Connections | liquid | diameter (OD) | mm | 9.52 (Flare) | 9.52 (Flare) | 9.52 (Flare) |
| | gas | diameter (OD) | mm | 15.9 (Flare) | 15.9 (Flare) | 19.1 (Braze) |
| | heat Insulation | | | both liquid and gas pipes | | |
| | max. total length | | m | 300 | 300 | 300 |
| Safety devices | | | | HPS, fan motor thermal protection, inverter overload protector, PC board fuse | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, inlet water temperature: 30°C, equivalent refrigerant piping: 7.5m, level difference: 0m.
Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 7.5m, level difference: 0m.
Sound power level is an absolute value that a sound source generates.
Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings.
Sound values are measured in a semi-anechoic room.

# 3. ACCESSORIES

| | RXYSQ4PA7V1B/RXYSQ4PA7Y1B | RXYSQ5PA7V1B/RXYSQ5PA7Y1B | RXYSQ6PA7V1B/RXYSQ6PA7Y1B |
|---|---|---|---|
| Cool/heat selector | KRC19-26A6 | | |
| Fixing box | KJB111A | | |
| Refnet headerr | KHRQ22M29H | | |
| Refnet joint | KHRQ22M20T | | |
| Central drain plug | KKPJ5F180 | | |

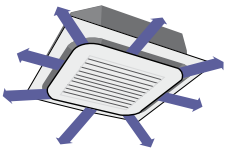
# INDOOR UNITS

## 1. FEATURES

### FXFQ-P

**20-25-32-40-50-63-80-100-125**

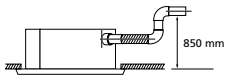
#### ROUND FLOW CEILING MOUNTED CASSETTE



**Comfort**

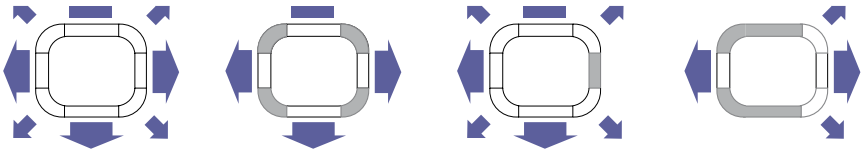
- Modern style decoration panel in white (RAL9010)
- 360° air discharge ensures uniform air flow and temperature distribution
- Air discharge from the corners avoids dead zones that may be subject to temperature differences
- Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- 23 different air flow patterns possible
- Fresh air intake: up to 20%

**Flexible installation and easy maintenance**




- Reduced installation height: 214mm for class 20-63
- Easy visible drain check thanks to clear drain socket
- Drain-up pump with 850 mm lift fitted as standard

#### EXAMPLES OF AIRFLOW PATTERNS



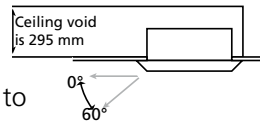
360° Round Flow | 4-Way Flow | 3-Way Flow | 2-Way Flow

### FXZQ-M8

**20-25-32-40-50**

#### 4-WAY BLOW CEILING MOUNTED CASSETTE (600MMX600MM)

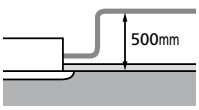
**Comfort**




- Modern style decoration panel in white (RAL9010)
- Extremely quiet in operation
- Excellent low draught characteristics. Since the flaps can move to a 0° position, virtually no draught can be experienced
- Any one of 5 different air flow patterns can be freely selected between 0° and 60° and will then be maintained during the operational cycle of the air conditioner

**Flexible Installation and Easy Maintenance**

- Thanks to the compact casing, it matches standard architectural modules of 600x600mm, therefore ceiling tile cutting is no longer necessary
- Air can be discharged in any of 4 directions
- Possibility to shut 1 or 2 flaps for easy installation in corners
- Since the switch box is located within the unit, it is easy to access from below for maintenance without removing ceiling tiles




- Drain-up pump with 500mm lift fitted as standard

# FXCQ-M8

**20-25-32-40-50-63-80-125**

## 2-WAY BLOW CEILING MOUNTED CASSETTE

### Comfort

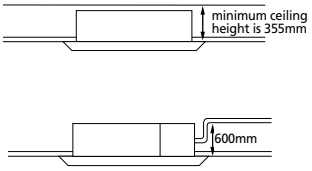
› Quiet in operation
› Leaves maximum floor and wall space for furniture, decorations and fittings
› Automatic air flow director ensures uniform air flow and temperature distribution
› Anti-ceiling soiling technology

### Filter

› Standard long life filter

### Flexible Installation and Easy Maintenance

› Easy installation in false ceilings of only 355mm
› Drain-up pump with 600mm lift fitted as standard
› Maintenance can be performed by simply removing the front panel
› Easy to clean flat suction grille
› Detachable swing flaps



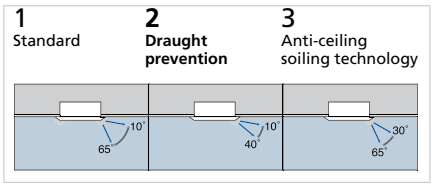

# FXKQ-MA

**20-32-40-63**

## CEILING MOUNTED CORNER CASSETTE

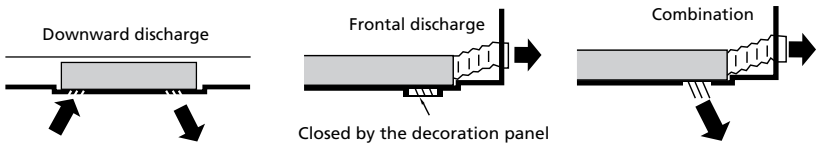
### Comfort

› Equipped with special draught prevention and anti-ceiling soiling technology



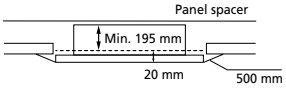

Note: Standard setting when shipped.

› Automatic air flow director ensures uniform air flow and temperature distribution
› Air flow by either downward air discharge, frontal discharge or a combination of both

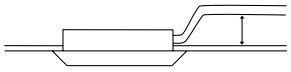



### Flexible Installation

› Compact dimensions, can easily be mounted in a narrow ceiling void (only 220mm ceiling space required, 195 with panel spacer, available as accessory)




› Drain-up pump with 500mm lift fitted as standard



# FXDQ-M8

## SMALL CONCEALED CEILING UNIT

**20-25**

**Comfort**

› Designed for hotel bedrooms
› Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
› Extremely quiet in operation

**Filter**

› Air suction filter fitted as standard

**Flexible Installation**

› Compact dimensions (230mm high & 652mm deep), can easily be mounted in a ceiling void
› The air suction direction can be altered from rear to bottom suction
› For easy mounting, the drain pan can be located to the left or the right of the unit

# FXDQ-P/NA

## SLIM CONCEALED CEILING UNIT

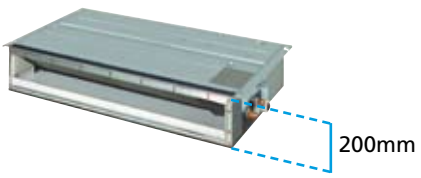
**20-25-32-40-50-63**

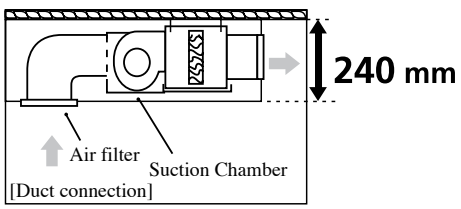
**Comfort**

› Quiet in operation
› Blends unobtrusively with any interior décor
› Leaves maximum floor and wall space for furniture, decorations and fittings

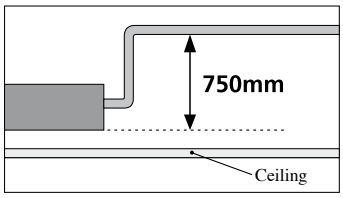
**Flexible Installation**

› Slim design, can easily be mounted in a ceiling void of only 240mm




› Can be installed in both new and existing buildings
› Medium external static pressure facilitates unit use with flexible ducts of varying lengths
› Drain-up pump with 750mm lift fitted as standard



# FXSQ-M8

## CONCEALED CEILING UNIT

**20-25-32-40-50-63-80-100-125**

**Comfort**

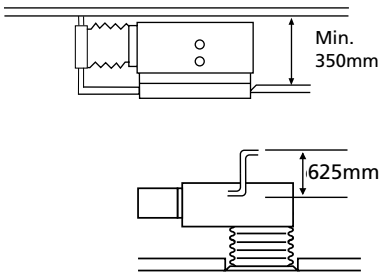
› High flexibility for a wide variety of applications
› Quiet in operation
› Blends unobtrusively with any interior décor

**Filter**

› Long life filter fitted as standard
› High efficiency filters (65% and 95%) available as accessory

**Flexible Installation and Easy Maintenance**

› High external static pressure facilitates unit use with flexible ducts of varying lengths
› When using suction panel, unit requires only 350mm of ceiling space
› Drain-up pump with 625mm lift fitted as standard
› The air suction direction can be altered from rear to bottom suction
› The switch box can be reached from the side or from the bottom side of the unit for easy servicing




# FXMQ-P

## CONCEALED CEILING UNIT

**40-50-63-80-100-125**

**Comfort**

› Leaves maximum floor and wall space for furniture, decorations and fittings

**Flexible Installation**

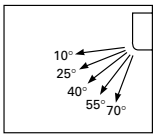
› Compact unit (a height of 300 mm), allows installation in narrow ceiling voids
› Complete range of models (FXMQ-PVE: 4.5 - 14 kW)
(FXMQ-MAVE: 22.40 - 28 kW)
› Built-in drain pump (standard for sizes 40 to 125) increases reliability of the drain system
› Reduction of power consumption of 20 %
(compared to FXMQ-MAVE series) through use of new DC Fan
› Possibility to change ESP through wired remote control allows optimisation of the supply air volume

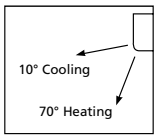
# FXAQ-MA

## WALL MOUNTED UNIT

**20-25-32-40-50-63**

### Comfort



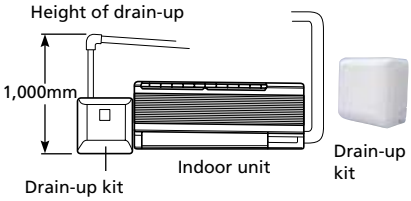

- Compact and stylish design blends unobtrusively in any interior décor
- Automatic air flow director ensures efficient air distribution via louvers that close automatically when the unit is switched off
- 5 different discharge angles can be programmed via the remote control
- Discharge angle automatically returns to its previous position on restart (initial setting 10 degrees for cooling and 70 degrees for heating)

### Filter

- Mildew proof polystyrene filter and drain pan

### Flexible Installation and Easy Maintance

- Both horizontal flaps and front panel can easily be removed and washed
- All maintenance operations can be carried out from the front of the unit
- Drain-up pump with 1,000mm lift available as accessory
- Drain pipe can be fitted either to the left or right side of the unit

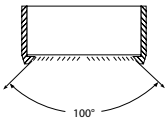



# FXHQ-MA

## SLIM CONCEALED CEILING UNIT

**32-63-100**

### Comfort



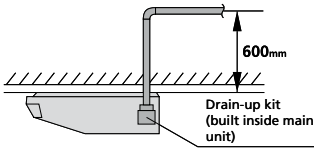

- Quiet in operation
- Leaves maximum floor and wall space for furniture, decorations and fittings
- Enhanced horizontal and vertical air circulation in all directions thanks to an air flow pattern of 100°

### Filter

- Long life filter fitted as standard

### Flexible Installation and Easy Maintance

- Can be installed in both new and existing buildings
- The ideal solution for installation without false ceilings
- Drain-up pump with 600mm lift available as accessory




- Maintenance can be performed easily from below the unit
- Bristle free flap makes cleaning easier

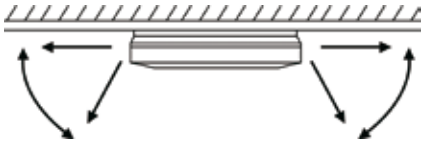
# FXUQ-MA

## 4-WAY BLOW CEILING SUSPENDED UNIT

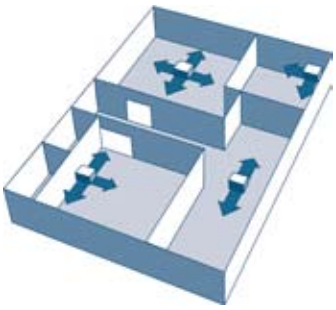
**71-100-125**

**Comfort**

› Group control with other VRV indoor units possible
› Cool heat selection
› Prevention of cold draught at hot start, defrost and oil return in heating
› Air can be discharged in any of 4 directions
› Air can be discharged at 5 different angles between 0 and 60 degrees



› Automatic air flow director ensures efficient air and temperature distribution.
› Air flow distribution for ceiling heights up to 3.5m without loss of capacity.



**Filter**

› Air filter, drain pan and heat exchanger fin are mildew proof and anti-bacterial treated

**Flexible Installation**

› Ideal for installation in new and existing buildings
› 5m maximum distance between FXUQ unit and junction box
› Possibility to shut 1 or 2 flaps for easy installation in corners
› Drain-up pump with 500mm lift fitted as standard

# FXLQ-MA

## FLOOR STANDING UNIT

**20-25-32-40-50-63**

**Comfort**

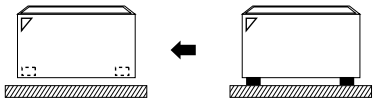
› Ideal for installation beneath a window
› Compact dimensions (only 222mm deep and 600mm high)
› All models are available with remote control

**Filter**

› Long life filter fitted as standard

**Flexible Installation and Easy Maintance**

› Running the pipes from connections at the back, enables the unit to be wall mounted




› On site connection during installation is easier
› The fibreless discharge grille prevents condensation and staining

# FXNQ-MA

## CONCEALED FLOOR STANDING UNIT

**20-25-32-40-50-63**

**Comfort**

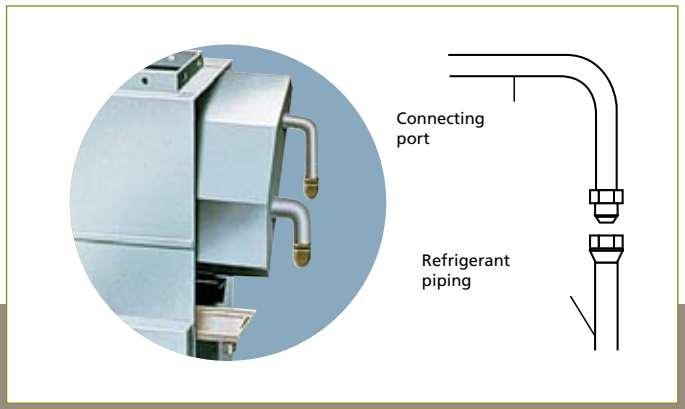
› Ideal for perimeter air conditioning
› Ideal for installation below a window
› All models are available with remote control

**Filter**

› Long life filter fitted as standard

**Flexible Installation and Easy Maintance**

› On site connection during installation is easier
› The connecting port faces downward, eliminating the need to attach auxiliary piping



# 2. SPECIFICATIONS & ACCESSORIES

## FXFQ-P

Roundflow ceiling mounted cassette

### SPECIFICATIONS

| FXFQ-P | | | | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity | cooling | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 | 9.0 | 11.2 | 14.0 |
| | heating | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 |
| Power input | cooling | | kW | 0.053 | | | 0.063 | 0.083 | 0.095 | 0.120 | 0.173 | 0.258 |
| | heating | | kW | 0.045 | | | 0.055 | 0.067 | 0.114 | 0.108 | 0.176 | 0.246 |
| Dimensions | (H x W x D) | | mm | 204 x 840 x 840 | | | | | | 246 x 840 x 840 | | 288 x 840 x 840 |
| Weight | unit | | kg | 20.0 | | | | 21.0 | | 24.0 | | 26.0 |
| Casing | | | | Galvanised steel | | | | | | | | |
| Air Flow Rate | cooling | high / low | $m^3$/min | 12.5 / 9.0 | | | 13.5 / 9.0 | 15.5 / 10.0 | 16.5 / 11.0 | 23.5 / 14.5 | 26.5 / 17.0 | 33.0 / 20.0 |
| | heating | high / low | $m^3$/min | 12.5 / 9.0 | | | 13.5 / 9.0 | 15.0 / 9.5 | 17.5 / 12.0 | 23.5 / 14.5 | 28.0 / 17.5 | 33.0 / 20.0 |
| Sound power (nominal) | cooling | | dB(A) | 49 | | | 50 | 51 | 52 | 55 | 58 | 61 |
| Sound pressure | cooling | high / low | dB(A) | 31 / 28 | | | 32 / 28 | 33 / 28 | 34 / 29 | 38 / 32 | 41 / 33 | 44 / 34 |
| | heating | high / low | dB(A) | 31 / 28 | | | 32 / 28 | 33 / 28 | 36 / 30 | 38 / 32 | 42 / 34 | 44 / 34 |
| Refrigerant | name | | | R-410A | | | | | | | | |
| Power Supply | | | | 1~ / 220-240V / 50Hz | | | | | | | | |
| Piping Connections | L / G / D | diameter | mm | 6.35 / 12.7 / 32 | 6.4 / 12.7 / 32 | | | | 9.5 / 15.9 / 32 | | | |
| Air Filter | | | | Resin net with mold resistance | | | | | | | | |
| Drain-up Height | | | mm | 750 | | | | | | | | |
| Decoration Panel | model | | | BYCQ140CW1 | | | | | | | | |
| | colour | | | RAL9010 | | | | | | | | |
| | (H x W x D) | | mm | 50x950x950 | | | | | | | | |
| | weight | | kg | 5.5 | | | | | | | | |

Notes:
The sound pressure values are mentioned for a unit installed with rear suction
The sound power level is an absolute value indicating the power wich a sound source generates.
Nominal cooling capacities are based on: indoor temperature: 270CDB, 190CWB, outdoor temperature: 350CDB, equivalent refrigerant piping: 5m, level difference: 0m.
Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m.
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

### ACCESSORIES

| FXFQ-P | | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 125 |
|---|---|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | | | | | | |
| Infrared remote control | cooling only | BRC7F533F | | | | | | | |
| | heat pump | BRC7F532F | | | | | | | |
| Decoration panel | | BYCQ140CW1 | | | | | | | |
| Replacement long life filter (non-woven type) | | KAFP551K160 | | | | | | | |
| Fresh air intake kit (20% fresh air intake) (chamber type) | | KDDQ5C140 | | | | | | | |
| Air discharge outlet sealing member | | KDBHQ55C140 | | | | | | | |

# FXZQ-M8

4-way blow ceiling mounted cassette (600mm x 600mm)

## SPECIFICATIONS

| FXZQ-M8 | | | 20 | 25 | 32 | 40 | 50 |
|---|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 |
| Heating capacity | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 |
| Nominal input | cooling | W | 73 | 73 | 76 | 89 | 115 |
| | heating | W | 64 | 64 | 68 | 80 | 107 |
| Dimensions (H x W x D) | | mm | 286 x 575 x 575 | | | | |
| Weight | | kg | 18 | | | | |
| Casing | | | galvanised steel plate | | | | |
| Air flow rate (H / L) | | $m^3$/min | 9.0 / 7.0 | 9.0 / 7.0 | 9.5 / 7.5 | 11.0 / 8.0 | 14.0 / 10.0 |
| Sound pressure level (H / L) (220V) | | dB(A) | 30 / 25 | 30 / 25 | 32 / 26 | 36 / 28 | 41 / 33 |
| Sound power level | | dB(A) | 47 | 47 | 49 | 53 | 58 |
| Refrigerant type | | | R-410A | | | | |
| Piping connections | liquid / gas | mm | ø6.4 / ø12.7 | | | | |
| Air filter | | | resin net with mold resistant | | | | |
| Drain-up height | | mm | 500 | | | | |
| Power supply | | V1 | 1~, 50Hz, 220-240V | | | | |
| Decoration panel | dimensions (H x W x D) | mm | 55 x 700 x 700 | | | | |
| | weight | kg | 2.7 | | | | |
| | Colour | | white (RAL 9010) | | | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent piping length: 7.5m (horizontal).
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent piping length: 7.5m (horizontal).
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

## ACCESSORIES

| FXZQ-M8 | | 20 | 25 | 32 | 40 | 50 |
|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | | | |
| Infrared remote control | cooling only | BRC7E531 | | | | |
| | heat pump | BRC7E530 | | | | |
| Decoration panel | | BYFQ60B | | | | |
| Sealing member of air discharge outlet | | KDBH44B60 | | | | |
| Panel spacer | | KDBQ44B60 | | | | |
| Replacement long life filter | | KAFQ441B60 | | | | |
| Fresh air intake kit | direct installation type | KDDQ44X60 | | | | |

# FXCQ-M8

2-way blow ceiling mounted cassette

## SPECIFICATIONS

| FXCQ-M8 | | | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 125 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 | 9.0 | 14.0 |
| Heating capacity | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 | 10.0 | 16.0 |
| Nominal input | cooling | W | 77 | 92 | 92 | 130 | 130 | 161 | 209 | 256 |
| | heating | W | 44 | 59 | 59 | 97 | 97 | 126 | 176 | 223 |
| Dimensions (H x W x D) | | mm | 305 x 780 x 600 | | | 305 x 995 x 600 | | 305 x 1,180 x 600 | 305 x 1,670 x 600 | |
| Weight | | kg | 26 | | | 31 | 32 | 35 | 47 | 48 |
| Casing | | | galvanised steel plate | | | | | | | |
| Air flow rate (H / L) | | $m^3$/min | 7 / 5 | 9 / 6.5 | 9 / 6.5 | 12 / 9 | 12 / 9 | 16.5 / 13 | 26 / 21 | 33 / 25 |
| Sound pressure level (H / L) | | dB(A) | 33 / 28 | 35 / 29 | 35 / 29 | 35.5 / 30.5 | 35.5 / 30.5 | 38 / 33 | 40 / 35 | 45 / 39 |
| Sound power level | | dB(A) | 45 | 50 | 50 | 50 | 50 | 52 | 54 | 60 |
| Refrigerant type | | | R-410A | | | | | | | |
| Piping connections | liquid / gas | mm | ø6.4 / ø12.7 | | | | | ø9.5 / ø15.9 | | |
| Air filter | | | resin net with mold resistant | | | | | | | |
| Drain-up height | | mm | 600 | | | | | | | |
| Power supply | | V3 | 1~, 50Hz, 230V | | | | | | | |
| Decoration panel | dimensions (H x W x D) | mm | 53 x 1,030 x 680 | | | 53 x 1,245 x 680 | | 53 x 1,430 x 680 | 53 x 1,920 x 680 | |
| | weight | kg | 8 | | | 8.5 | | 9.5 | 12 | |
| | colour | | ivory white | | | | | | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 8m • level difference: 0m.
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 8m • level difference: 0m.
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

## ACCESSORIES

| FXCQ-M8 | | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 125 |
|---|---|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | | | | | | |
| Infrared remote control | cooling only | BRC7C67 | | | | | | | |
| | heat pump | BRC7C62 | | | | | | | |
| Decoration panel | | BYBC32G | | | BYBC50G | | BYBC63G | BYBC125G | |
| High efficiency filter 65% *1 | | KAFJ532G36 | | | KAFJ532G56 | | KAFJ532G80 | KAFJ532G160 | |
| High efficiency filter 90% *1 | | KAFJ533G36 | | | KAFJ533G56 | | KAFJ533G80 | KAFJ533G160 | |
| Filter chamber for bottom suction | | KDDFJ53G36 | | | KDDFJ53G56 | | KDDFJ53G80 | KDDFJ53G160 | |
| Replacement long life filter | | KAFJ531G36 | | | KAFJ531G56 | | KAFJ531G80 | KAFJ531G160 | |

Note:
*1. Filter chamber is required when installing a high efficiency filter.

# FXKQ-MA

Ceiling mounted corner cassette

## SPECIFICATIONS

| FXKQ-MA | | | 25 | 32 | 40 | 63 |
|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 2.8 | 3.6 | 4.5 | 7.1 |
| Heating capacity | | kW | 3.2 | 4.0 | 5.0 | 8.0 |
| Nominal input | cooling | W | 66 | 66 | 76 | 105 |
| | heating | W | 46 | 46 | 56 | 85 |
| Dimensions (H x W x D) | | mm | 215 x 1,110 x 710 | | | 215 x 1,310 x 710 |
| Weight | | kg | 31 | | | 34 |
| Casing | | | galvanised steel plate | | | |
| Air flow rate (H / L) | | $m^3$/min | 11 / 9 | 11 / 9 | 13 / 10 | 18 / 15 |
| Sound pressure level (H / L) (220V) | | dB(A) | 38 / 33 | 38 / 33 | 40 / 34 | 42 / 37 |
| Sound power level | | dB(A) | * | * | * | * |
| Refrigerant type | | | R-410A | | | |
| Piping connections | liquid / gas | mm | ø6.4 / ø12.7 | | | ø9.5 / ø15.9 |
| Air filter | | | resin net with mold resistant | | | |
| Drain-up height | | mm | 500 | | | |
| Power supply | | VE | 1~, 50Hz, 220-240V | | | |
| Decoration panel | dimensions (H x W x D) | mm | 70 x 1,240 x 800 | | | 70 x 1,440 x 800 |
| | weight | kg | 8.5 | | | 9.5 |
| | colour | | ivory white | | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 7.5m (horizontal).
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 7.5m (horizontal).
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
*Data were not available at time of publication.

## ACCESSORIES

| FXKQ-MA | | 25 | 32 | 40 | 63 |
|---|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | | |
| Infrared remote control | cooling only | BRC4C63 | | | |
| | heat pump | BRC4C61 | | | |
| Decoration panel | | BYK45F | | | BYK71F |
| Panel spacer | | KPBJ52F56 | | | KPBJ52F80 |
| Replacement long life filter | | KAFJ521F56 | | | KAFJ521F80 |
| Air discharge grille | | K-HV7AW | | | K-HV9AW |
| Air discharge blind panel | | KDBJ52F56W | | | KDBJ52F80W |
| Flexible duct (with shutter) | | KFDJ52F56 | | | KFDJ52F80 |

# FXDQ-M8

Small concealed ceiling unit

## SPECIFICATIONS

| FXDQ-M8 | | | 20 | 25 |
|---|---|---|---|---|
| Cooling capacity | | kW | 2.2 | 2.8 |
| Heating capacity | | kW | 2.5 | 3.2 |
| Nominal input | cooling | W | 50 | |
| | heating | W | 50 | |
| (Dimensions (HxWxD | | mm | 230x502x652 | |
| Weight | | kg | 17 | |
| Casing | | | galvanised steel plate | |
| (Air flow rate (H/L | | m³/min | 6.7/5.2 | 7.4/5.8 |
| (Sound pressure level (H/L | | (dB(A | 37/32 | |
| Sound power level | | (dB(A | 50 | |
| Refrigerant type | | | R-410A | |
| Piping connections | liquid/gas | mm | ø6.4/ø12.7 | |
| Air filter | | | resin net with mold resistant | |
| Power supply | | V3 | 50Hz, 230V ,~1 | |

Notes :
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 8m • level difference : 0m
Nominal heating capacities are based on: indoor air temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 8m • level difference : 0m
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

## ACCESSORIES

| FXDQ-M8 | | 20 | 25 |
|---|---|---|---|
| Wired remote control | | BRC1D52, BRC2C51, BRC3A61 | |
| Infrared remote control | cooling | BRC4C64 | |
| | heating | BRC4C62 | |

# FXDQ-P / NA

Slim concealed ceiling unit

## SPECIFICATIONS

| FXDQ-P / NA | | | FXDQ20P | FXDQ25P | FXDQ32P | FXDQ40NA | FXDQ50NA | FXDQ63NA |
|---|---|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Heating capacity | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 |
| Nominal input | cooling | W | 86 | 86 | 89 | 160 | 165 | 181 |
| | heating | W | 67 | 67 | 70 | 70 | 152 | 168 |
| Dimensions (H x W x D) | | mm | | 200 x 700 x 620 | | 200 x 900 x 620 | | 200 x 1,100 x 620 |
| Weight | | kg | 23 | 23 | 23 | 27 | 28 | 31 |
| Casing | | | galvanised steel plate | | | | | |
| Air flow rate (H / L) | | $m^3$/min | 8.0 / 6.4 | 8.0 / 6.4 | 8.0 / 6.4 | 10.5 / 8.5 | 12.5 / 10.0 | 16.5 / 13.0 |
| Sound pressure level (H / L) | | dB(A) | 33 / 29 | 33 / 29 | 33 / 29 | 34 / 30 | 35 / 31 | 36 / 32 |
| Sound power level | | dB(A) | * | * | * | * | * | * |
| Refrigerant type | | | R-410A | | | | | |
| Drain-up height | | mm | 750 | | | | | |
| Piping connections | liquid / gas | mm | ø6.4 / ø12.7 | | | | | ø9.5 / ø15.9 |
| Air filter | | | removable, washable, mildew proof | | | | | |
| Power supply | | VE | 1~, 50Hz, 220-240V | | | | | |

Notes:
Nominal cooling capacities are based on: • Indoor temperature: 27°CDB, 19°CWB • Outdoor temperature: 35°CDB • Equivalent piping length: 7.5m (horizontal).
Nominal heating capacities are based on: • Indoor temperature: 20°CDB • Outdoor temperature: 7°CDB, 6°CWB • Equivalent piping length: 7.5m (horizontal).
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
The sound pressure values are mentioned for a unit installed with rear suction.
* Data were not available at time of publication.

## ACCESSORIES

| FXDQ-P / NA | | FXDQ20P | FXDQ25P | FXDQ32P | FXDQ40NA | FXDQ50NA | FXDQ63NA |
|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | | | | |
| Infrared remote control | cooling only | BRC4C64 | | | | | |
| | heat pump | BRC4C62 | | | | | |

# FXSQ-M8

Concealed ceiling unit

## SPECIFICATIONS

| FXSQ-M8 | | | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 | 9.0 | 11.2 | 14.0 |
| Heating capacity | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 |
| Nominal input | cooling | W | 110 | 110 | 114 | 127 | 143 | 189 | 234 | 242 | 321 |
| | heating | W | 90 | 90 | 94 | 107 | 123 | 169 | 214 | 222 | 301 |
| Dimensions (H x W x D) | | mm | 300 x 550 x 800 | 300 x 700 x 800 | 300 x 1,000 x 800 | 300 x 1,400 x 800 | | | | | |
| Weight | | kg | 30 | 30 | 30 | 30 | 31 | 41 | 51 | 51 | 52 |
| Casing | | | galvanised steel plate | | | | | | | | |
| Air flow rate (H / L) | | $m^3$/min | 9 / 6.5 | 9 / 6.5 | 9.5 / 7 | 11.5 / 9 | 15 / 11 | 21 / 15.5 | 27 / 20 | 28 / 20.5 | 38 / 28 |
| Sound pressure level (H / L) | | dB(A) | 32 / 28 | 32 / 28 | 33 / 28 | 33 / 29 | 35 / 31 | 35 / 30 | 37 / 31 | 38 / 33 | 40 / 35 |
| Sound power level | | dB(A) | 50 | 50 | 51 | 56 | 58 | 56 | 55 | 56 | 65 |
| Refrigerant type | | | R-410A | | | | | | | | |
| Piping connections | liquid / gas | mm | ø6.4 / ø12.7 | | | | | ø9.5 / ø15.9 | | | |
| Air filter | | | resin net with mold resistant | | | | | | | | |
| Drain-up height | | mm | 625 | | | | | | | | |
| Power supply | | V3 | 1~, 50Hz, 230V | | | | | | | | |
| Decoration panel | dimensions (H x W x D) | | 55 x 650 x 500 | | | 55 x 800 x 500 | | 55 x 1,100 x 500 | 55 x 1,500 x 500 | | |
| | weight | kg | 3 | | | 3.5 | | 4.5 | 6.5 | | |
| | colour | | ivory white | | | | | | | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 8m • level difference: Om.
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 8m • level difference: Om.
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
The sound pressure values are mentioned for a unit installed with rear suction.

## ACCESSORIES

| FXSQ-M8 | | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
|---|---|---|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52, BRC2C51, BRC3A61 | | | | | | | | |
| Infrared remote control | cooling only | BRC4C64 | | | | | | | | |
| | heat pump | BRC4C62 | | | | | | | | |
| Decoration panel | | BYBS32D | | | BYBS45D | | BYB571D | BYBS125D | | |
| Service access panel | | KTBJ25K36W | | | KTBJ25K56W | | KTBJ25K80W | KTBJ25K160W | | |
| High efficiency filter 65% *1 | | KAFJ252L36 | | | KAFJ252L56 | | KAFJ252L80 | KAFJ252L160 | | |
| High efficiency filter 90% *1 | | KAFJ253L36 | | | KAFJ253L56 | | KAFJ253L80 | KAFJ253L160 | | |
| Filter chamber for bottom suction | | KAJ25L36D | | | KAJ25L56D | | KAJ25L80D | KAJ25L160D | | |
| Filter chamber rear suction | | KAJ25L36B | | | KAJ25L56B | | KAJ25L80B | KAJ25L160B | | |
| Air suction canvas | | KSA-25K36 | | | KSA-25K56 | | KSA-25K80 | KSA-25K160 | | |
| Screening door / blind board | | KBBJ25K36 | | | KBBJ25K56 | | KBBJ25K80 | KBBJ25K160 | | |
| Air discharge adapter for round duct | | KDAJ25K36 | | | KDAJ25K56 | | KDAJ25K71 | KDAJ25K140 | | |

Notes:
*1. If installing a high efficiency filter in the unit, an assembly chamber for either bottom or rear suction is required.

# FXMQ-P

Concealed ceiling unit

## SPECIFICATIONS

| FXMQ-P | | | 40 | 50 | 63 | 80 | 100 | 125 |
|---|---|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 4.5 | 5.6 | 7.1 | 9.0 | 11.2 | 14.0 |
| Heating capacity | | kW | 5.0 | 6.3 | 8.0 | 10.0 | 12.5 | 16.0 |
| Nominal input | cooling | W | 0.194(1) / 0.193(2) | 0.215(1) / 0.214(2) | 0.230(1) / 0.229(2) | 0.298(1) / 0.297(2) | 0.376(1) / 0.375(2) | 0.461(1) / 0.460(2) |
| | heating | W | 0.182 | 0.203 | 0.218 | 0.286 | 0.364 | 0.449 |
| Dimensions (H x W x D) | | mm | 300 x 700 x 700 | 300 x 1,000 x 700 | | | 300 x 1,400 x 700 | |
| Weight | | kg | 28 | 36 | 36 | 36 | 46 | 46 |
| Casing | | | galvanised steel plate | | | | | |
| Air flow rate (HH / H / L) | | $m^3$/min | 16/13/11 | 18/16.5/15 | 19.5/17.5/16 | 25/22.5/20 | 32/27/23 | 39/33/28 |
| Sound pressure level | | dB(A) | note 3 | note 3 | note 3 | note 3 | note 3 | note 3 |
| Sound power level | | dB(A) | note 3 | note 3 | note 3 | note 3 | note 3 | note 3 |
| Refrigerant type | | | R-410A | | | | | |
| Piping connections | liquid / gas | mm | ø6.4 / ø12.7 | ø9.5 / ø15.9 | | | | |
| Air filter | | | note 4 | | | | | |
| Power supply | | VE | 1~, 50Hz, 220-240V / 1~, 60Hz, 220V | | | | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 5m (horizontal).
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 5m (horizontal).
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
(1) 50Hz, 220-240V
(2) 60Hz, 220V
(3) Data were not available at time of publication.
(4) The air filter is not standard accessory, but please mount it in the duct system at the suction side. Select its colorimetric method (gravity method) 50% or more.

## ACCESSORIES

| FXMQ-P | | 40 | 50 | 63 | 80 | 100 | 125 |
|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | | | | |
| Infrared remote control | cooling only | BRC4C66 | | | | | |
| | heat pump | BRC4C65 | | | | | |
| High efficiency filter 65% | | KAF372AA56 | KAF372AA80 | | | KAF372AA160 | |
| High efficiency filter 90% | | KAF373AA56 | KAF373AA80 | | | KAF373AA160 | |
| Filter chamber | | KDDF37AA56 | KDDF37AA80 | | | KDDF37AA160 | |
| Longlife replacement filter | | KAF371AA56 | KAF371AA80 | | | KAF371AA160 | |

# FXAQ-MA

Wall mounted unit

## SPECIFICATIONS

| FXAQ-MA | | | 20 | 25 | 32 | 40 | 50 | 63 |
|---|---|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| capacity | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 |
| Nominal input | cooling | W | 16 | 22 | 27 | 20 | 27 | 50 |
| | heating | W | 24 | 27 | 32 | 20 | 32 | 60 |
| Dimensions (HxWxD) | | mm | 290 x 795 x 230 | | | 290 x 1,050 x 230 | | |
| Weight | | kg | 11 | | | 14 | | |
| Colour | | | white | | | | | |
| Air flow rate (H / L) | | $m^3$/min | 7.5 / 4.5 | 8 / 5 | 9 / 5.5 | 12 / 9 | 15 / 12 | 19 / 14 |
| Sound pressure level (H / L) (220V) | | dB(A) | 35 / 29 | 36 / 29 | 37 / 29 | 39 / 34 | 42 / 36 | 46 / 39 |
| Sound power level | | dB(A) | * | * | * | * | * | * |
| Refrigerant type | | | R-410A | | | | | |
| Piping connections | liquid / gas | mm | ø6.4 / ø12.7 | | | | | ø9.5 / ø15.9 |
| Air filter | | | resin net washable | | | | | |
| Power supply | | VE | 1 ~, 50Hz, 220-240V | | | | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 5m (horizontal).
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 5m (horizontal).
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
*Data were not available at time of publication.

## ACCESSORIES

| FXAQ-MA | | 20 | 25 | 32 | 40 | 50 | 63 |
|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | | | | |
| Infrared remote control | cooling only | BRC7E619 | | | | | |
| | heat pump | BRC7E618 | | | | | |
| Drain pump kit | | K-KDU572DVE | | | | | |

# FXHQ-MA

Ceiling suspended unit

## SPECIFICATIONS

| FXHQ-MA | | | 32 | 63 | 100 |
|---|---|---|---|---|---|
| Cooling capacity | | kW | 3.6 | 7.1 | 11.2 |
| Heating capacity | | kW | 4.0 | 8.0 | 12.5 |
| Nominal input | cooling | W | 111 | 115 | 135 |
| | heating | W | 111 | 115 | 135 |
| Dimensions (HxWxD) | | mm | 195 x 960 x 680 | 195 x 1,160 x 680 | 195 x 1,400 x 680 |
| Weight | | kg | 24 | 28 | 33 |
| Colour | | | ivory white | | |
| Air flow rate (H / L) | | $m^3$/min | 12 / 10 | 17.5 / 14 | 25 / 19.5 |
| Sound pressure level (H / L) (220V) | | dB(A) | 36 / 31 | 39 / 34 | 45 / 37 |
| Sound power level | | dB(A) | * | * | * |
| Refrigerant type | | | R-410A | | |
| Piping connections | liquid / gas | mm | ø6.4 / ø12.7 | | ø9.5 / ø15.9 |
| Air filter | | | resin net with mold resistant | | |
| Power supply | | VE | 1 ~, 50Hz, 220-240V | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 7.5m (horizontal).
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 7.5m (horizontal).
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
*Data were not available at time of publication.

## ACCESSORIES

| FXHQ-MA | | 32 | 63 | 100 |
|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | |
| Infrared remote control | cooling only | BRC7E66 | | |
| | heat pump | BRC7E63 | | |
| Drain pump kit | | KDU50M60 | KDU50M125 | KDU50M125 |
| Replacement long life filter | resin net | KAFJ501DA56 | KAFJ501DA80 | KAFJ501DA112 |
| L-type piping kit | for upward direction | KHFP5M35 | KHFP5M63 | KHFP5M63 |

# FXUQ-MA

4-way blow ceiling suspended unit

## SPECIFICATIONS

| FXUQ-MA | | | 71 | 100 | 125 |
|---|---|---|---|---|---|
| Cooling capacity | | kW | 8.0 | 11.2 | 14.0 |
| Heating capacity | | kW | 9.0 | 12.5 | 14.0 |
| Nominal input | cooling | W | 180 | 289 | 289 |
| | heating | W | 160 | 269 | 269 |
| Dimensions (HxWxD) | | mm | 165 x 895 x 895 | 230 x 895 x 895 | 230 x 895 x 895 |
| Weight | | kg | 25 | 31 | 31 |
| Colour | | | white | | |
| Air flow rate (H / L) | | | 19 / 14 | 29 / 21 | 32 / 23 |
| Sound pressure level (H / L) (220V) | dB(A) | | 40 / 35 | 43 / 38 | 44 / 39 |
| Sound power level (H) | | dB(A) | 56 | 59 | 60 |
| Refrigerant type | | | | R-410A | |
| Piping connections | liquid / gas | mm | ø9.5 / ø15.9 | ø9.5 / ø15.9 | ø9.5 / ø15.9 |
| Air filter | | | resin net with mold resistant | | |
| Power supply | | V1 | 1~, 50Hz, 230V | | |
| Combination with junction box | | | BEVQ71MA | BEVQ100MA | BEVQ125MA |

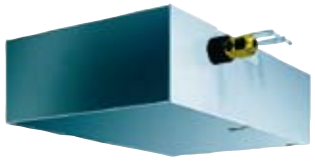
Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB, 24° CWB.
Nominal heating capacities are based on: indoor temperature: 20°CDB, 15° CWB • outdoor temperature: 7°CDB, 6°CWB.
Capacities are net including a deduction for cooling (an addition for heating) for indoor fan motor heat.

## ACCESSORIES

| FXUQ-MA | | 71 | 100 | 125 |
|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | |
| Infrared remote control | cooling only | BRC7C529 | | |
| | heat pump | BRC7C528 | | |
| Sealing member of air discharge outlet | | KDBHJ49F80 | | KDBHJ49F140 |
| Air discharge decoration panel | | KDBTJ49F80 | | KDBTJ49F140 |
| Vertical flap kit | | KDGJ49F80 | | KDGJ49F140 |
| Replacement long life filter | | KAFJ495F140 | | |
| L-type connection piping kit | | KHFP49M63 | | KHFP49M140 |

## JUNCTION BOX FOR CONNECTION TO VRV

| BEVQ-MA | | | 71 | 100 | 125 |
|---|---|---|---|---|---|
| Dimensions | H x W x D | mm | 100x350x225 | | |
| Weight | | kg | x | 3.0 | 3.5 |
| Casing | | | galvanised steel plate | | |
| Power supply | | VE | 1~, 50Hz, 220-240V | | |



BEVQ-MA

# FXLQ-MA

Floor standing unit

## SPECIFICATIONS

| FXLQ-MA | | | 20 | 25 | 32 | 40 | 50 | 63 |
|---|---|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Heating capacity | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 |
| Nominal input | cooling | W | 49 | 49 | 90 | 90 | 110 | 110 |
| | heating | W | 49 | 49 | 90 | 90 | 110 | 110 |
| Dimensions (H x W x D) | | mm | 600 x 1,000 x 222 | | 600 x 1,140 x 222 | | 600 x 1,420 x 222 | |
| Weight | | kg | 25 | | 30 | | 36 | |
| Colour | | | ivory white | | | | | |
| Air flow rate (H/L) | | $m^3$/min | 7/6 | 7/6 | 8/6 | 11/8.5 | 14/11 | 16/12 |
| Sound pressure level (H/L) (220V) | | dB(A) | 35/32 | 35/32 | 35/32 | 38/33 | 39/34 | 40/35 |
| Sound power level | | dB(A) | * | * | * | * | * | * |
| Refrigerant type | | | R-410A | | | | | |
| Piping connections | liquid/gas | mm | ø6.4/ø12.7 | | | | | ø9.5/ø15.9 |
| Air filter | | | resin net with mold resistant | | | | | |
| Power supply | | VE | 1~, 50Hz, 220-240V | | | | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 7.5m (horizontal).
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 7.5m (horizontal).
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
*Data were not available at time of publication.

## ACCESSORIES

| FXLQ-MA | | 20 | 25 | 32 | 40 | 50 | 63 |
|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52, BRC2C51, BRC3A61 | | | | | |
| Infrared remote control | cooling only | BRC4C64 | | | | | |
| | heat pump | BRC4C62 | | | | | |
| Long life replacement filter | | KAFJ361K28 | | KAFJ361K45 | | KAFJ361K71 | |

# FXNQ-MA

Concealed floor standing unit

## SPECIFICATIONS

| FXNQ-MA | | | 20 | 25 | 32 | 40 | 50 | 63 |
|---|---|---|---|---|---|---|---|---|
| Cooling capacity | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Heating capacity | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 |
| Nominal input | cooling | W | 49 | 49 | 90 | 90 | 110 | 110 |
| | heating | W | 49 | 49 | 90 | 90 | 110 | 110 |
| Dimensions (HxWxD) | | mm | 600 x 1,00 x 222 | | 600 x 1,140 x 222 | | 600 x 1,420 x 222 | |
| Weight | | kg | 25 | | 30 | | 36 | |
| Casing | | | ivory white | | | | | |
| Air flow rate (H/L) | | $m^3$/min | 7/6 | 7/6 | 8/6 | 11/8.5 | 14/11 | 16/12 |
| Sound pressure level (H/L)(220V) | | dB(A) | 35/32 | 35/32 | 35/32 | 38/33 | 39/34 | 40/35 |
| Sound power level | | dB(A) | * | * | * | * | * | * |
| Refrigerant type | | | R-410A | | | | | |
| Piping connections | liquid/gas | mm | ø6.4/ø12.7 | | | | | ø9.5/ø15.9 |
| Air filter | | | resin net with mold resistant | | | | | |
| Power supply | | VE | 1~, 50Hz, 220-240V | | | | | |

Notes:
Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 8m • level difference: Om.
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 8m • level difference: Om.
Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
The sound pressure values are mentioned for a unit installed with rear suction.

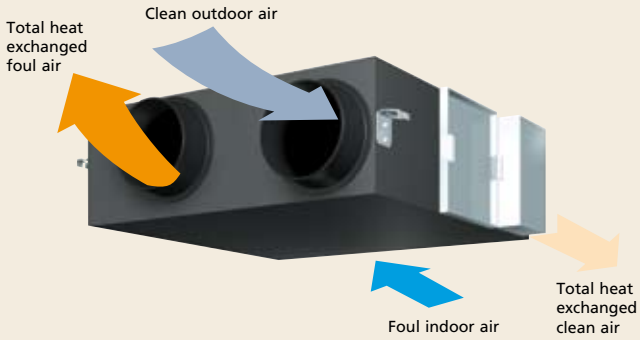
## ACCESSORIES

| FXNQ-MA | | 20 | 25 | 32 | 40 | 50 | 63 |
|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52, BRC2C51, BRC3A61 | | | | | |
| Infrared remote control | cooling only | BRC4C64 | | | | | |
| | heat pump | BRC4C62 | | | | | |
| Replacement long life filter | | KAFJ361K28 | | KAFJ361K45 | | KAFJ361K71 | |

# VENTILATION

## 1. VAM-FA8

The Daikin heat recovery ventilation system modulates the temperature and humidity of incoming fresh air to match indoor conditions. A balance is thus achieved between indoor and outdoor ambients, enabling the cooling or heating load placed on the air conditioning system to be reduced significantlyHRV units can be controlled individually or integral with the air conditioning system Daikin VRV® or Sky Air series)




- 9 models to choose from
- Compact, energy saving ventilation
- Specially developed heat exchange element with HEP (High Efficiency Paper)
- Easy integration into the VRV® system
- Connectable to current Daikin control systems:

DS-net

intelligent touch Controller

intelligent Manager

BACnet Gateway

SMS-IF

**VAM-FA**

| VENTILATION | | | VAM150FA | VAM250FA | VAM350FA | VAM500FA | VAM650FA | VAM800FA | VAM1000FA | VAM1500FA | VAM2000FA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Air flow rate | | m/h | 150 | 250 | 350 | 500 | 650 | 800 | 1,000 | 1,500 | 2,000 |
| Sound pressure level (max.) (1) | | dBA | 27/28.5 | 28/29 | 32/34 | 33/34.5 | 34.5/35.5 | 36/37 | 36/37 | 39.5/41.5 | 40/42.5 |
| External static pressure (max.) | | Pa | 69 | 64 | 98 | 98 | 93 | 137 | 157 | 137 | 137 |
| Temperature exchange efficiency | | % | 74 | 72 | 75 | 74 | 74 | 74 | 75 | 75 | 75 |
| Enthalpy exchange efficiency | heating | % | 58 | 58 | 61 | 58 | 58 | 60 | 61 | 61 | 61 |
| | cooling | % | 64 | 64 | 65 | 62 | 63 | 65 | 66 | 66 | 66 |
| Dimensions | H | mm | 269 | 269 | 285 | 285 | 348 | 348 | 348 | 710 | 710 |
| | W | mm | 760 | 760 | 812 | 812 | 988 | 988 | 988 | 1,498 | 1,498 |
| | D | mm | 509 | 509 | 800 | 800 | 852 | 852 | 1,140 | 852 | 1,140 |
| Weight | | kg | 24 | 24 | 33 | 33 | 48 | 48 | 61 | 132 | 158 |
| Duct diameter | | mm | Ø 100 | Ø 150 | Ø 150 | Ø 200 | Ø 200 | Ø 250 | Ø 250 | Ø 350 | Ø 350 |
| Power supply | | VE | 1~, 50Hz, 220-240V | | | | | | | | |

(1) Sound pressure level is measured in heat exchange mode.




# 2. VKM-GA / VKM-GAM

- Heat purge (economiser): heat accumulated indoors is discharged at night
- Integration of humidification and air conditioning into HRV unit
- Increased static pressure thanks to improved fan performance
- Individual control via HRV remote control
- Connectable to current Daikin control systems:

DS-net

intelligent touch Controller

intelligent Manager

BACnet Gateway

DMS-IF

**VKM-GAM**

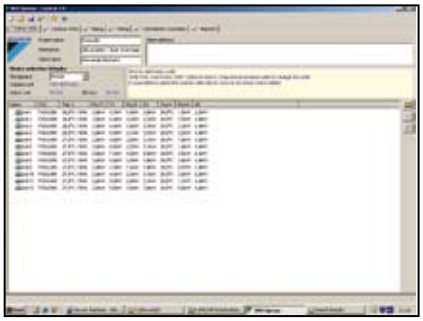
| VENTILATION, DX COIL & HUMIDIFIER | | | VKM50GAM | VKM80GAM | VKM100GAM |
|---|---|---|---|---|---|
| Fresh air conditioning load | cooling | kW | 4.71 | 7.46 | 9.12 |
| | heating | kW | 5.58 | 8.79 | 10.69 |
| Air flow rate | ultra high - high - low | m/h | 500 - 500 - 440 | 750 - 750 - 640 | 950 - 950 - 820 |
| Sound pressure level - 220V | ultra high - high - low | dBA | 37 - 35.5 - 32 | 38.5 - 36 - 33 | 39 - 37 - 34 |
| Sound pressure level - 240V | ultra high - high - low | dBA | 38 - 36 - 34 | 40 - 37.5 - 35.5 | 40 - 38 - 35.5 |
| Static pressure | ultra high - high - low | Pa | 160 - 120 - 100 | 140 - 90 - 70 | 110 - 70 - 60 |
| Temperature exchange efficiency | ultra high - high - low | % | 76 - 76 - 77.5 | 78 - 78 - 79 | 74 - 74 - 76.5 |
| Enthalpy exchange efficiency - cooling | ultra high - high - low | % | 64 - 64 - 67 | 66 - 66 - 68 | 62 - 62 - 66 |
| Enthalpy exchange efficiency - heating | ultra high - high - low | % | 67 - 67- 69 | 71 - 71 - 73 | 65 - 65 -69 |
| Humidifier type | | | natural evaporating humdifier | | |
| Humidification capacity | | kg/h | 2.70 | 4.00 | 5.40 |
| Dimensions | height | mm | 387 | 387 | 387 |
| | width | mm | 1,764 | 1,764 | 1,764 |
| | depth | mm | 832 | 1,214 | 1,214 |
| Weight | | kg | 102 | 120 | 125 |
| Power supply | | V1 | 1~, 220-240V, 50Hz | | |

**VKM-GA**

| VENTILATION & DX COIL | | | VKM50GA | VKM80GA | VKM100GA |
|---|---|---|---|---|---|
| Fresh air conditioning load | cooling | kW | 4.71 | 7.46 | 9.12 |
| | heating | kW | 5.58 | 8.79 | 10.69 |
| Air flow rate | ultra high - high - low | m/h | 500 - 500 - 440 | 750 - 750 - 640 | 950 - 950 - 820 |
| Sound pressure level - 220V | ultra high - high - low | dBA | 38 - 36 - 33.5 | 40 - 37.5 - 34.5 | 40 - 38 - 35 |
| Sound pressure level - 240V | ultra high - high - low | dBA | 39 - 37 - 35.5 | 41.5 - 39 - 37 | 41 - 39 - 36.5 |
| Static pressure | ultra high - high - low | Pa | 180 - 150 - 110 | 170 - 120 - 80 | 150 - 100 - 70 |
| Temperature exchange efficiency | ultra high - high - low | % | 76 - 76 - 77.5 | 78 - 78 - 79 | 74 - 74 - 76.5 |
| Enthalpy exchange efficiency - cooling | ultra high - high - low | % | 64 - 64 - 67 | 66 - 66 - 68 | 62 - 62 - 66 |
| Enthalpy exchange efficiency - heating | ultra high - high - low | % | 67 - 67- 69 | 71 - 71 - 73 | 65 - 65 -69 |
| Dimensions | height | mm | 387 | 387 | 387 |
| | width | mm | 1,764 | 1,764 | 1,764 |
| | depth | mm | 832 | 1,214 | 1,214 |
| Weight | | kg | 96 | 109 | 114 |
| Power supply | | V1 | 1~, 220-240V, 50Hz | | |

# POWERFUL SELECTION PROGRAMMES

## 1. VRV® XPRESS



The Daikin heat recovery ventilation system modulates the Daikin has developed a new user friendly, software tool that allows rapid VRV® selection and provides a professional result in the 7 following steps:

1. Select indoor units
2. Connect outdoor units to indoor units
3. Automatic receipt of piping diagram with joints
4. Automatic receipt of wiring diagram
5. Connect appropriate centralised control systems
6. Visualise result in Microsoft Word, Microsoft Excel and AutoCAD®
7. Save project

Using VRV® Xpress enables VRV® selection to be achieved in a simple, complete and professional manner.



# 2. VRV® PRO

› **FEATURES:**

The VRV® Pro selection programme offers 3 separate modes to accommodate different design formats according to customer requirements. Multi languages are possible.

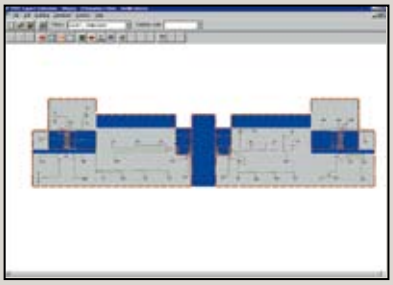
1. **Expert mode:** once the cooling and heating loads in the different rooms have been calculated, the software will select the most appropriate system plus an estimate of the power consumption.

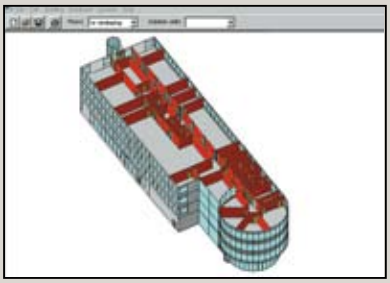
2. **Quick mode:** based on calculated system loads, the software will select the most appropriate system.

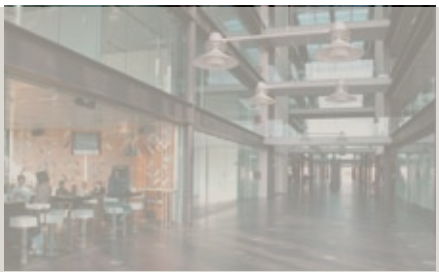
3. **Drawing mode:** selecting the indoor and outdoor units from a list enables the user to design a system in no time at all.

A simple to use, Daikin computerised selection programme, designed for use with Windows 95®, Windows 98®, WindowsNT®, Windows 2000®, Windows XP® and WindowsVista® systems, enables consulting engineers, design and build contractors, property developers and architects etc. to plan a Daikin air conditioning project on a step by step basis, complete with detailed drawings, bills of quantities and costs.
The programme thus enables VRV® air conditioning systems to be engineered precisely and economically (without over-sizing units), thereby ensuring optimum operating cycles and maximum energy efficiency.









# USER FRIENDLY
# CONTROL SYSTEMS

## 1. INDIVIDUAL CONTROL SYSTEMS

BRC4*
BRC7*

› **INFRARED REMOTE CONTROL**

**Operation buttons:** ON/OFF, timer mode start/stop, timer mode on /off, programme time, temperature setting, air flow direction (FXHQ, FXFQ, FXCQ and FXAQ models only), operating mode, fan speed control, filter sign reset, inspection/test indication

**Display:** Operating mode, battery change, set temperature, air flow direction (FXHQ, FXFQ, FXCQ and FXAQ models only), programmed time, inspection/test operation, fan speed

BRC2C51

› **SIMPLIFIED REMOTE CONTROL**

Simple, compact and easy to operate unit, suitable for use in hotel bedrooms

**Operation buttons:** ON/OFF, operating mode selection, fan speed control, temperature setting

**Display:** Cool/heat changeover control, Heat Recovery Ventilation (HRV) in operation, set temperature, operating mode, centralised control indication, fan speed, defrost/hot start, malfunction adjustment, operating mode selection, fan speed control, filter sign reset, inspection test /operation

BRC3A61

› **SIMPLIFIED BUILT-IN REMOTE CONTROL FOR HOTEL APPLICATIONS**

Compact, user friendly unit, ideal for use in hotel bedrooms

**Operation buttons:** ON/OFF, fan speed control, temperature setting

**Display:** Heat Recovery Ventilation (HRV) in operation, set temperature, operating mode, centralised control indication, fan speed, defrost/hot start, malfunction

› **WIRED REMOTE CONTROL**

› Limit operation (min/max): room temperature is controlled within adjustable upper and lower limits. Limit operation can be activated manually or by schedule timer
› Real time clock: indicates real time and day
› Schedule timer:
  - It is possible to programme a weekly schedule timer
  - It is possible to programme the remote control for each day of the week.
    Five day actions can be set as follows:
    · Set point: unit is switched ON and normal operation is maintained
    · OFF: unit is switched OFF
    · Limits: unit is switched ON and min/max control (cf. limit operation for more details)
› Home leave (frost protection): during occupants' absence, the indoor temperature can be maintained at a certain level. This function can also switch the unit ON/OFF
› Different levels of disabled buttons can be selected as follows:
  - **Level 1:** all buttons are accessible
  - **Level 2:** all buttons are disabled except for: ON / OFF, set temperature up/down, fan speed, cooling/heating mode, enable/disable schedule timer, air flow direction adjustment button
  - **Level 3:** all buttons are disabled except for: ON/OFF, set temperature up/down, fan speed
› User friendly HRV function, thanks to the introduction of a button for ventilation mode and fan speed
› Constantly monitoring of the system for malfunctions in a total of 80 components
› Immediate display of fault location and condition
› Reduction of maintenance time and costs

BRC1D52

**Operation buttons:** ON / OFF, timer mode start / stop, timer on/off, programmed time, temperature setting, air flow direction adjustment, operating mode selection, fan speed control, filter sign reset, inspection test/operation

**Display:** Operating mode, Heat Recovery Ventilation (HRV) in operation, cool / heat changeover control, centralised control indication, group control indication, set temperature, air flow direction, programmed time, inspection/test operation, fan speed, clean air filter, defrost / hot start, malfunction

# 2. CENTRALISED CONTROL SYSTEMS

## DCS302C51

### › CENTRALISED REMOTE CONTROL

Providing individual control of 64 groups (zones) of indoor units

› A maximum of 64 groups (128 indoor units, max. 10 outdoor units) can be controlled
› A maximum of 128 groups (128 indoor units, max. 10 outdoor units) can be controlled via 2 centralised remote controls in separate locations
› Zone control
› Group control (up and down buttons are added for group selection)
› Control of HRV air flow direction and air flow rate
› Expanded timer function
› Malfunction code display
› Maximum wiring length of 1,000m (total: 2,000m)

## DCS301B51

### › UNIFIED ON/OFF CONTROL

Providing simultaneous and individual control of 16 groups of indoor units

› A maximum of 16 groups (128 indoor units) can be controlled
› 2 remote controls in separate locations can be used
› Operating status indication (normal operation, alarm)
› Centralised control indication
› Maximum wiring length of 1,000m (total: 2,000m)

### › SCHEDULE TIMER

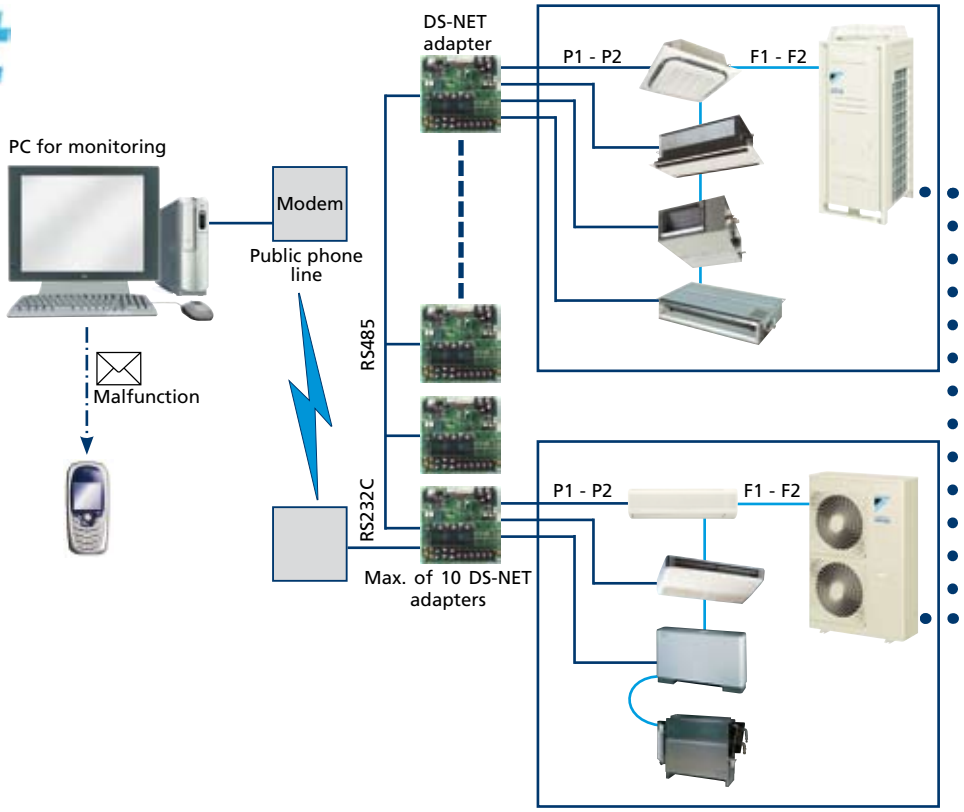
Enabling 64 groups to be programmed

› A maximum of 128 indoor units can be controlled
› 8 types of weekly schedule
› A maximum of 48 hours back-up power supply
› Maximum wiring length of 1,000m (total: 2,000m)

# 3. NETWORK SOLUTIONS

DS-net

The ideal solution for control and management up to 2,000 indoor units




**APPLICATION AREA**

› A small commercial area of less than 40 indoor units.
› Critical applications for centralized monitoring.

**SYSTEM LAYOUT**

› Allows monitoring and control of up to up to 50 stores or sites and 2,000 indoor units with just one modem and phone line.
› Automates daily air conditioning operation in order to free users from the hassle of air conditioning operation/management.
› The daily schedule setting allows automatic operation afterward.
› Automates alarm (report messages) for any malfunctions/errors. Immediate report of any indoor unit breakdown to the servicing company.
› Automatic report of breakdown/ malfunction information.
› Minimizes the inconvenience of not having air conditioning via rapid messages

**FUNCTIONS**

› Schedule setup (Daily schedule)
  - Start / stop
› A/C malfunction report
  - Send message to monitoring system
› Manual operation
  - Start/Stop, set temperature, operation mode, fan speed
› Status monitoring
  - Start/Stop, set temperature,
  - Operation mode, room temperature, operation time, error code

# intelligent touch Controller

Allows detailed and easy monitoring and operation of VRV® systems (max. 2 x 64 control groups)

## LANGUAGES

English, French, German, Italian, Spanish

## SYSTEM LAYOUT

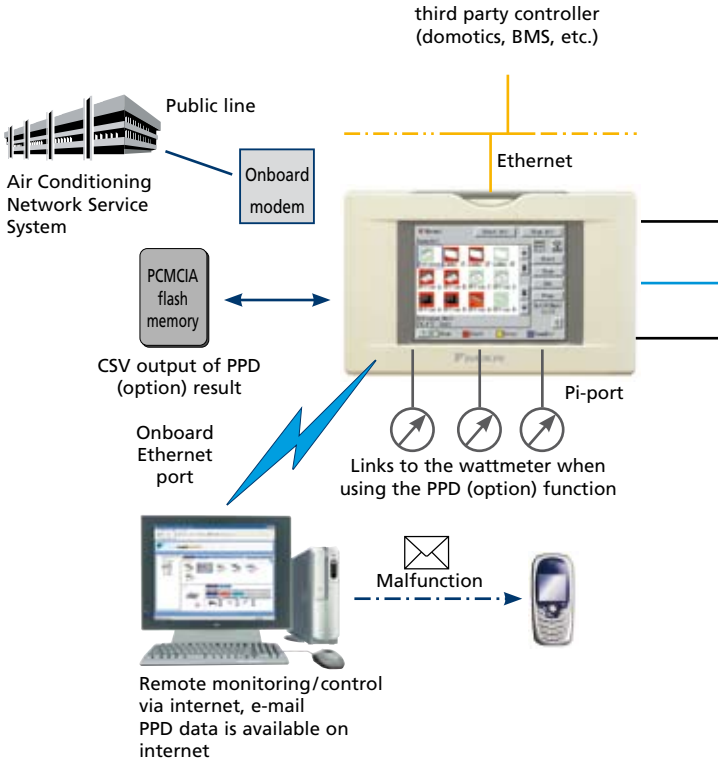
- Up to 2x64 indoor units can be controlled
- Onboard Ethernet port (web browser & e-mail)
- Digital i/o contacts (option)
- Touch panel (full colour LCD via icon display)

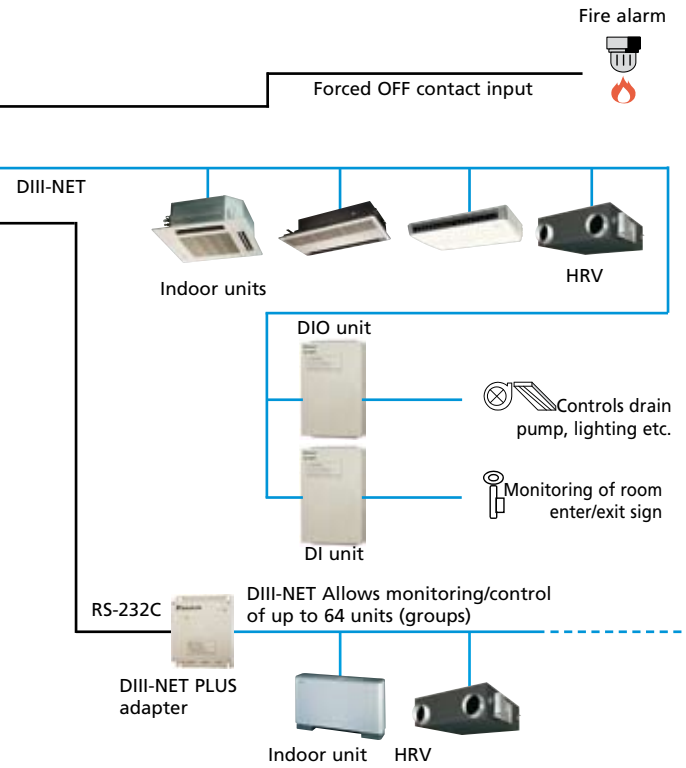
## MANAGEMENT

- Web application & internet compatibility
  - Monitoring & control according to user
  - Remote monitoring & control of more than one building
  - Remote monitoring & control of more than one building via internet
- Power Proportional Distribution (option)
- PPD data is available on the internet
- Easy management of electricity consumption
- Enhanced history function

## CONTROL

- Individual control (set point, start/stop, fan speed) (max. 2x64 indoor units/groups)
- Schedule control (8 schedules, 17 patterns)
- Flexible grouping in zones
- Yearly schedule
- Fire emergency stop control
- Interlocking control
- Increased HRV monitoring and control function
- Automatic cooling/heating changeover
- Quick selection and full control
- Simple navigation
- Heating optimization
- Temperature limit
- Password security: 3 levels (general, administration & service)




## MONITORING

Visualisation via Graphical User Interface (GUI)

- Icon colour display change function
- Indoor units operation mode
- Error messages via e-mail & mobile phone (option)
- Indication filter replacement
- Multi PC

## COST PERFORMANCE

- Labour saving
- Easy installation
- Compact design: limited installation space
- Overall energy saving

## OPEN INTERFACE

- Communication to any third party controller (domotics, BMS, etc.) is possible via open interface.

## CONNECTABLE TO

- VRV®
- HRV
- Sky Air (via interface adapter)
- Split (via interface adapter)

# Intelligent Manager

The ideal solution for control and management of maximum 1,024 VRV® indoor units

## SYSTEM LAYOUT

- Up to 1,024 indoor units can be controlled (by 4 iPUs)
- Ethernet TCPIP/10 base/T communication
- Integrated digital contacts on the Intelligent Processing Unit (iPU)
  - 19 general input ports
  - 2 digital outputs
- Stand alone operation of the iPU for minimum 48 hours
- Compatible with UPS shutdown software

## MANAGEMENT

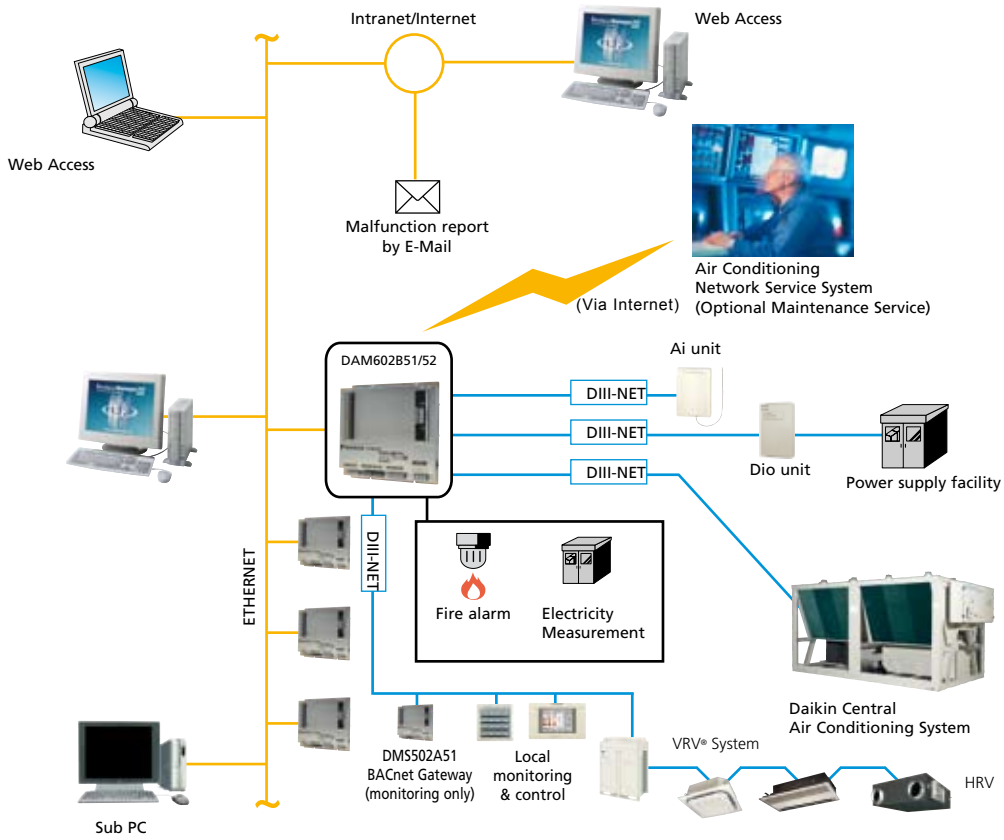
- Web access function (option)
- Power Proportional
- Distribution (option)
- Operational history management (start/stop, malfunction, operation hours)
- Generation of reports (graphics & tables) (daily, weekly, monthly)
- Peak load shedding
- Advanced tenant management
- Sliding temperature
- Eco mode (option)

## CONTROL

- Individual control (setpoint, start / stop, fan speed) (max. 1,024 indoor units)
- Group control (100 groups)
- Schedule control (128 programs)
- Fire emergency stop control (32 programs)
- Interlocking control
- Setpoint limitation
- Automatic cooling heating changeover
- Power failure/release control
- Temperature limit (automatic start)
- Timer extension

## MONITORING

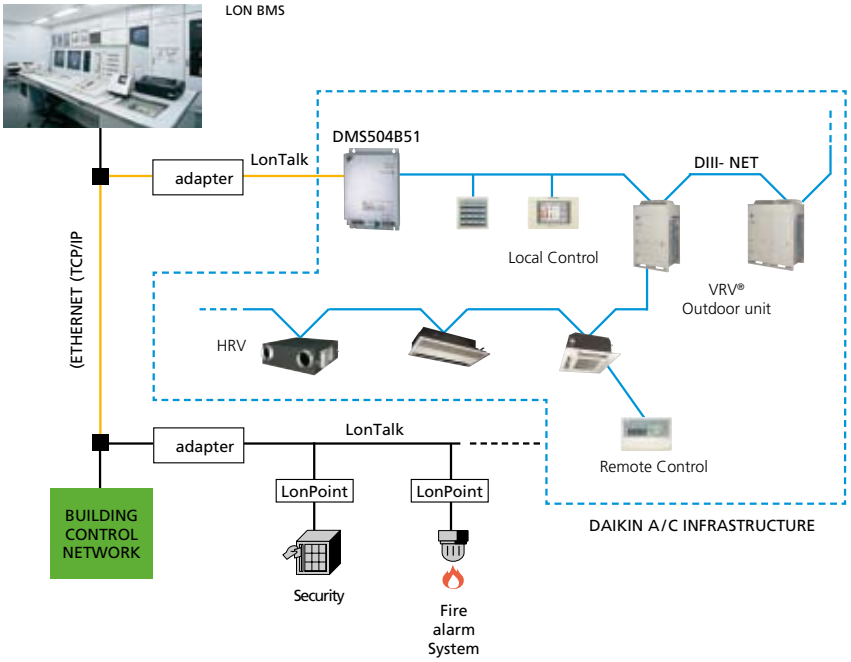
- Visualisation via a Graphical User Interface (GUI) featuring free layout
- Operation mode of indoor & outdoor units
- Fault indication
- Indication filter replacement
- Setpoint indication
- Operation time monitoring
- Multi PC
- On-line help



# DMS-IF

Lonworks Networks Compatible Gateway

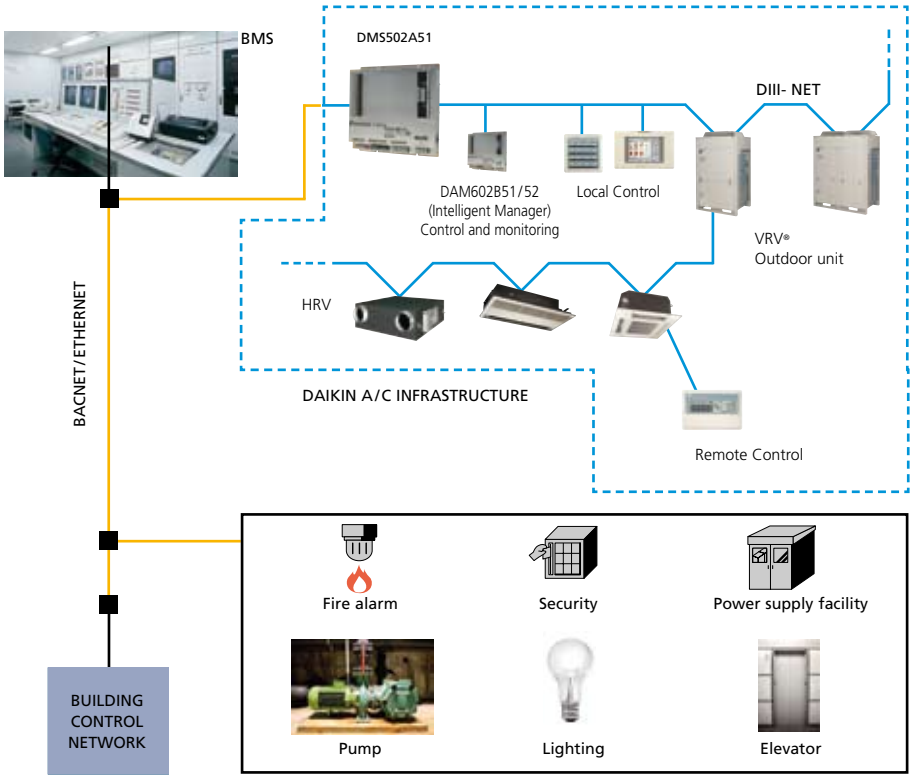
- Interface for connection to LonWorks® networks
- Communication via Lon protocol (twisted pair wire)
- 64 units connectable per DMS-IF
- Unlimited site size
- Quick and easy installation




# BACnet Gateway

Integrated control system connecting VRV® system with BMS system.

- PPD data is available on BMS-system
- Interface for BMS system
- Communication via BACnet protocol (connection via Ethernet)
- 256 units connectable per BACnet gateway
- Unlimited site size
- Easy and fast installation



# 4. ACCESSORIES

## INDIVIDUAL CONTROL SYSTEMS

| DESCRIPTION | | FXFQ | FXZQ | FXCQ | FXKQ | FXDQ | FXDQ-N | FXSQ | FXMQ | FXUQ | FXHQ | FXAQ | FXLQ | FXNQ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wired remote control | | BRC1D52 | | | | | | | | | | | | |
| Infrared remote control | cooling only | BRC7F533 | BRC7E531 | BRC7C67 | BRC4C63 | BRC4C64 | BRC4C64 | BRC4C64 | BRC4C66 | BRC7C529 | BRC7E66 | BRC7E619 | BRC4C64 | BRC4C64 |
| | heat pump | BRC7F532 | BRC7E530 | BRC7C62 | BRC4C61 | BRC4C62 | BRC4C62 | BRC4C62 | BRC4C65 | BRC7C528 | BRC7E63 | BRC7E618 | BRC4C62 | BRC4C62 |
| Simplified remote control | | - | - | - | - | BRC2C51 | BRC2C51 | BRC2C51 | BRC2C51 | - | - | - | BRC2C51 | BRC2C51 |
| Simplified remote control for hotel use | | - | - | - | - | BRC3A61 | BRC3A61 | BRC3A61 | BRC3A61 | - | - | - | BRC3A61 | BRC3A61 |

## CENTRALISED CONTROL SYSTEMS

| DESCRIPTION | FXFQ | FXZQ | FXCQ | FXKQ | FXDQ | FXDQ-N | FXSQ | FXMQ | FXUQ | FXHQ | FXAQ | FXLQ | FXNQ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Centralised remote control | DCS302C51 | | | | | | | | | | | | |
| Unified ON/OFF control | DCS301B51 | | | | | | | | | | | | |
| Schedule timer | DST301B51 | | | | | | | | | | | | |

## OTHERS

| DESCRIPTION | FXFQ | FXZQ | FXCQ | FXKQ | FXDQ | FXDQ-N | FXSQ | FXMQ | FXUQ | FXHQ | FXAQ | FXLQ | FXNQ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wiring adapter | - | KRP1B57*1 | - | KRP1B61 | KRP1B61 | KRP1B56 | - | KRP1B61 | KRP4A53 | KRP1B3 | - | KRP1B61 | KRP1B61 |
| Wiring adapter (hour meter) | EKRP1C11*1 | - | EKRP1B2 | - | EKRP1B2*2 | - | EKRP1B2 | - | | - | - | - | - |
| Wiring adapter for electrical appendices (1) | KRP2A526*1 | KRP2A526*1 | KRP2A516*1 | KRP2A61 | KRP2A516 | KRP2A53 | KRP2A516 | KRP2A61 | | KRP2A62* | KRP2A51 | KRP2A51 | KRP2A51 |
| Wiring adapter for electrical appendices (2) | KRP4AA53*1 | KRP4A536*1 | KRP4A516*1 | KRP4A51 | KRP4A516 | KRP4A54 | KRP4A516 | KRP4A51 | | KRP4A52* | KRP4A51 | KRP4A51 | KRP4A51 |
| Remote sensor | KRCS01-4 | KRCS01-1 | | | | | | | | | | | |
| Installation box for adapter PCB | KRP1H98 | KRP1BA101 | KRP1B96*3/4 | - | - | KRP1BA101 | | - | KRP1B97 | KRP1C93*3 | KRP4A93*3/4 | - | - |
| Electrical box with earth terminal (3 blocks) | - | KJB311A | | | | | | | | | | | |
| Electrical box with earth terminal (2 blocks) | KJB212AA | KJB212A | | | | | | | | | | | |
| Noise filter (for electromagnetic interface only) | - | KEK26-1A | | | | | | | | | | | |
| External control adapter | - | DTA104A52 | DTA104A51*1 | DTA104A61 | DTA104A51 | DTA104A53 | DTA104A51 | DTA104A61 | | DTA104A62 | DTA104A51 | DTA104A61 | DTA104A61 |
| Interface adapter for Sky Air series | - | - | - | - | - | - | - | - | DTA102A52 | - | - | - | - |
| Connector for forced on/forced off | - | - | - | - | - | - | - | - | EKRORO | - | - | - | - |

Notes:
*1: Installation box is required
*2: Fixing box is KRP1A90
*3: Up to 2 adapters can be fixed per installation box
*4: Only 1 installation box can be installed per indoor unit

DS-net

| DESCRIPTION | REFERENCE | COMMENTS |
|---|---|---|
| DS-net adapter | DTA113B51 | 4 units can be connected per adapter, 40 units when 10 adapters are connected |
| Software | DPC001B1-B51 | Monitoring panel software |

touch intelligent Controller

| DESCRIPTION | REFERENCE | COMMENTS |
|---|---|---|
| Intelligent Touch Controller | DCS601C51 | 2x64 units can be connected |
| Software | DCS002C51 | Power Proportional Distribution (PPD) software |
| | DCS004A51 | E-mail / Web software |
| Hardware | DCS601A52 | DIII NET-Plus adapter |
| Installation box | KJB411A | For wall mounted installation |
| Touch-Pen | 1264009 | Spare part n° of Touch-Pen for Intelligent Touch Controller |
| Interface adapters | KRP928A2S | For connection to Split units |
| | DTA102A52 | For connection to R-22 / R-407C Sky Air units |
| | DTA112B51 | For connection to R-410A Sky Air units |
| Digital input | DEC101A51 | Input contacts: 16 points |
| Digital input/output | DEC102A51 | Input contacts: 8 points; output contacts: 4 points |

## intelligent Manager

| DESCRIPTION | REFERENCE | COMMENTS |
|---|---|---|
| Intelligent Processing unit | DAM602B51 | 256 indoor units per IPU |
| | DAM602B52 | 128 indoor units per IPU |
| Software | IM3.XX | Up to 1,024 indoor units |
| Interface adapters | KRP928A2S | For connection to Split units |
| | DTA102A52 | For connection to R-407C/R-22 Sky Air units |
| | DTA112B51 | For connection to R-410A Sky Air units |
| DIII Ai | DAM101A51 | Outdoor temperature sensor |
| Digital input | DEC10151* | Input contacts: 16 points |
| Digital input / output | DEC10251* | Input contacts: 8 points; output contacts: 4 points |
| Power Proportional Distribution | DAM002A51 | |
| ECO Mode | DAM003A51 | |
| Web Acces Function | DAM004A51 | |

## DMS-IF

| DESCRIPTION | REFERENCE | COMMENTS |
|---|---|---|
| LonWorks® networks compatible Gateway | DMS504B51 | Up to 64 units can be connected per DMS-IF |
| Interface adapters | KRP928A2S | For connection to Split units |
| | DTA102A52 | For connection to R-407C/R-22 Sky Air units |
| | DTA112B51 | For connection to R-410A Sky Air units |

## BACnet Gateway

| DESCRIPTION | REFERENCE | COMMENTS |
|---|---|---|
| BACnet Gateway | DMS502B51 | 64 units per Gateway |
| DIII board | DAM411B51 | Extension of 3 x DIII lines (3 x 64) indoor units |
| Digital input/output | DAM412B51 | For forced shutdown |
| Interface adapters | KRP928A2S | For connection to Split units |
| | DTA102A52 | For connection to R-407C/R-22 Sky Air units |
| | DTA112B51 | For connection to R-410A Sky Air units |

## BMS: BUILDING MANAGEMENT SYSTEM

| DESCRIPTION | | REFERENCE | COMMENTS |
|---|---|---|---|
| Contact / analog signal | Parallel interface - Basic unit | DPF201A51 | enables ON/OFF command, operation and display of malfunction can be used in combination with up to 4 units. |
| | Temperature measurement units | DPF201A52 | enables temperature measurement output for 4 groups; 0~5VDC» |
| | Temperature setting units | DPF201A53 | enables temperature setting input for 16 groups; 0~5VDC» |
| | Unification adapter for computerised control | DCS302A52 | used for combining of air conditioning control computer and central remote controller (ON/OFF, display) |
| | Wiring adapter for electrical appendices (1) | KRP2A51 | simultaneously controls air conditioning control computer and up to 64 groups of indoor units. |
| | | KRP2A52 | |
| | Wiring adapter for electrical appendices (2) | KRP4A51-53 | to control the group of indoor units collectively, which are connected by the transmission wiring of remote controller. |
| External control adapter for outdoor unit | | DTA104A51 | cooling/heating mode change over, demand control and low noise control are available between the plural outdoor units. |
| | | DTA104A52 | |
| DIII-net expander adapter | | DTA109A51 | a maximum of 10 outdoors or 128 indoors can be connected to 1 DTA109A51 |
| | | | a maximum of 8 DTA109A51 can be connected to DIII-net |
| Mounting kit | | KRP4A92 | for easy installation of the DTA109A51 |

# NOTES

In all of us, a green heart

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

Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.

ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.

Daikin units comply with the European regulations that guarantee the safety of the product.

VRV® products are not within the scope of the Eurovent certification programme.



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**DAIKIN EUROPE N.V.**

Naamloze Vennootschap
Zandvoordestraat 300
B-8400 Oostende, Belgium
www.daikin.eu
BTW: BE 0412 120 336
RPR Oostende

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