

# New products

2002



Split, Multi Split & Sky Air Hi-VRV Hydronic systems

Medium temperature range refrigeration units

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Note: We would like to point out that all data mentioned in this catalogue are preliminary and therefore still subject to change

Ceiling mounted 4-way blow cassette

p. 59

LGYP2-3B7V1

Measuring conditions







4MK58,75AZVMB 3MX52AZVMB 4MX68AZVMB 4MK90AZVMB 4MX80AZVMB

# 3MX52AZVMB 4MK58-90AZVMB 4MX68-80AZVMB

# Inverter Multi Systems on R-410A

#### **BACKGROUND**

In 2002 Daikin will supplement the existing R-22 range of Multi inverter systems with new HFC R-410A Multi inverter systems featuring high COP values (up to 3.5 in cooling and 4.1 in heating!) and new user friendly functions.

A variety of different indoor units can be connected, including wall mounted, flexi type units, floor standing and ducted models. (for explanation on indoor units, see chapter 3)

In contrast to the competition, which only offers heat pump models, the new Daikin equipment will be launched in both cooling only and heat pump R-410A Multi inverter formats.

#### **MODEL RANGE: OUTDOOR UNITS**

|              |                | 5.8/5.2kW  | 7.5/6.8kW  | 9.0/8.0kW  |
|--------------|----------------|------------|------------|------------|
| Cooling only | Current (R-22) |            |            | 4MK90HV1NB |
|              | New (R-410A)   | 4MK58AZVMB | 4MK75AZVMB | 4MK90AZVMB |
| Heat pump    | Current (R-22) | 2MX52HV1NB | 3MX68HV1NB | 4MX80HV1NB |
|              | New (R-410A)   | 3MX52AZVMB | 4MX68AZVMB | 4MX80AZVMB |

Indoor units for multi connection (for more info on indoor units, see chapter 3)

#### **MODEL RANGE**

| Indoor units - cooling only |                 |             |             |             |             |  |  |  |
|-----------------------------|-----------------|-------------|-------------|-------------|-------------|--|--|--|
| Class                       |                 | 25          | 35          | 50          | 60          |  |  |  |
| Wall mounted                | Current (R-22)  | FTK25JAV1NB | FTK35JAV1NB | FTK50HV1NB  | FTK60HV1NB  |  |  |  |
|                             | New (R-410A)    | FTK25AZVMB  | FTK35AZVMB  | FTK50AZVMB  | FTK60AZVMB  |  |  |  |
| Concealed ceiling           | Current (R-22)  | CDK25HAV1NB | CDK35HAV1NB | CDK50HAV1NB | CDK60HAV1NB |  |  |  |
|                             | New (R-410A)    | CDK25AZVMB  | CDK35AZVMB  | CDK50AZVMB  | CDK60AZVMB  |  |  |  |
| Floor standing              | Current (R-22)* | FVK25KZV1B  | FVK35KZV1B  | -           | -           |  |  |  |
|                             | New (R-410A)    | -           | -           | -           | -           |  |  |  |
| Flexi type                  | Current (R-22)  | -           | -           | -           | -           |  |  |  |
|                             | New (R-410A)    | FLK25AZVMB  | FLK35AZVMB  | FLK50AZVMB  | FLK60AZVMB  |  |  |  |

#### **MODEL RANGE**

| Indoor units - heat pump |                 |             |             |             |             |            |  |  |  |
|--------------------------|-----------------|-------------|-------------|-------------|-------------|------------|--|--|--|
| Class                    |                 | 25          | 35          | 50          | 60          | 71         |  |  |  |
| Wall mounted             | Current (R-22)  | FTX25JAV1NB | FTX35JAV1NB | FTXD50JV1B  | FTXD60JV1B  | FTXD71JV1B |  |  |  |
|                          | New (R-410A)    | FTX25AZVMB  | FTX35AZVMB  | FTX50AZVMB  | FTX60AZVMB  | FTX71AZVMB |  |  |  |
| Concealed                | Current (R-22)  | CDX25HAV1NB | CDX35HAV1NB | CDX50HAV1NB | CDX60HAV1NB | -          |  |  |  |
| ceiling                  | New (R-410A)    | CDX25AZVMB  | CDX35AZVMB  | CDX50AZVMB  | CDX60AZVMB  | -          |  |  |  |
| Floor standing           | Current (R-22)* | FVX25KZV1B  | FVX35KZV1B  | -           | -           | -          |  |  |  |
|                          | New (R-410A)    | FVX25AZVMB  | FVX35AZVMB  | FVX50AZVMB  | FVX60AZVMB  | -          |  |  |  |
| Flexi type               | Current (R-22)  | -           | -           | -           | -           | -          |  |  |  |
|                          | New (R-410A)    | FLX25AZVMB  | FLX35AZVMB  | FLX50AZVMB  | FLX60AZVMB  | -          |  |  |  |

<sup>(\*)</sup> Note: These units are R-410A indoor units which can also be connected to the current inverter multi outdoor units using R-22.

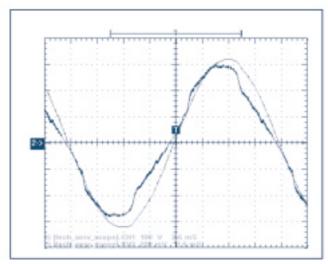
### FEATURES OF OUTDOOR UNITS OVERVIEW

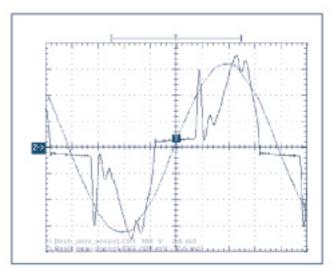
- 1. Energy saving via the latest Daikin technology
  - Swing compressor
  - Reluctance DC motor
  - PAM control
- 2. Quiet Operation
  - Outdoor unit silent operation
  - Night quiet mode
- 3. Wider operation range
- 4. Changes for installation and after sales service works.
- 5. User friendly functions
  - Priority room setting
  - Cooling / Heating mode lock (Heat pump models only)
- 6. Improved durability

#### **Detailed info**

#### 1. Energy saving with the latest Daikin technology

- The use of a Daikin swing compressor results in:
  - Substantial energy savings due to smooth rotation with minimal friction and refrigerant gas compression with limited losses
  - Low vibrations and low noise stemming from smooth roller movements
  - High durability very few components rub together during operation
- The use of a <u>reluctance DC inverter motor</u> results in substantial energy savings, since more power is generated with far less electric consumption than in normal motors. The double torque magnetic and reluctance torque inherent in the reluctance DC motor results in less energy consumption than with magnetic torque only, regular DC motors. The magnetic force generated by the neodymium magnets is far stronger than that of regular magnets, resulting in higher energy efficiency.
- The use of <u>PAM (Pulse Amplitude Modulation) control</u> ensures full use of power and controls motor voltage, even under high load conditions. This results in high rotational speed and better performance levels. PAM also improves the quality of the signal at the power terminals. It will result in a much higher  $\cos \varphi$  value, which indicates a more efficient use of power.





Power supply (bold line) and voltage with PAM

Power supply (peaks) and voltage without PAM

The combination of highly efficient R-410A refrigerant and the technology outlined above results in exceptional COP values - up to 3.5 in cooling and 4.1 in heating!

#### 2. Quiet operation

The tables below illustrate the sound pressure levels compared with current R-22 inverter models:

#### **COOLING ONLY**

|                | 4MK58 | 4MK75 | 4MK90 |
|----------------|-------|-------|-------|
| Current (R-22) | -     | -     | 49    |
| New (R-410A)*  | 46/43 | 48/45 | 48/45 |

#### **HEAT PUMP**

|                | 2(3)MX52 |         | 3(4)MX68 |         | 4MX80   |         |
|----------------|----------|---------|----------|---------|---------|---------|
|                | Cooling  | Heating | Cooling  | Heating | Cooling | Heating |
| Current (R-22) | 45       | 46      | 46       | 47      | 49      | 49      |
| New (R-410A)*  | 46/43    | 47/44   | 48/45    | 49/46   | 48/45   | 49/46   |

<sup>\*</sup> Second sound levels are sound pressure levels when using outdoor unit silent operation (see below for more explanation)

The new Multi inverter units are equipped with <u>3 types of "silent mode" functions</u>, 1 to reduce the sound level of the indoor unit, and 2 functions to reduce the sound level of the outdoor unit:

|         | Туре             | Effects*1 (dB(A)) | Remark                        |
|---------|------------------|-------------------|-------------------------------|
| INDOOR  | Indoor unit      | H:37 L:30         | Air flow: ultra low blow      |
|         | silent operation | -> LL:(27)        | set via the remote controller |
| OUTDOOR | Outdoor unit     | 48 -> (45)*2      | Air flow: low blow            |
|         | silent operation |                   | set via the remote controller |
|         | Night quiet mode | 48 -> (45)*2      | Requires initial setting      |
|         |                  |                   | Cooling operation only        |

<sup>\*1:</sup> In case of using outdoor unit 4MK90AZ with indoor unit FTK25AZ

#### **Detailed Explanation:**

- a. Indoor silent operation : please refer to explanation regarding indoor units
- b. Outdoor unit silent operation



When the SILENT button is selected on the remote control of the indoor unit (see picture), operating sound of the outdoor unit is reduced by 3dB(A) (sound pressure), by lowering the revolution speed of the compressor and outdoor fan.

This is a a useful means of reducing the sound level, particularly during night time operation in order not to cause local disturbances.

#### Important remark:

In the event that "Priority room setting" is not active, the "Outdoor unit silent mode" can be activated only if the 'silent' command is selected on ALL indoor units.

In case "Priority room setting " is active, the "Outdoor unit silent mode" can be activated merely by selecting the 'silent' command on the indoor unit in the room set as 'priority room'.

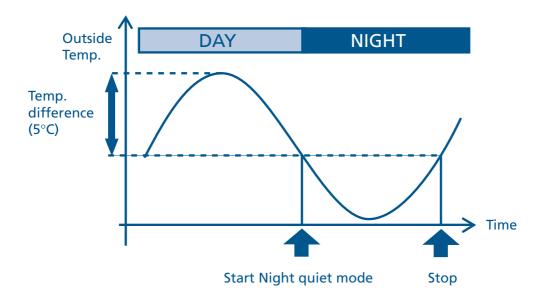
<sup>\*2:</sup> Minimum = 39dB(A) sound pressure (when operating only 1 unit)

<sup>():</sup> Target value

#### • c. Night quiet mode (only for cooling mode)

It is possible to reduce outdoor unit sound level automatically by removing a jumper wire in the outdoor unit. This function only works in cooling mode.

Night mode automatically starts when the outdoor temperature has dropped by 5°C (or more, depending on the setting) below the maximum temperature recorded during the day. (the function can be deactivated if the jumper wire is kept and reinstalled in the outdoor unit)



#### 3. Wider operation range

In comparison to current Multi inverter units using R-22, the operation range has been extended as follows:

Cooling only: from -10°C (R-22= from 10°C only) to 46°C (R-22= to 43°C)

teat pump: • cooling mode from -10°C (R-22= from 21°C for 2MX52H & 3MX68H, from 10°C for 4MX80H) to 46°C (R-22= to 43°C)

• heating mode from -15°C (R-22= from -10°C) to 15°C (R-22 same)

#### 4. Changes for installation and after sales service

#### **PIPING LENGTHS Cooling only 58 75** 90 current new current new current new **Piping** Total 45 60 70 70 length Height 15 15 15 15 difference Refrigerant Chargeless charge

#### **PIPING LENGTHS**

| Heat pump |             | 52      |         | 68      |         | 80         |         |
|-----------|-------------|---------|---------|---------|---------|------------|---------|
|           |             | current | new     | current | new     | current    | new     |
| Piping    | Total       | 35      | (45)    | 60      | 60      | 70         | 70      |
| length    | Height      | 15      | 15      | 15      | 15      | 15         | 15      |
|           | difference  |         |         |         |         |            |         |
|           | Refrigerant | 20m     | 20m     | 30m     | 30m     | chargeless | (40m)   |
|           | charge      | or more | or more | or more | or more |            | or more |

#### Changed service access

With the current units, both front and top cover must be removed to reach the PCB. With the new units, only the top panel needs to be removed to reach the PCB.

#### • Wiring changes:

The transmission wiring was changed from: Red/White/Black for Phase/Transmission/Neutral to Black/White/Red for Neutral/Phase/Transmission.

- Multi inverter R-410A series are equipped with <u>an automatic check and correction function for wiring errors</u> (similar to the current R-22 Multi inverter units)
- <u>Changes of indoor pipe diameters</u> (see also chapter 3 indoors) The liquid pipe diameters of some indoor units are changed:

- 35 class : from 12.7 to 9.5 - 60 class : from 15.9 to 12.7

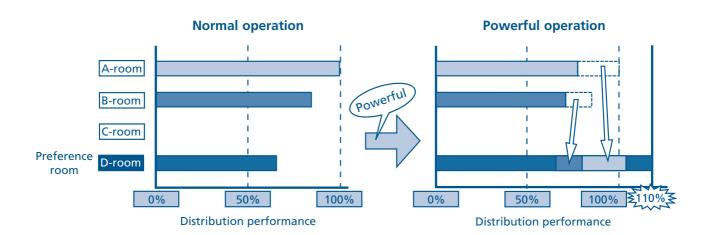
#### 5. User friendly functions

With R-22 Multi inverter units, following functions were available only on 4MK90H and 4MX80H units. As a result of widespread demand, they are now available for all classes:

#### • Priority room setting

It is possible to indicate a room as "priority room", which means that this indoor unit is the decisive factor in determining cooling or heating mode. The priority room must be set via a switch in the outdoor unit. Without this priority setting, the decision to switch from cooling to heating can come from any indoor unit, which is often confusing for customers.

It is also possible to increase the power supplied from the outdoor unit to the "priority room" by pressing the "powerful button" on the indoor unit.



• Cooling / Heating mode lock (Heat pump models only)

It is now possible to establish cooling or heating mode for 52 to 68 class heat pump models (already existing for the 80 class) via a switch on the outdoor unit. This is a useful feature for hotels or offices. Otherwise, the occupant in the "priority room" would determine the cooling or heating mode of the building — if no "priority room" is set, this can be determined from any room.

#### 6. Improved durability

- The units are constructed in a way to prevent small animals (frogs, mice,...) from reaching the electrical box.
- The PCB is installed upside down in order to improve its anti corrosion characteristics.
- A rust proof steel sheet beneath the unit gives additional protection against corrosion.

#### **SPECIFICATIONS**

| COOLING ONLY                    |                |              | 4MK58AZVMB   | 4MK75AZVMB   | 4MK90AZVMB  |
|---------------------------------|----------------|--------------|--------------|--------------|-------------|
| Capacity                        | min.~nom.~max. | kW           | 1.4~5.8~6.8  | 1.4~7.5~8.6  | 1.9~9.0~9.6 |
| COP                             |                | 3.50         | 3.40         | 3.20         |             |
| Sound level *1 dB(A)            |                | 46/43 (39*2) | 48/45 (39*2) | 48/45 (39*2) |             |
| Dimensions HxWxD                |                | 735x936x300  |              | 910x900x320  |             |
| Weight kg                       |                | 61           | 69           | 80           |             |
| Total piping length m           |                |              | 45           | 60           | 70          |
| Amount of additional charge g/m |                |              | charge less  |              |             |
| Operation range                 | from~to        | °CDB         | -10~46       |              |             |

<sup>\*1</sup> Rated value: the value when using quiet functions

#### **SPECIFICATIONS**

| HEAT PUMP                       |         |       | 3MX52AZVMB                                  | 4MX68AZVMB   | 4MX80AZVMB       |  |
|---------------------------------|---------|-------|---|--------------|------------------|--|
| Capacity                        | cooling |       | 1.4~5.2~6.1                                 | 1.4~6.8~7.3  | 1.9~8.0~ 9.2     |  |
| (min.~nom.~max.)                | heating |       | 1.5~6.8~7.8                                 | 1.5~8.6~9.6  | 2.3~9.6~10.7     |  |
| COP                             | cooling |       | 3.20  | 3.20         | 3.30             |  |
|                                 | heating |       | 3.80  | 3.70         | 4.10             |  |
| Sound level *1                  | cooling | dB(A) | 46/43 (39*²)                                | 48/45 (39*²) | 48/45 (39*²)     |  |
|                                 | heating | dB(A) | 47/44 (39*²)                                | 49/46 (39*²) | 49/46 (39*²)     |  |
| Dimensions                      |         | HxWxD | 735x936x300                                 |              | 908x900x320      |  |
| Weight kg                       |         | kg    | 61  | 69           | 80               |  |
| Total piping length m           |         | 45    | 60  | 70           |                  |  |
| Amount of additional charge g/m |         | g/m   | 20 (20m or more) 20 (30m or more) 20 (40m o |              | 20 (40m or more) |  |
| Operation range (from~to)       | cooling | °CDB  |   | -10~46       | -                |  |
|                                 | heating | °CWB  | -15~21                                      |              |                  |  |

<sup>\*1</sup> Rated value: the value when using quiet functions

#### **ACCESSORIES**

For the outdoor units:

| <b>ACCESSORIES</b> |   |  |       |     |   |   |
|--------------------|---|--|-------|-----|---|---|
| VI LESCURIES       | • |  |       |     |   |   |
|                    | Δ |  | <br>• | C D | ж | - |

|                | 5.8~7.5KW CLASS | 9.0KW CLASS |  |  |
|----------------|-----------------|-------------|--|--|
| Suction grille | KPW-945A4       |             |  |  |
| Drain plug     | KKP937A4        | KKP945A4    |  |  |

(For control systems and indoor unit accessories : see the indoor units.)

<sup>\*2</sup> Minimum value (when operating only 1 unit)

<sup>\*2</sup> Minimum value (when operating only 1 unit)





RX50-71AZVMB

# **2** RX50-71AZVMB

### Pair, inverter controlled outdoor units

#### **BACKGROUND**

As well as new Multi inverter units operating on R-410A, Daikin will also launch Pair heat pump combinations using R-410A, in 50 to 71 class sizes.

#### **MODEL RANGE**

| Class | Wall Mounted | Floor standing | Flexi type | <b>Outdoor Unit</b> |
|-------|--------------|----------------|------------|---------------------|
| 5.0kW | FTX50AZVMB   | FVX50AZVMB     | FLX50AZVMB | RX50AZVMB           |
| 6.0kW | FTX60AZVMB   | -              | -          | RX60AZVMB           |
| 7.1kW | FTX71AZVMB   | -              | -          | RX71AZVMB           |

#### **FEATURES**

- 1. Energy saving via the latest Daikin technology
  - Swing compressor
  - Reluctance DC motor
  - PAM control

#### 2. Quiet Operation

- Outdoor unit silent operation

#### 3. Wide operation range

Cooling from -10°C till 46°C, heating from -15°C till 15°C.

For more detailed information on features 1 and 2, please refer to the explanation in chapter 1 on Multi outdoor units.

#### **SPECIFICATIONS**

| RX50AZVMB                    |                     |         |       | FTX50AZVMB              | FVX50AZVMB       | FLX50AZVMB  |  |  |
|------------------------------|---------------------|---------|-------|-------------------------|------------------|-------------|--|--|
| Power supply                 |                     |         |       |                         | 1~50Hz, 220-240V |             |  |  |
| Nominal capacity min~nom~max |                     | cooling | kW    | 0.9~5.2~5.8 0.9~5.0~5.3 |                  | 0.9~5.0~5.3 |  |  |
|                              | min~nom~max         | heating | kW    | 0.9~6.5~8.0             | 0.9~5.0~5.3      | 0.9~6.1~7.5 |  |  |
| Dimensions                   | Dimensions HxWxD mm |         |       | 735x825x300             |                  |             |  |  |
| Sound pressure leve          | I                   | cooling | dB(A) | 47 (40)                 |                  |             |  |  |
|                              |                     | heating | dB(A) | 48 (40)                 |                  |             |  |  |
| Sound power level dB(A)      |                     |         | dB(A) | 60                      |                  |             |  |  |
| Charge less piping length m  |                     |         | m     | 10                      |                  |             |  |  |
| Max. piping length           |                     |         | m     | 30                      |                  |             |  |  |

#### **SPECIFICATIONS**

| RX60AZVMB                    |                         |         |       | FTX60AZVMB       |  |
|------------------------------|-------------------------|---------|-------|------------------|--|
| Power supply                 |                         |         |       | 1~50Hz, 220-240V |  |
| Nominal capacity min~nom~max |                         | cooling | kW    | 0.9~6.0~6.0      |  |
|                              | min~nom~max             | heating | kW    | 0.9~7.0~8.0      |  |
| Dimensions                   |                         | HxWxD   | mm    | 735x825x300      |  |
| Sound pressure level         |                         | cooling | dB(A) | 49 (40)          |  |
|                              | heat                    |         | dB(A) | 49(40)           |  |
| Sound power level            | Sound power level dB(A) |         | dB(A) | 62               |  |
| Chargeless piping length m   |                         | m       | 10    |                  |  |
| Max. piping length           |                         |         | m     | 30               |  |

#### **SPECIFICATIONS**

| RX71AZVMB                    |                             |         |       | FTX71AZVMB       |  |
|------------------------------|-----------------------------|---------|-------|------------------|--|
| Power supply                 |                             |         |       | 1~50Hz, 220-240V |  |
| Nominal capacity min~nom~max |                             | cooling | kW    | 0.9~7.1~8.0      |  |
|                              | min~nom~max                 | heating | kW    | 0.9~8.5~9.5      |  |
| Dimensions                   | Dimensions HxWxD            |         | mm    | 735x825x300      |  |
| Sound pressure leve          | Sound pressure level coolii |         | dB(A) | 52 (47)          |  |
| heating                      |                             | heating | dB(A) | 52 (47)          |  |
| Sound power level dB(A)      |                             | dB(A)   | 65    |                  |  |
| Chargeless piping length m   |                             | m       | 10    |                  |  |
| Max. piping length           |                             |         | m     | 30               |  |

Indoor sound pressure: H tap / L tap, ( ) refers to value at "silent tap"
Outdoor sound pressure: ( ) means value in the "Outdoor silent operation"

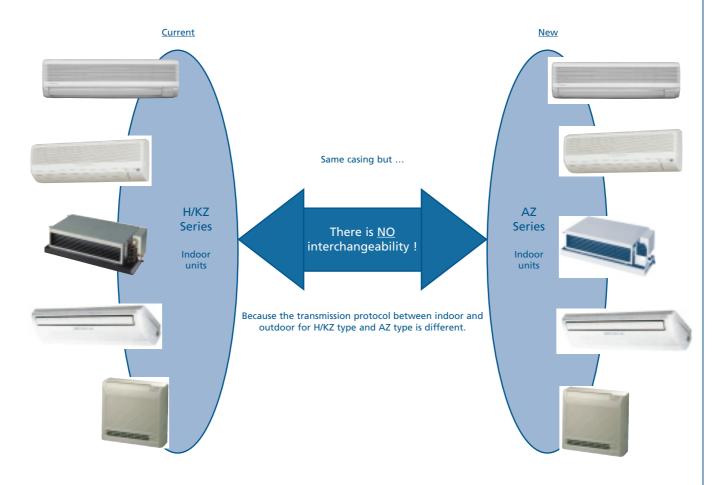
#### **ACCESSORIES**

There are no specific accessories for the outdoor units. For controllers and indoor unit accessories, please refer to chapter 3 - indoor units.

# 3 INDOOR UNITS

#### **BACKGROUND**

The new Multi and Pair inverter units on R-410A, described in chapter 1 and 2, utilise a new method of communication. As a result, dedicated indoor units, not interchangeable with the current inverter indoor units, must be used, not interchangeable even with current R-410A inverter such as FTKD25KZ.



These new indoor units are equipped with 'QUIET FUNCTIONS'. There are 3 types of quiet functions:

#### **QUIET FUNCTIONS**

|         | FUNCTION   | EFFECTS*1 (dB(A))      | NOTE   |
|---------|--|------------------------|--|
| INDOOR  | Indoor unit silent operation                         | H:37, L:30 -> LL: (27) | Air flow: Ultra low blow set via remote controller |
| OUTDOOR | Outdoor unit silent operation                        | 48 -> (45)*²           | Air flow: Low blow set via remote controller       |
|         | (For more information, see chapter 1: outdoor units) |                        |  |
|         | NEW Night quiet mode                                 | 48 -> (45)*²           | Requires initial setting - cooling operation only  |
|         | (For more information, see chapter 1: outdoor units) |                        |  |

- \*1 If using outdoor unit "4MK90AZVMB", indoor unit "FTK25AZVMB"
- \*2 Minimum 39dB(A) (when operating only 1 unit)
- () Target value

#### **INDOOR UNIT SILENT OPERATION:**

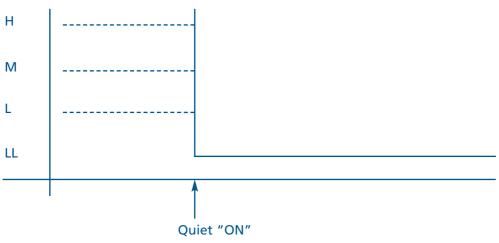
When air flow is set to "Quiet" via remote controller, the operating sound of the indoor unit is reduced by 3dB(A). This function is useful when studying or sleeping.



#### Air flow setting button



#### Indoor unit's fan



#### **NOTE**

When operating in "Quiet" or "Ultra low" mode both operating noise and cooling/heating capacity are reduced.

#### **MODEL RANGE & COMPATIBILITY OVERVIEW**

#### **INTERCHANGEABILITY**

|                        |                     | IN        | <b>VERTER MU</b> | LTI        |             | INVERTE      | R SPLIT      |                |
|------------------------|---------------------|-----------|------------------|------------|-------------|--------------|--------------|----------------|
|                        |                     | CUR       | RENT             | NEW        | CURRENT     |              |              | NEW            |
|                        |                     | 2~4MK(X)H | RMX140J(Z)       | 3~4MK(X)AZ | RK(X)25/35J | RK(X)25/35KZ | RXD50/60/71J | RX50/60/71AZ   |
| Wall mounted unit      | FTK(X)25/35J        | 0         | 0                | Х          | 0           | Х            | Х            | Х              |
|                        | FTK(X)D25/35KZ      | 0         | 0                | Х          | Х           | 0            | Х            | Х              |
|                        | FTK(X)D50/60/71J    | 0         | 0                | Х          | Х           | Х            | 0            | Х              |
|                        | FTK(X)25/35AZ       | X         | Х                | 0          | Х           | Х            | Х            | Х              |
|                        | FTK(X)50/60/71AZ    | Х         | Х                | 0          | Х           | Х            | Х            | O (H/P only)   |
| Flexi type unit        | FLX25/35H           | 0         | 0                | Х          | Х           | Х            | Х            | х              |
|                        | FLX50/60J           | 0         | 0                | Х          | Х           | Х            | 0            | х              |
|                        | FLK(X)25/35/50/60AZ | X         | Х                | 0          | Х           | Х            | Х            | O (FLX50 only) |
| Concealed ceiling unit | CDK(X)25/35/50/60HA | 0         | 0                | Х          | Х           | Х            | Х            | х              |
|                        | CDK(X)25/35/50/60AZ | X         | Х                | 0          | Х           | Х            | Х            | х              |
| Floor standing unit    | FVK(X)25/35KZ       | 0         | 0                | Х          | Х           | Х            | Х            | Х              |
|                        | FVXT40/50G          | Х         | Х                | Х          | Х           | Х            | Х            | Х              |
|                        | FVX25/35/50AZ       | Х         | Х                | 0          | Х           | Х            | Х            | O (FVX50 only) |

O = possible, X = not possible







FTK/FTX25,35AZVMB

FTX50-71AZVMB

### FTK/FTX25-71AZVMB

# Wall mounted, inverter controlled unit

#### **FEATURES**

#### FTK/FTX25-35AZ

- Inverter powerful mode
- Movement sensor
- Home leave operation
- Outdoor unit silent operation
- Indoor unit silent operation
- Photocatalytic deodorising filter
  - · Air purification filter
  - · Washable grille
  - · Night set mode
  - Power air flow dual flap (auto swing: up & down)
  - Wide angle louvers
  - 24 hour ON/OFF timer
  - Interface adapter for DIII-net (optional)

#### FTK/FTX50-60-71AZ

- Inverter powerful mode
- Home leave operation
- Outdoor unit silent operation
- Indoor unit silent operation
- Photocatalytic deodorising filter
  - Air purification filter
  - Washable grille
  - Night set mode
  - Power air flow flap (auto swing: up & down)
  - Wide angle louvers (auto swing: right & left)
  - 24 hour ON/OFF timer
  - Interface adapter for DIII-net (optional)

#### **SPECIFICATIONS**

| COOLING ONLY                |         |       | FTK25AZVMB  | FTK35AZVMB | FTK50AZVMB    | FTK60AZVMB |            |
|-----------------------------|---------|-------|-------------|------------|---------------|------------|------------|
| HEAT PUMP                   |         |       | FTX25AZVMB  | FTX35AZVMB | FTX50AZVMB    | FTX60AZVMB | FTX71AZVMB |
| Capacity/class kW           |         |       | 2.5         | 3.5        | 5.0           | 6.0        | 7.1        |
| Dimensions                  |         | mm    | 273x784x185 |            | 298x1,050x190 |            |            |
| Weight                      |         | kg    | 7.5         |            | 12            |            |            |
| Sound pressure level        | Cooling | dB(A) | 38/25/22    | 39/26/23   | 44/35/32      | 45/37/35   | 46/37/34   |
| H/L/LL                      | Heating | dB(A) | 38/25/22    | 39/26/23   | 42/32/29      | 44/34/31   | 46/34/31   |
| Piping connection Liquid mm |         | mm    | Ø6.4        | Ø6.4       | Ø6.4          | Ø6.4       | Ø9.5       |
|                             | Gas     | mm    | Ø9.5        | Ø9.5       | Ø12.7         | Ø12.7      | Ø15.9      |
|                             | Drain   | mm    | Ø18.0       | Ø18.0      | Ø18.0         | Ø18.0      | Ø18.0      |

#### **ACCESSORIES**

#### **CONTROL SYSTEMS**

| KRP413A1S |
|-----------|
|           |
| KRC72     |
| DCS302B51 |
| DCS301B51 |
| DCT301B51 |
| KRP928A1S |
|           |

<sup>(1)</sup> Wiring adapter is also required for each indoor unit

An infrared remote control will be standard provided with the indoor unit.

#### **OTHER ACCESSORIES**

|  | FTK/FTX25-35AZ | FTK/FTX50-60-71AZ |
|--|----------------|-------------------|
| Photocatalytic deodorising filter, with frame    | -              | KAZ917B41         |
| Photocatalytic deodorising filter, without frame | KAZ962A42      | KAZ917B42         |
| Combined air purification filter                 | KAZ926B41      | -                 |
| + photocatalytic deodorising filter              |                |                   |
| Air purification filter with frame               | -              | KAF925B41         |
| Air purification filter without frame            | KAF926B42      | KAF925B42         |
| Anti theft protection for remote controller      | KKF917A4       | KKF917A4          |







FLK/FLX25-60AZVMB

FLK/FLX25-60AZVMB

### FLK/FLX25-60AZVMB

# Flexi type, inverter controlled unit

#### **FEATURES**

- Inverter powerful mode
- Home leave operation
- Outdoor unit silent operation
- Indoor unit silent operation
- Photocatalytic deodorising filter
  - Air purification filter
  - · Night set mode
  - Wide angle louvers (auto swing: right & left)
  - 24 hour ON/OFF timer
  - Interface adapter for DIII-net (optional)

#### **SPECIFICATIONS**

| COOLING ONLY         |           |       | FLK25AZVMB | FLK35AZVMB | FLK50AZVMB | FLK60AZVMB |
|----------------------|-----------|-------|------------|------------|------------|------------|
| HEAT PUMP            |           |       | FLX25AZVMB | FLX35AZVMB | FLX50AZVMB | FLX60AZVMB |
| Capacity/class kW    |           |       | 2.5        | 3.5        | 5.0        | 6.0        |
| Dimensions           |           | mm    |            | 490x1,0    | 050x200    |            |
| Weight kg            |           |       | 16         |            | 17         |            |
| Sound pressure level | Cooling   | dB(A) | 37/31/28   | 38/32/29   | 47/39/36   | 48/41/38   |
| H/L/LL               | Heating   | dB(A) | 37/31/28   | 39/33/30   | 46/35/33   | 47/37/34   |
| Piping connection    | Liquid mm |       | Ø6.4       | Ø6.4       | Ø6.4       | Ø6.4       |
|                      | Gas       | mm    | Ø9.5       | Ø9.5       | Ø12.7      | Ø12.7      |
|                      | Drain     | mm    | Ø18.0      | Ø18.0      | Ø18.0      | Ø18.0      |

#### **ACCESSORIES**

#### **CONTROL SYSTEMS**

| Wiring adapter for time clock                   | KRP413A1S |
|---|-----------|
| (normal open contact/normal open pulse contact) |           |
| Centralised control board - up to 5 rooms (1)   | KRC72     |
| Central remote control (1)                      | DCS302B51 |
| Unified ON/OFF control (1)                      | DCS301B51 |
| Schedule timer (1)                              | DCT301B51 |
| Interface adapter (DIII-net)                    | KRP928A1S |

<sup>(1)</sup> Wiring adapter is also required for each indoor unit

An infrared remote control will be standard provided with the indoor unit.

#### **OTHER ACCESSORIES**



|   | FLK/FLX25-35-50-60AZ |
|---|----------------------|
| Photocatalytic deodorising filter with frame    | KAZ917B41            |
| Photocatalytic deodorising filter without frame | KAZ917B42            |
| Air purification filter with frame              | KAF925B41            |
| Air purification filter without frame           | KAF925B42            |
| Anti theft protection for remote controller     | KKF917A4             |





FVX25-50AZVMB

### FVX25-50AZVMB

### Floor standing, inverter controlled unit

#### **FEATURES**

- Inverter powerful mode
- Home leave-operation



Outdoor unit silent operation



• Indoor unit silent operation



- Photocatalytic deodorising filter
  - Air purification filter
  - Night set mode
  - Wide angle louvers (auto swing: right & left)
  - 24 hour ON/OFF timer
  - Interface adapter for DIII-net (optional)

#### **SPECIFICATIONS**

| HEAT PUMP            |         |       | FVX25AZVMB  | FVX35AZVMB | FVX50AZVMB |  |  |
|----------------------|---------|-------|-------------|------------|------------|--|--|
| Capacity/class       |         | kW    | 2.5         | 3.5        | 5.0        |  |  |
| Dimensions           |         | mm    | 660x650x195 |            |            |  |  |
| Weight kg            |         |       | 13          |            |            |  |  |
| Sound pressure level | Cooling | dB(A) | 38/26/23    | 39/26/23   | 44/36/33   |  |  |
| H/L/LL               | Heating | dB(A) | 38/26       | 39/26      | 45/36      |  |  |
| Piping connection    | Liquid  | mm    | Ø6.4        | Ø6.4       | Ø6.4       |  |  |
|                      | Gas     | mm    | Ø9.5        | Ø9.5       | Ø12.7      |  |  |
|                      | Drain   | mm    | Ø20.0       | Ø20.0      | Ø20.0      |  |  |

#### **ACCESSORIES**

#### **CONTROL SYSTEMS**

| KRP413A1S |
|-----------|
|           |
| KRC72     |
| DCS302B51 |
| DCS301B51 |
| DCT301B51 |
| KRP928A1S |
|           |

<sup>(1)</sup> Wiring adapter is also required for each indoor unit

An infrared remote control will be standard provided with the indoor unit.

#### **OTHER ACCESSORIES**



|   | FVX25-35-50AZ |
|---|---------------|
| Photocatalytic deodorising filter with frame    | KAZ917B41     |
| Photocatalytic deodorising filter without frame | KAZ917B42     |
| Air purification filter with frame              | KAF925B41     |
| Air purification filter without frame           | KAF925B42     |
| Anti theft protection for remote controller     | KKF917A4      |





CDK/CDX25-60AZVMB

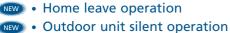
### CDK/CDX25-60AZVMB

### Concealed ceiling, inverter controlled unit

#### **FEATURES**







- 24 hour ON/OFF timer
- Interface adapter for DIII-net (optional)

#### **SPECIFICATIONS**

| COOLING ONLY HEAT PUMP      |                       |       | CDK25AZVMB | CDK35AZVMB | CDK50AZVMB | CDK60AZVMB |
|-----------------------------|-----------------------|-------|------------|------------|------------|------------|
|                             |                       |       | CDX25AZVMB | CDX35AZVMB | CDX50AZVMB | CDX60AZVMB |
| Capacity/class              |                       | kW    | 2.5        | 3.5        | 5.0        | 6.0        |
| Dimensions                  |                       | mm    |            | 260x90     | 00x580     |            |
| Weight                      |                       | kg    | 23 24      |            |            |            |
| Sound pressure level        | Cooling               | dB(A) | 39/36      | 39/36      | 42/39      | 44/41      |
| H/L                         | Heating               | dB(A) | 40/39      | 40/39      | 42/38      | 44/40      |
| Piping connection           | ing connection Liquid |       | Ø6.4       | Ø6.4       | Ø6.4       | Ø6.4       |
|                             | Gas (CDK)             | mm    | Ø9.5       | Ø9.5       | Ø12.7      | Ø12.7      |
|                             | Gas (CDX)             | mm    | Ø9.5       | Ø9.5       | Ø12.7      | Ø15.9      |
| Drain                       |                       |       | Ø27.2      | Ø27.2      | Ø27.2      | Ø27.2      |
| External static pressure Pa |                       |       | 24         | 24         | 20         | 30         |

#### **ACCESSORIES**

#### **CONTROL SYSTEMS**

| KRP413A1S |
|-----------|
|           |
| KRC72     |
| DCS302B51 |
| DCS301B51 |
| DCT301B51 |
| KRP928A1S |
|           |

<sup>(1)</sup> Wiring adapter is also required for each indoor unit

An infrared remote control will be standard supplied with the indoor unit.

#### **OTHER ACCESSORIES**

| Anti theft protection for remote controller | KKF917A4  |
|---|-----------|
| Suction grille                              | KDGF19A45 |









RZP71DV1

RZP100,125DV1

# 4 RZP71-125DV1

### Sky Air Super Inverter

#### **BACKGROUND**

After the success of the inverter in the residential market, Daikin has decided to introduce the first Sky Air inverter in Europe for the light commercial market (shops, small offices). This will enable Daikin to take the lead in promoting the need for energy preservation throughout the European light commercial sector.

Initially the range will be marketed in the UK, France, Italy, Germany and Spain, other countries will follow. Payback time, comfort, quality and features will justify the price premium.

The ozone friendly Super inverter heat pump and reluctant DC compressor represent the top end of the current Sky Air range. This latest introduction strengthens our image as market leader and distinguishes Daikin from its competitors.

#### **MODEL RANGE**

|      | OUTDOOR UNIT | INDOOR UNITS |           |          |          |         |  |  |
|------|--------------|--------------|-----------|----------|----------|---------|--|--|
|      | RZPDV1       | FHYCPB7V1    | FHYBPB7V1 | FHYPB7V1 | FUYPBV17 | FAYPBV1 |  |  |
| PAIR | 71           | •            | •         | •        | •        | •       |  |  |
|      | 100          | •            | •         | •        | •        | •       |  |  |
|      | 125          | •            | •         | •        | •        |         |  |  |
| TWIN | 100 (2 x 45) | •            | •         | •        |          |         |  |  |
|      | 125 (2 x 60) | •            | •         | •        |          |         |  |  |

#### **FEATURES**

#### • ENERGY SAVING VIA:

#### 1. Reluctance DC compressor

High energy efficiency in the most frequently used mid-to-low settings keeps annual electricity costs low.

### The RZP-unit is the first commercial grade air conditioner with powerful neodymium magnets using reluctance torque Secret to raising energy-efficiency!

DOUBLE TORQUE IMPROVES ENERGY EFFICIENCY The combination of magnetic torque from powerful neodymium magnets and reluctance torque (applied to an air conditioner's compressor for the first time) generates more power using less electricity.

Powerful magnets



Neodymium magnet

Ferrite magnet

Neodymium magnet is much more powerful than the widely used ferrite magnets.

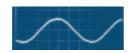
#### 2. Sine Wave DC inverter

Generates smooth inverter waveforms to increase efficiency

Rectangular wave



Sine wave PWM\*



\*Pulse Width

#### 3. Heat divide type heat exchanger

Improved capability of the heat exchanger by U type wide form and waffle fin adoption. This new technique results in an improved COP

#### 4. New Super Cooling e-bridge circuit

An increase in evaporation capacity stems from the newly developed refrigeration circuit, known as the SCe-bridge circuit, which adds super cooling prior to expansion procedure. By adopting this circuit, the COPs in both cooling and heating have been drastically improved.

#### 5. DC fan motor

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

#### 6. Compressor linked fan control

Maintains maximum COP

#### 7. Smooth air flow mechanism:

- Hybrid aerofoil fan:

A newly designed fan, applying air flow analyses techniques developed by NASA, creates smooth air flow, raising the COP and reducing the sound level.

- High flared bell mouth
- Super aero grille

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

#### 8. Predicted mean vote (PMV) control

At equivalent room temperatures an occupant can feel hot in the summer and cold in the fall and spring. The PMV control function senses conditions such as outdoor temperature, internal heat sources and the levels of radiant heat. It then maintains room temperature at the most comfortable level and maximises energy saving characteristics.

#### COMFORTABLE

#### 1. Comfortable control by inverter

During start up, full power is used to achieve the room set point temperature quickly. The capacity is then adjusted according to the outdoor temperature and indoor load varations to achieve fine control of the room temperature setting. Non inverter type air conditioners switch on and off repeatedly, causing large fluctuations in room temperature.

#### 2. Reduced sound level via:

### • Hybrid aerofoil fan - Super aero grille (explanation cf "Smooth air flow mechanism")

#### • Low-noise compressor

Smooth rotation and minimal vibrations ensure quiet operation

#### • Night quiet mode

Reduces normal operating noise level by trimming compressor and fan rotation rate during low load night time operation.

#### 3. Expansion of the operation range

- Heating operation ranges down to -15°CWB
- Cooling operation ranges up to 50°CDB

#### 4. Maximum piping length up till 70m (for 100 & 125 model)

|                             |         |        | RZP71DV1           | RZP100DV1               | RZP125DV1            |
|-----------------------------|---------|--------|--------------------|-------------------------|----------------------|
| Power supply                |         |        |                    | 1 phase, 220-240V, 50Hz |                      |
| Cooling capacity/           |         | kW     | 6.9(3.2-7.8)       | 9.7(4.9-11.0)           | 12.1(5.8-13.8)       |
| Max. cooling capacity       |         | Btu/h  | 23,600             | 33,100                  | 41,300               |
|                             |         |        | (10,900-26,600)    | (16,700-37,600)         | (19,800-47,100)      |
|                             |         | kcal/h | 5,900(2,800-6,700) | 8,300(4,200-9,500)      | 10,400(5,000-11,900) |
| Heating capacity/           |         | kW     | 7.8(3.4-8.8)       | 11.0(5.5-12.6)          | 13.7(5.9-15.9)       |
| Max. heating capacity       |         | Btu/h  | 26,600             | 37,600                  | 46,800               |
|                             |         |        | (11,600-30,000)    | (18,800-43,100)         | (20,100-54,300)      |
|                             |         | kcal/h | 6,700(2,900-7,600) | 9,500(4,700-10,800)     | 11,800(5,100-13,700) |
| Average COP of Cool/Heat    |         |        | TBC                | TBC                     | TBC                  |
| Dimensions (HxWxD)          |         | mm     | 905x900x320        | 1,435x900x320           | 1,435x900x320        |
| Weight                      |         | kg     | 71                 | 119                     | 119                  |
| Max. ref. piping length     |         | m      | 50                 | 70                      | 70                   |
| Charged for                 |         | m      | 30                 | 30                      | 30                   |
| Operation sound (C/H)       |         | dBA    | 48/50              | 50/52                   | 51/53                |
| Night quiet mode            |         | dBA    | 45                 | 45                      | 45                   |
| MFA( ) for FDYP (Australia) |         | А      | 20                 | 30(41)                  | 30(40)               |
| Operation range             | cooling | °CDB   | -5~50              | -5~50                   | -5~50                |
|                             | heating | °CWB   | -15~16             | -15~16                  | -15~16               |





# 5 RMX140JZVMB

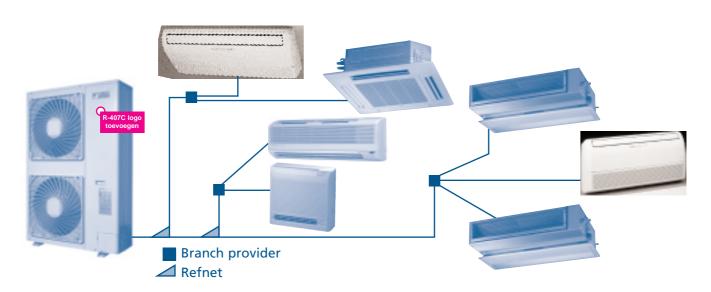
### Super Multi Plus, Inverter controlled - heat pump

#### **BACKGROUND**

After the successful introduction of the RMX140JVMB, Daikin has now launched its RMX140JZVMB with R-407C refrigerant.

| MODEL RANGE  |             |
|--------------|-------------|
| OUTDOOR UNIT |             |
|              | MODEL NAME  |
| Heat pump    | RMX140JZVMB |

| CONNECTA | CONNECTABLE INDOOR UNITS |             |            |            |             |             |            |  |
|----------|--------------------------|-------------|------------|------------|-------------|-------------|------------|--|
| 25 class | FTX25JAV1NB              | FTXD25KZV1B | FVX25KZV1B | FLX25HV1NB | CDX25HAV1NB | -           | -          |  |
| 35 class | FTX35JAV1NB              | FTXD35KZV1B | FVX35KZV1B | FLX35HV1NB | CDX35HAV1NB | FHYB35FK7V1 | FHYC35B7V1 |  |
| 45 class | -                        | -           | -          | -          | -           | FHYB45FK7V1 | FHYC45B7V1 |  |
| 50 class | FTXD50JAV1NB             | -           | -          | FLX50JV1   | CDX50HAV1NB | -           | -          |  |
| 60 class | FTXD60JAV1NB             | -           | -          | FLX60JV1   | CDX60HAV1NB | FHYB60FK7V1 | FHYC60B7V1 |  |
| 71 class | FTXD71JAV1NB             | -           | -          | -          | -           | FHYB71FK7V1 | FHYC71B7V1 |  |



IT IS POSSIBLE TO CONNECT UP TO 7 INDOOR UNITS TO A SINGLE OUTDOOR UNIT

#### **FEATURES**

- Size of connectable indoor units extended to the **71 class**
- This new unit incorporates the advanced Daikin **PAM inverter** technology. The application of this unique facility results in:
  - improved cooling and heating performance
  - reduced power consumption with 30% compared to non inverter systems
  - minimum operating sound levels
  - low start up current
- PAM Inverter controlled fan motors
- The use of a **BP-unit** (Branch Provider), containing the expansion valves, results in the following features:
  - quiet operation, due to the possibility of remote installation
  - less piping and wiring is needed in comparison to a standard multi-system
  - longer piping length possible
  - easy installation
  - for 2 rooms: BPMK928B42 for 3 rooms: BPMK928B43
- <u>MIO-control</u> (Multiple Input and Output) is a very innovative method to simultaneously output multiple signals based on multiple pieces of input information. This allows the air conditioner to respond quickly to changes in room conditions and hereby create a comfortable ambience.
- Chargeless piping up to 115m

#### **SPECIFICATIONS**

| RMX-JZ                |                              |         |             |  |
|-----------------------|------------------------------|---------|-------------|--|
| HEAT PUMP             |                              |         | RMX140JZVMB |  |
| Capacity              | apacity cooling              |         | kW          | 14.5   |
|                       | heating                      |         | kW          | 16.5   |
| Nominal input         | cooling                      |         | kW          | 5.0  |
|                       | heating                      |         | kW          | 6.05   |
| Dimensions            | HxWxD                        |         | mm          | 1,345x880x320                                    |
| Weight                |                              |         | kg          | 136  |
| Sound pressure level  | cooling                      |         | dB(A)       | 53   |
|                       | heating                      |         | dB(A)       | 53   |
| Sound power level     |                              | dB(A)   | *           |  |
| Compressor            |                              |         | type        | hermetically sealed scroll type (oval discharge) |
| Refrigerant charge    | R-407C                       |         | kg          | 9.9  |
| Max. piping length    | for 1 room                   |         | mm          | 15   |
|                       | for all rooms                |         | mm          | 115  |
| Max. level difference | between indoors and outdoors |         | mm          | 30   |
|                       | between indoors and BP units |         | mm          | 15   |
| Standard operation    | cooling                      | from~to | °CDB        | -5~46  |
| range                 | heating                      | from~to | °CWB        | -15~15.5   |

<sup>\*</sup> Sound power level was not available at the time of printing

#### **BP-UNIT**

|                          |    | BPMK928B42 | ВРМК928В43 |
|--------------------------|----|------------|------------|
| Connectable indoor units |    | 1~2        | 1~3        |
| Nominal input            | W  | 1          | 0          |
| Dimensions               | mm | 223x4l     | 00x272     |
| Weight                   | kg | 7          | 8          |

#### **ACCESSORIES**

| Central drain plug                      |                  | KKPJ5F180  |
|---|------------------|------------|
| Fixture for preventing overturning      |                  | KPTJ60F160 |
| Wire fixture for preventing overturning |                  | K-KBPA1    |
| Auxiliary piping                        | for front / side | KHFJ5F180F |
|   | for rear         | KHFJ5F180B |
| Refnet joint                            |                  | KHR928A4T7 |

Note: More information about this outdoor unit can be found in the Super Multi Plus catalogue (EPCE01-02) or on the Extranet.

# **6 COMBINATION TABLES**

| R-22<br>COOLING ON | ILY             | FT18GV1B9 | FT18JV1B | AN25AV1B | AN25AV1B9 | FT25GV1B9 | FT25JV1B | AN35AV1B | AN35AV1B9 | FT35GV1B9 | FT35JV1B | FT40GV1B | FT45G(A)V1B |   | FV25D/V1 (2) |       |    | 1 = | FL35G(A)V1NB | FL40G(A)V1NB | FL45G(A)V1NB | FHC35FJ/V1 | FHC35BJV1 | FHC356/VI | FHY C35FJ/VI | FHYG35B7V1 | FHC45FJ7V1 | FHC45BJV1 | FHC45B7V1 | FHYC45FJ7V1 | FHYC45BJV1 | FHYC45B7V1 | FHC60FJ7V1 | FHC60BJV1 | FHC60B/V1 | THI COOLU VI | FHYCOUBJVI | FHYC60B7V1 | FHYC71BIV1 | FHYC71B7V1 | FHYC100FJ7V1 | FHYC100BJV1 | FHYC100B7V1 | FHYC125FJ7V1 | FHYC125B7V1 |
|--------------------|-----------------|-----------|----------|----------|-----------|-----------|----------|----------|-----------|-----------|----------|----------|-------------|---|--------------|-------|----|-----|--------------|--------------|--------------|------------|-----------|-----------|--------------|------------|------------|-----------|-----------|-------------|------------|------------|------------|-----------|-----------|--------------|------------|------------|------------|------------|--------------|-------------|-------------|--------------|-------------|
| RE18G(A)7V1        | RE18GV1B        | Р         | P        |          |           |           |          |          |           |           |          |          |             |   |              |       |    |     |              |              |              |            |           |           |              |            |            |           |           |             |            |            |            |           |           |              |            | $\perp$    |            |            |              |             |             | $\perp$      |             |
| AR25AV1B           |                 |           |          | P        |           |           |          |          |           |           |          |          |             |   |              |       |    |     |              |              |              |            |           |           |              |            |            |           |           |             |            |            |            |           |           |              |            |            |            |            |              |             |             |              |             |
| AR25AV1B9          |                 |           |          |          | P         |           |          |          |           |           |          |          |             |   |              |       |    |     |              |              |              |            |           |           |              |            |            |           |           |             |            |            |            |           |           |              |            |            |            |            |              |             |             |              |             |
| RE25G(A)7V1        | RE25GV1B (2)    |           |          |          |           | P         | P        |          |           |           |          |          |             |   |              |       |    | P   |              |              |              |            |           |           |              |            |            |           |           |             |            |            |            |           |           |              |            |            |            |            |              |             |             |              |             |
| R25DB(DC)7V11      | R25DBV11B       |           |          |          |           | P         | P        |          |           |           |          |          |             |   | P            |       |    | P   |              |              |              |            |           |           |              |            |            |           |           |             |            |            |            |           |           |              |            |            |            |            |              |             |             |              |             |
| AR35AV1B           |                 |           |          |          |           |           |          | Р        |           |           |          |          |             |   |              |       |    |     |              |              |              |            |           |           |              |            |            |           |           |             |            |            |            |           |           |              |            |            |            |            |              |             |             |              |             |
| AR35AV1B9          |                 |           |          |          |           |           |          |          | Р         |           |          |          |             |   | Т            | Т     | Т  |     |              |              |              | Т          | Т         | Т         |              | Т          |            |           | П         |             | Т          |            | Т          | Т         |           | Т            | Т          | Т          | Т          | Т          |              |             |             | Т            |             |
| RE35G(A)7V1        | RE35GV1B (2)    |           |          |          |           |           |          |          |           | Р         | Р        | П        |             |   | Т            |       | Т  |     | Р            |              | Т            | Т          |           | Т         |              |            |            |           |           |             | Т          |            |            | Т         |           | Т            | Τ          | Т          | Т          | Т          |              |             |             | Т            | $\Box$      |
| R35DB(DC)7V11      | R35DBV11B       |           |          |          |           |           |          |          |           | Р         | Р        |          |             |   | F            | •     | Т  |     | Р            |              |              | Р          | P F       | •         |              |            |            |           |           |             | Т          |            |            | Т         |           |              | Т          | Т          | Т          | Т          |              |             | П           | Т            |             |
| RE40G(A)7V1        | RE40GV1B        |           |          |          |           |           |          |          |           |           |          | Р        |             |   | Т            | Т     | Т  |     |              | Р            |              | Т          | Т         | Т         |              | Т          |            |           |           |             | Т          |            |            | Т         |           | Т            | Т          | Т          | Т          | Т          |              |             |             | Т            |             |
| R45DB(DC)7V11/W11  | R45DBV11B,-W11B |           |          |          |           |           |          |          |           |           |          |          | Р           |   | Т            | P     |    |     |              |              | Р            | Т          |           | Т         |              |            | P          | Р         | Р         |             | Т          |            |            | Т         |           |              | Т          | Т          | Т          | Т          |              |             | П           | Т            |             |
| R60F7V1/W1         | R60FA7V1/W1     |           |          |          |           |           |          |          |           |           |          |          |             | Р | Т            |       | P  |     |              |              |              | Т          |           | Т         |              |            |            |           |           |             | Т          |            | P          | P         | P         |              | Т          | Т          | Т          | Т          |              |             | П           | Т            |             |
| R71FJ7V1/W1        |                 |           |          |          |           |           |          |          |           |           |          |          |             |   |              |       |    |     |              |              |              | T          |           | Т         | Г            | T          |            |           |           |             |            |            |            | Т         |           |              | T          | F          | PP         | Р          |              |             |             |              |             |
| R71B7V1/W1         |                 |           |          |          |           |           |          |          |           |           |          |          | Т           |   | Т            | Т     | Т  |     |              |              |              | Т          | Т         | Т         | Г            | T          |            |           | П         |             | Т          |            | Т          | Т         |           | Т            | Т          | F          | PP         | Р          |              |             |             | Т            |             |
| R100FJ7V1/W1       |                 |           |          |          |           |           |          |          |           |           |          |          |             |   | Т            |       | Т  |     |              |              |              | Т          |           | Т         | Г            | T          |            |           |           | Т           | Т          | Т          |            | Т         | 1         | 1            | r i        | T   1      | ГΤ         | Т          | P            | Р           | Р           | Т            |             |
| R100B7V1/W1        |                 |           |          |          |           |           |          |          |           |           |          |          |             |   | Т            |       | Т  |     |              |              |              | Т          |           | Т         | Г            | T          |            |           |           | Т           | Т          | Т          |            | Т         | 1         | 1            | r i        | T   1      | Т          | Т          | P            | Р           | Р           | Т            |             |
| R125FJ7W1          |                 |           |          |          |           |           |          |          |           |           |          |          |             |   | Т            |       | Т  |     |              |              |              | Т          |           | Т         |              |            |            |           |           | Т           | Т          | Т          |            | Т         | 1         | 1            | r i        | F 7        | Т          | Т          |              |             |             | P            | P           |
| R125B7W1           |                 |           |          |          |           |           |          |          |           |           |          |          | П           |   | Т            |       |    |     |              |              |              | Т          |           | Т         | T            | T          |            |           |           | Т           | Т          | т          |            | Т         | 1         | 1            | r i        | r   7      | Т          | T          |              |             |             | P            | P           |
| R200F7W1           |                 |           |          |          |           |           |          |          |           |           |          | П        |             |   | Т            |       | Т  |     |              |              | Т            | Т          |           | Т         | T            | T          |            |           |           | т           | т          | т          |            | Т         | 1         | 1            | r i        | r 7        | Т          | T          | Т            | Т           | T           | T   1        | ГΤ          |
| R250F7W1           |                 |           |          |          |           |           |          |          |           |           |          |          |             |   | Т            | Т     | Т  |     |              |              |              | Т          | Т         | Т         |              | Т          |            |           | П         | Т           | Т          | т          | Т          | Т         | 1         | 1            | r i        | F   7      | Т          | T          | Т            | Т           | T           | T   1        | ГΤ          |
| MAE25G(A)7V1       |                 | М         | М        |          |           |           |          |          |           |           |          |          |             |   |              |       |    | М   |              |              |              |            |           |           |              |            |            |           |           |             |            |            |            |           |           |              | T          | Т          |            |            |              |             |             |              |             |
| AMA32A7V1N9        |                 |           |          |          | M         |           |          |          | м         |           | П        | П        | П           |   | Т            | Т     |    |     |              | П            | Т            | Т          | Т         | Т         |              | П          |            |           | П         |             | Т          |            |            | Т         |           | Τ            | Τ          | Т          | Т          | П          |              |             |             | Т            |             |
| MAE32G(A)7V1       |                 | М         | М        | М        |           |           |          | M        |           | М         | м        |          | Т           |   | Т            |       | Т  | М   | М            | П            | Т            | Т          | Т         | Т         |              | Т          |            |           | П         |             | Т          |            |            | Т         |           | Т            | Т          | Т          | Т          | Т          |              |             |             | Т            |             |
| MA45D(A)7V1        |                 | М         | М        |          |           | М         | М        |          |           | М         | м        | М        | Т           | r | N N          | /1    | Т  | М   | M            | П            |              | VI I       | M N       | /         |              | Т          |            |           | П         |             | Т          |            |            | Т         |           | Т            | Т          | Т          | Т          | Т          |              |             |             | Т            |             |
| MA56DA(DB)7V1/V11  | /W1/W11         |           |          |          |           | М         | M        |          |           | М         | M        | М        | M           | P | VI N         | /I IV | 1  | M   | М            |              | М            | VI I       | M N       | /         |              |            | M          | M         | M         |             |            |            |            |           |           |              |            |            |            |            |              |             |             |              |             |
| MA90CK7V1/W1/W11   | I MA90CKV1/Y1   |           |          |          |           | М         | м        |          |           | М         | М        | м        | М           | M | VI N         | / N   | ıM | M   | М            |              | М            | VI I       | M N       | /         |              |            | M          | м         | М         |             | Т          |            | M I        | VI I      | VI        |              | T          | Т          | Т          | П          |              |             |             | Т            |             |

| R-22<br>COOLING ON | NLY             | FH35FJ7V1 | FHY35FJ7V1 | FH35BJV1 | FHY35BJV1 | FH45FJ7V1 | FHY45FJ7V1 | FH45BJV1 | FHY45BJV1 | FH60FJ/V1 | FH60BJV1 | FHY60BJV1 | FH71FJ7V1 | FHY71BJV1 | FH100FJ7V1 | FHY100BJV1 | FH125FJ7V1 | FHY125BJV1 | FHK35FJV18 | FHK45FJV18 | FHYK45FJV18 | FHK60FJV18 | FHYK60FJV18 | FHYK/1FJV18 | FHEB25B7V1 | FHEB25GZ7V1 | FHB3 5FJ(FK)7V1 | FHYB35FJ(FK)7V1 | FHB45FJ(FK)7V1 | FHYB45FJ(FK)7V1 | FHB60FJ(FK)7V1 | FHYB71FK7V1 | FHYB100FK7V1 | FHYB125FK7V1 | FUY71FJV1 | FUY100FJV1 | FUY125FJV1 | FAY71FJV19 | FAY100FJV19 | FDY125F7V1 | FDY125B7V1 | FDY200F/V1 | FDY250F7V1 | FDY250B7V1 |
|--------------------|-----------------|-----------|------------|----------|-----------|-----------|------------|----------|-----------|-----------|----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-------------|------------|-------------|-------------|------------|-------------|-----------------|-----------------|----------------|-----------------|----------------|-------------|--------------|--------------|-----------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|
| RE18G(A)7V1        | RE18GV1B        |           |            |          |           |           |            |          |           |           |          |           |           |           |            |            |            | 4          |            |            |             |            | 4           | 1           | •          |             |                 |                 |                | 4               |                |             |              |              |           |            |            |            |             |            |            |            | $\perp$    |            |
| AR25AV1B           |                 | Ш         |            | _        |           |           | _          | _        | _         | _         | _        |           | Ш         |           | _          | _          | 4          | 4          | _          | _          |             | _          | 4           | 4           | _          | L           |                 | _               | _              | 4               | _              | _           | _            |              |           | Ш          |            |            |             |            | _          | _          | 4          | L          |
| AR25AV1B9          |                 |           |            |          |           |           |            | 4        | _         |           |          |           | Ш         |           |            | _          | 4          | 4          |            |            |             | _          | 4           | 4           | _          |             |                 | _               |                |                 |                | $\perp$     |              |              |           | Ш          |            |            |             |            | 4          |            | ┸          | L          |
| RE25G(A)7V1        | RE25GV1B (2)    | Ш         |            |          |           |           |            | 4        | _         |           |          |           |           |           |            | _          |            | _          | _          |            | Ш           | _          | 4           | 4           | P          | P           |                 | _               |                |                 | _              | ┸           |              |              |           | Ш          |            |            |             |            | _          |            | ┸          | L          |
| R25DB(DC)7V11      | R25DBV11B       | Ш         |            |          |           |           |            | _        | _         |           |          |           |           |           | _          | _          | _          | _          |            |            |             | _          | _           | 4           | P          | P           |                 | _               |                |                 |                | $\perp$     |              |              |           |            |            |            |             | _          | _          |            | $\perp$    |            |
| AR35AV1B           |                 | Ш         |            |          |           |           |            |          |           |           |          |           | Ш         |           |            |            |            |            |            |            |             |            |             | _           |            |             | Ш               |                 |                |                 |                |             |              |              |           | Ш          |            |            |             |            |            |            | ┸          |            |
| AR35AV1B9          |                 | Ш         |            |          |           |           |            |          |           |           |          |           |           |           |            |            |            | _          |            |            |             |            |             | _           |            |             | Ш               |                 |                |                 |                | $\perp$     |              |              |           |            |            |            |             |            |            |            | $\perp$    |            |
| RE35G(A)7V1        | RE35GV1B (2)    |           |            |          |           |           |            |          |           |           |          |           |           |           |            |            |            |            |            |            |             |            |             |             |            |             |                 |                 |                |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| R35DB(DC)7V11      | R35DBV11B       | P         |            | Р        |           |           |            |          |           |           |          |           |           |           |            |            |            |            | P          |            |             |            |             |             |            |             | P               |                 |                |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| RE40G(A)7V1        | RE40GV1B        |           |            |          |           |           |            |          |           |           |          |           |           |           |            |            |            |            |            |            |             |            |             |             |            |             |                 |                 |                |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| R45DB(DC)7V11/W11  | R45DBV11B,-W11B |           |            |          |           | Р         | _          | Р        |           |           |          |           |           |           |            |            |            |            |            | P          |             |            |             |             |            |             |                 |                 | P              |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| R60F7V1/W1         | R60FA7V1/W1     |           |            |          |           |           |            |          |           | P         | P        |           |           |           |            |            |            |            |            |            |             | Р          |             |             |            |             |                 |                 |                |                 | P              |             |              |              |           |            |            |            |             |            |            |            |            |            |
| R71FJ7V1/W1        |                 |           | Т          |          | Т         |           |            |          |           |           |          |           | P         | P         |            |            |            |            | 1          | Г          |             |            |             | P           |            |             |                 | Т               |                |                 |                | P           |              |              | P         |            |            | Р          |             |            |            |            | $\perp$    |            |
| R71B7V1/W1         |                 |           | Т          |          | Т         |           |            |          |           |           |          |           | Р         | Р         |            |            |            |            | 1          | Г          |             |            |             | P           |            |             |                 | Т               |                |                 |                | P           |              |              | P         |            |            | Р          |             |            |            |            |            |            |
| R100FJ7V1/W1       |                 |           | Т          |          | Т         |           | T          |          | T         | 1         |          | Т         | Т         | Т         | Р          | P          |            |            | 1          | Г          | Т           |            | Т           | Т           |            |             |                 | Т               |                | Т               | 1              | T           | P            |              | Т         | P          |            | Т          | Р           |            |            |            |            |            |
| R100B7V1/W1        |                 |           | Т          |          | Т         |           | T          |          | Т         | 1         |          | T         | Т         | Т         | P          | P          |            |            | _ 1        | Г          | Т           |            | T T         | Т           |            |             |                 | Т               |                | Т               | 1              | T           | P            |              | Т         | P          |            | Т          | P           |            |            |            |            |            |
| R125FJ7W1          |                 |           |            |          |           |           | T          |          | T         | 1         |          | T         | Т         | Т         |            |            | P          | P          |            |            | Т           |            | T           | Т           |            |             |                 |                 |                | Т               | 1              | T           |              | P            | Т         |            | Р          | Т          |             | Р          | P          |            |            |            |
| R125B7W1           |                 |           |            |          | Т         |           | T          | _   -    | Т         | 1         |          | T         | Т         | Т         |            |            | Р          | P          | 1          | Г          | Т           |            | T   1       | т           |            |             |                 | Т               |                | Т               | 1              | T           |              | P            | Т         |            | P          | Т          |             | Р          | P          |            |            |            |
| R200F7W1           |                 |           |            |          | Т         |           | T          |          | Т         | 1         |          | T         | Т         | Т         | Т          | Т          | Т          | Т          | 1          | Г          | Т           |            | т 🗀         | т           |            |             |                 | Т               |                | Т               | 1              | T           | T            | T            | Т         | Т          | Т          | Т          | Т           | Т          | T I        | PF         | )          |            |
| R250F7W1           |                 |           |            |          |           |           | Т          | -        | Т         | 1         |          | T         | Т         | Т         | Т          | Т          | Т          | Т          |            |            | Т           |            | т 🗀         | т           |            |             |                 |                 |                | Т               | 1              | T           | T            | T            | Т         | Т          | Т          | Т          | Т           | Т          | Т          |            | P          | P          |
| MAE25G(A)7V1       |                 |           |            |          |           |           |            |          |           |           |          |           |           |           |            |            |            |            |            |            |             |            |             | I           | /1         |             |                 |                 |                |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| AMA32A7V1N9        |                 |           |            |          |           |           |            |          |           |           |          |           |           |           |            |            |            |            |            |            |             |            |             |             |            |             |                 |                 |                |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| MAE32G(A)7V1       |                 |           |            |          |           |           |            |          |           |           |          |           |           |           |            |            |            |            |            |            |             |            |             | N           | /1         |             |                 |                 |                |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| MA45D(A)7V1        |                 | М         |            | М        |           |           |            |          |           |           |          |           |           |           |            |            |            |            | VI         |            |             |            |             |             | M          | M           | M               |                 |                |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| MA56DA(DB)7V1/V11  | /W1/W11         | M         |            | M        |           | M         | I          | VI       |           |           |          |           |           |           |            |            |            |            | VI         | M          |             |            |             |             | M          | M           | M               |                 | M              |                 |                |             |              |              |           |            |            |            |             |            |            |            |            |            |
| MA90CK7V1/W1/W1    | 1 MA90CKV1/Y1   | М         |            | М        |           | М         | 1          | VI       | N         | VI        | M        |           |           |           |            |            |            |            | VI         | M          |             | M          |             |             | M          | M           | M               |                 | M              |                 | VI             |             |              |              |           |            |            |            |             |            |            |            |            |            |

| R-22,<br>INVERTER CONTROLLED<br>COOLING ONLY | FTK25HV1NB | FTK25J(A)V1NB | FTK35HV1NB | FTK35J(A)V1NB | FTK50HV1NB | FTK60HV1NB | CDK25H(A)V1NB(8) | CDK35H(A)V1NB(8) | CDK50H(A)V1NB(8) | CDK60H(A)V1NB(8) | FVK25KZV1B (**) | FVK3 5KZV1B (**) | FTKD25KZV1B (***) | FTKD35KZV1B (***) |
|--|------------|---------------|------------|---------------|------------|------------|------------------|------------------|------------------|------------------|-----------------|------------------|-------------------|-------------------|
| RK25HV1NB                                    | Р          |               |            |               |            |            |                  |                  |                  |                  |                 |                  |                   |                   |
| RK25JV1NB(9)                                 |            | P             |            |               |            |            |                  |                  |                  |                  |                 |                  |                   |                   |
| RK35HV1NB                                    |            |               | P          |               |            |            |                  |                  |                  |                  |                 |                  |                   |                   |
| RK35JV1NB(9)                                 |            |               |            | P             |            |            |                  |                  |                  |                  |                 |                  |                   |                   |
| 4MK90HV1NB                                   | M          | M             | M          | M             | M          | M          | M                | М                | M                | M                | M               | M                | M                 | М                 |

| R-407C<br>COOLING ONLY         | FT25GZV1NB | FT25JZV1NB | FT35GZV1NB | FT35JZV1 NB | FT45G(A)ZV1NB | FT60GZV1NB | FL25GZV1NB | FL35GZV1NB | FL45GZV1NB | FHC35GZ7V1 | FHC35BZV1 | FHC35BZ7V1 | HYC35KZV1 | FHYC35BZV1 | FHYC35BZ7V1 | FHYCP35B7V1 | FHC45GZ7V1 | FHC45BZV1 | FHC45BZ7V1 | HYC45KZV1 | HYC45BZV1 | FHYC45BZ7V1 | FHYCP45B7V1 | FHC60BZ7V1 | FHYCP60B7V1 | FHYC71KZV1 | FHYC71BZV1 | FHYCP71B7V1 | FHYC100KZV1 | FHYC100BZV1 | FHYCP100B7V1 | FHYC125KZV1 | FHYC125BZV1 | FHYCP125B7V1 |
|--------------------------------|------------|------------|------------|-------------|---------------|------------|------------|------------|------------|------------|-----------|------------|-----------|------------|-------------|-------------|------------|-----------|------------|-----------|-----------|-------------|-------------|------------|-------------|------------|------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------|
| R25EZ7V11 R25EAZ7V1 R25GZ7V11  | P          | P          |            |             |               |            | Р          |            |            |            |           |            |           |            |             |             |            |           |            |           |           |             |             |            |             |            |            |             |             |             |              |             |             |              |
| R35EZ7V11 R35EAZ7V11 R35GZ7V11 |            |            | P          | P           |               |            |            | P          |            | Р          | P         | P          |           |            |             |             |            |           |            |           |           |             |             |            |             |            |            |             |             |             |              |             |             |              |
| R45E(A)Z7V11/W11 R45GZ7V11/W11 |            |            |            |             | P             |            |            |            | P          |            |           |            |           |            |             |             | Р          | P         | P          |           |           |             |             |            |             |            |            |             |             |             |              |             |             |              |
| R60GZ7W1                       |            |            |            |             |               | P          |            |            |            |            |           |            |           |            |             |             |            |           |            |           |           |             |             | P          |             |            |            |             |             |             |              |             |             |              |
| R71GZ7V1/W1/T1                 |            |            |            |             |               |            |            |            |            |            |           |            | Т         | Т          | Т           |             |            |           |            |           |           |             |             |            |             | Р          | P          |             |             |             |              |             |             |              |
| RP71B7V1/W1/T1                 |            |            |            |             |               |            |            |            |            |            |           |            |           |            |             | Т           |            |           |            |           |           |             |             |            |             |            |            | P           |             |             |              |             |             |              |
| R100GZ7V1/W1/T1                |            |            |            |             |               |            |            |            |            |            |           |            | Т         | Т          | Т           |             |            |           |            | Т         | Т         | Т           |             |            |             | Т          | Т          |             | P           | Р           |              |             |             |              |
| RP100B7V1/W1/T1                |            |            |            |             |               |            |            |            |            |            |           |            |           |            |             | Т           |            |           |            |           |           |             | Т           |            | Т           |            |            | Т           |             |             | Р            |             |             |              |
| R125GZ7W1/T1                   |            |            |            |             |               |            |            |            |            |            |           |            | Т         | Т          | Т           |             |            |           |            | Т         | Т         | Т           |             |            |             | Т          | Т          |             |             |             |              | Р           | Р           |              |
| RP125B7W1/T1                   |            |            |            |             |               |            |            |            |            |            |           |            |           |            |             | Т           |            |           |            |           |           |             | Т           |            | Т           |            |            | Т           |             |             |              |             |             | P            |
| RP200B7W1                      |            |            |            |             |               |            |            |            |            |            |           |            |           |            |             | Т           |            |           |            |           |           |             | Т           |            | Т           |            |            | Т           |             |             | Т            |             |             | Т            |
| RP250B7W1                      |            |            |            |             |               |            |            |            |            |            |           |            |           |            |             |             |            |           |            |           |           |             | Т           |            | Т           |            |            | Т           |             |             | Т            |             | П           | Т            |
| MA56GZ7W11                     | M          | М          | М          | М           | M             |            | M          | M          | M          | M          | M         | M          |           |            |             |             | M          | M         | M          |           |           |             |             |            |             |            |            |             |             |             |              |             |             |              |
| MA90GZ7W11                     | M          | М          | М          | M           | M             | M          | М          | М          | М          | М          | M         | М          |           |            |             |             | M          | M         | М          |           |           |             |             | M          |             |            |            |             |             |             |              |             |             |              |

| R-407C<br>COOLING ONLY         | FH35GZ7V1 | FHY35GZ7V1 | FH35BZV1 | FHYF336VI | FHY45GZ7V1 | FH45BZV1 | FHYP45BV1 | FH60BZV1 | H71GZ7V1 | FHYP71BV1 | FH100GZ7V1 | FHYP100BV1 | H125GZ7V1 | FHYP125BV1 | FHYKP35BV1 | FHK45BZV1 | FHYKP45BV1 | FHK60BZV1 | FHYKP60BV1 | FHYKP71BV1 | HEB25GZ7V1 |   | HYB35GZ7V1 | FHR45G77V1 | FHYB45GZ7V1 | FHYBP45B7V1 | FHYBP60B7V1 | HYB71GZ7V1 | HYBP71B7V1 | FHYB100GZ7V1 | FHYBP100B7V1 | HYB125GZ/V1 | FAYP71BV1 | FAYP100BV1 | FUYP71BV1 | FUYP100BV1 | FUYP125BV1 | FDYP125B7V1 |        | FDYP250B7V1 |
|--------------------------------|-----------|------------|----------|-----------|------------|----------|-----------|----------|----------|-----------|------------|------------|-----------|------------|------------|-----------|------------|-----------|------------|------------|------------|---|------------|------------|-------------|-------------|-------------|------------|------------|--------------|--------------|-------------|-----------|------------|-----------|------------|------------|-------------|--------|-------------|
| R25EZ7V11 R25EAZ7V1 R25GZ7V11  |           |            |          |           |            |          |           |          |          |           |            |            |           |            |            |           |            |           |            |            | P          |   |            |            |             |             |             |            |            |              |              |             |           |            |           |            |            |             |        |             |
| R35EZ7V11 R35EAZ7V11 R35GZ7V11 | P         |            | P        |           |            |          |           |          |          |           |            |            |           | P          |            |           |            |           |            |            |            | P |            |            |             |             |             |            |            |              |              |             |           |            |           |            |            |             |        |             |
| R45E(A)Z7V11/W11 R45GZ7V11/W11 |           |            |          | P         |            | P        |           |          |          |           |            |            |           |            |            | P         |            |           |            |            |            |   |            | P          |             |             |             |            |            |              |              |             |           |            |           |            |            |             |        |             |
| R60GZ7W1                       |           |            |          | Т         |            |          |           | Р        |          |           |            |            |           |            |            |           |            | Р         |            |            |            |   |            | Т          |             |             |             |            |            |              |              |             |           |            |           |            |            |             |        |             |
| R71GZ7V1/W1/T1                 |           | Т          |          | Т         |            |          |           |          | P        |           |            |            |           |            |            |           |            |           |            | П          |            | 1 | T          | Т          |             |             |             | Р          |            |              |              |             | П         |            |           |            |            |             | Т      | П           |
| RP71B7V1/W1/T1                 |           |            | 1        | г         |            | П        |           |          |          | Р         |            |            |           |            | T          |           |            |           |            | Р          |            | Т | 1          | -          | Т           |             |             |            | Р          | П            |              |             | P         | Г          | Р         |            |            |             | Т      |             |
| R100GZ7V1/W1/T1                |           | Т          |          | Т         | T          |          |           |          | T        |           | Р          |            |           |            |            |           |            |           |            |            |            | 1 | Т          | Т          | T           |             |             | Т          |            | Р            |              |             |           | Г          |           |            |            |             | Т      | Т           |
| RP100B7V1/W1/T1                |           |            | 1        | г         |            |          | Т         | T        |          | Т         |            | Р          |           |            | Т          |           | Т          |           | Т          | т          |            |   | 1          | П          |             | Т           | Т           |            | Т          |              | Р            |             | T         | Р          | Т         | Р          |            |             | П      | Π           |
| R125GZ7W1/T1                   |           | Т          |          | Т         | T          |          |           |          | T        |           |            |            | Р         |            |            |           |            |           |            |            |            |   | Т          |            | T           |             |             | Т          |            |              |              | P           |           | Г          |           |            |            |             | П      |             |
| RP125B7W1/T1                   |           |            | 1        | г         |            |          | Т         | T        |          | Т         |            |            |           | Р          | Т          |           | Т          |           | Т          | Т          |            |   | 1          | -          |             | Т           | Т           |            | Т          |              |              | F           | Т         | Г          | Т         |            | Р          | Р           | Т      | П           |
| RP200B7W1                      |           |            | 1        | г         |            |          | Т         | T        |          | Т         |            |            | 1         | Т          | Т          |           | Т          |           | Т          | Т          |            |   | 1          | F          |             | Т           | Т           |            | Т          |              | Т            | 1           | Т         | Т          | Т         | Т          | Т          | Т           | Р      |             |
| RP250B7W1                      |           |            |          | Т         |            |          | Т         | T        |          | Т         |            |            | 1         | Т          | T          |           | Т          |           | Т          | Т          |            |   |            |            |             | Т           | Т           |            | Т          |              | Т            | 1           | T         | Т          | Т         | Т          | Т          | Т           | $\top$ | P           |
| MA56GZ7W11                     | м         |            | м        | IV        | 1          | М        |           |          |          |           |            |            | T         | N          | 1          | М         |            |           |            |            | М          | м |            | IV         | 1           |             |             |            |            |              |              |             |           |            |           |            |            |             | T      | Τ           |
| MA90GZ7W11                     | м         |            | М        | IV        | 1          | М        |           | м        |          |           |            |            |           | IV         | 1          | М         |            | м         |            |            | М          | м |            | IV         | 1           |             |             |            |            |              |              |             |           |            |           |            |            |             | $\top$ |             |

| R-407C,<br>INVERTER CONTROLLED<br>COOLING ONLY | FTKD25KZV1B | FTK25AZVMB | FTKD35KZV1B | FTK35AZVMB | FTK50AZVMB | FTK60AZVMB | CDK25AZVMB | CDK35AZVMB | CDK50AZVMB | CDK60AZVMB | FLK25AZVMB | FLK35AZVIMB | FLK50AZV/MB | FLK60AZVIMB | FVK25KZV1B | FVK35KZV1B |
|--|-------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|------------|------------|
| RKD25KZV1B                                     | P           |            |             |            |            |            |            |            |            |            |            |             |             |             | P          |            |
| RKD35KZV1B                                     |             |            | P           |            |            |            |            |            |            |            |            |             |             |             |            | P          |
| 4MK58AZVMB                                     |             | M          |             | M          | M          |            | M          | M          | М          |            | M          | M           | M           |             |            |            |
| 4MK75AZVMB                                     |             | M          |             | M          | M          | M          | М          | M          | M          | M          | M          | M           | M           | M           |            |            |
| 4MK90AZVMB                                     |             | М          |             | M          | M          | M          | м          | M          | м          | M          | М          | м           | М           | м           |            |            |

| R-22<br>HEAT PUMP              | FTY18GV1B9 | FTY18JV1B | ANY22A7V1NB (2) | ANY22A7V1NS (2) | ANY22A7V1N9 (2) | FTY22GV1B9 | FTY22JV1B | ANY35A7V1NB (2) | ANY35A7V1NS (2) | ANY35A7V1N9 (2) | FTY35GV1B9 | FTY35JV1B | FTY40GV1B | FTY45G(A)V1B |   | FVY223D7V1 (2) | FVY353D7V1 (2) | ~I ` | ECVY223D7V1 (2) |     | FLY22G(A)V1NB | FLY35G(A)V1NB | FLY40G(A)V1NB | FLY45G(A)V1NB | FHYC35FJ7V1 | HYC35BJV1 | THY CAEFIZY | FHYC45R1V1 | FHYC45B7V1 | FHYC60FJ7V1 | FHYC60BJV1 | FHYC60B7V1 | FHYC71 FJ7V1 | FHYC71 BIV1 | FHYC71B7V1 | FHYC71 KVE | FHYC100FJ7V1 | FHYC100BJV1 | FHYC100B7V1 | FHYC125FJ7V1 | FHYC125BJV1 |
|--------------------------------|------------|-----------|-----------------|-----------------|-----------------|------------|-----------|-----------------|-----------------|-----------------|------------|-----------|-----------|--------------|---|----------------|----------------|------|-----------------|-----|---------------|---------------|---------------|---------------|-------------|-----------|-------------|------------|------------|-------------|------------|------------|--------------|-------------|------------|------------|--------------|-------------|-------------|--------------|-------------|
| REY18G7V1 REY18GA7V1 REY18GV1B | P          | P         |                 |                 |                 |            |           |                 |                 |                 |            |           |           |              |   |                |                | I    |                 |     |               |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| ARY22A7V1NB (2)                |            |           | P               |                 |                 |            |           |                 |                 |                 |            |           |           |              |   |                |                |      |                 |     |               |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| ARY22A7V1NS (2)                |            |           |                 | P               |                 |            |           |                 |                 |                 |            |           |           |              |   |                |                |      |                 |     |               |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| ARY22A7V1N9 (2)                |            |           |                 |                 | P               |            |           |                 |                 |                 |            |           |           |              |   |                |                |      |                 |     |               |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| REY22G7V1 REY22GA7V1 REY22GV1B |            |           |                 |                 |                 | Р          | P         |                 |                 |                 |            |           |           |              |   |                |                |      |                 |     | P             |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| RY22DA7V19 RY22DB7V1 RY22DAV1B |            |           |                 |                 |                 | Р          | P         |                 |                 |                 |            |           |           |              |   | P              |                |      |                 |     | P             |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| ARY35A7V1NB (2)                |            |           |                 |                 |                 |            |           | P               |                 |                 |            |           |           |              |   |                |                |      |                 |     |               |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| ARY35A7V1NS (2)                |            |           |                 |                 |                 |            |           |                 | Р               |                 |            |           |           |              |   |                |                |      |                 |     |               |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| ARY35AA7V1NB (2)               |            |           |                 |                 |                 |            |           | Р               |                 |                 |            |           |           |              |   |                |                | Т    |                 | Т   |               |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| ARY35AA7V1N9 (2)               |            |           |                 |                 |                 |            |           |                 |                 | Р               |            |           |           |              |   |                |                |      |                 |     |               |               |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| REY35G7V1 REY35GA7V1 REY35GV1B |            |           |                 |                 |                 |            |           |                 |                 |                 | Р          | P         | Τ         |              |   |                |                | Т    |                 | Т   |               | P             |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             | $\Box$      |              |             |
| RY35D7V1 RY35DA7V1             |            |           |                 |                 |                 |            |           |                 |                 |                 | P          | Р         | Т         |              |   |                | Р              |      |                 | П   |               | P             |               |               | Р           | PF        |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| REY40G7V1 REY40GA7V1           |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           | Р         |              |   |                |                |      |                 |     |               |               | P             |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| RY45DA7V1 RY45DB7V1            |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           |           | P            |   |                |                | P    |                 |     |               |               |               | Р             |             |           | F           | P          | P          |             |            |            |              |             |            |            |              |             |             |              |             |
| RY60F7V1 RY60FA7V1             |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           |           |              | Р |                |                |      |                 |     |               |               |               |               |             |           |             |            |            | P           | P          | P          |              |             |            |            |              |             |             |              |             |
| RY71FJ7V1/W1                   |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           | Т         |              |   |                |                | Т    |                 | Т   |               |               |               |               | T           | T   1     | Т           | Т          | Т          |             |            |            | Р            | Р           | Р          |            |              |             | $\Box$      | Т            | Т           |
| RY71B7V1/W1                    |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           |           |              |   |                |                |      |                 |     |               |               |               |               | T           | T   1     | Т           |            |            |             |            |            | P            | Р           | Р          |            |              |             |             |              |             |
| RY100FJ7V1/W1                  |            |           |                 |                 |                 |            |           |                 |                 |                 | П          |           | Т         | Т            |   | Т              |                | Т    |                 | Т   |               |               |               |               | T           | T   1     | Т           | Т          | Т          | Т           | T          | Т          | Т            | Т           | Т          | П          | Р            | Р           | Р           | Т            | Т           |
| RY100B7V1/W1                   |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           |           |              |   |                |                |      |                 |     |               |               |               |               | T           | T   1     | ī           | T          | T          | T           | T          | T          | Т            | Т           | Т          |            | Р            | Р           | Р           |              |             |
| RY125FJ7W1                     |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           | Т         | Т            |   |                |                |      |                 | Т   |               |               |               |               | Т           |           | 1           | T          | T          | T           | T          | Т          | Т            | Т           | Т          |            |              |             | П           | P            | PΙ          |
| RY125B7W1                      |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           | Т         | Т            |   | Т              |                | Т    |                 | Т   |               |               |               |               |             | T   1     | 1           | Т          | Т          | T           | T          | Т          | Т            | Т           | Т          | П          | П            |             | П           | P            | P           |
| RY200F7W1                      |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           |           |              |   |                |                | T    |                 |     |               |               |               |               |             | T   1     | ī           | Т          | Т          | Т           | Т          | Т          | Т            | Т           | Т          |            | Т            | Т           | Т           | T            | T           |
| RY250F7W1                      |            |           |                 |                 |                 |            |           |                 |                 |                 |            |           |           |              |   |                |                |      |                 |     |               |               |               |               |             |           | 1           | Г          | T          | T           | T          | T          | Т            | Т           | Т          |            | Т            | Т           | T           | T            | T           |
| MEY32G7V1 MEY32GA7V1           | M          | M         |                 |                 |                 |            |           |                 |                 |                 | М          | М         | T         |              |   |                |                | T    |                 |     | M             | M             |               |               |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| MY56D7V1 MY56DA7V1             |            |           |                 |                 |                 | М          | М         |                 |                 |                 | М          | М         | VI I      | VI           |   |                |                | ı    | VI N            | 1 1 | M             | M             |               | М             |             |           |             |            |            |             |            |            |              |             |            |            |              |             |             |              |             |
| MY90CJ7V1/W1                   |            |           |                 |                 |                 | М          | М         |                 |                 |                 | М          | М         | VI I      | M            |   | Т              |                | F    | M N             | 1 1 | M             | M             |               | М             | Т           |           | Т           |            | T          |             |            |            |              |             |            |            |              |             | $\Box$      |              |             |

|                                |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              | _            |             |             |             |             |           |            |            |            |             |            |            |            |            |            | _          |
|--------------------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|-------------|------------|-------------|------------|----------------|----------------|-----------------|-----------------|-----------------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|-----------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| R-22<br>HEAT PUMP              | FHY35FJ7V1 | FHY35BJV1 | FHY45FJ7V1 | FHY45BJV1 | FHY60FJ7V1 | FHY60BJV1 | FHY71FJ7V1 | FHY71BJV1 | FHY100FJ7V1 | FHY100BJV1 | FHY125FJ7V1 | FHY125BJV1 | FHEYB18B(A)7V1 | FHEYB22B(A)7V1 | FHYB35FJ(FK)7V1 | FHYB45FJ(FK)7V1 | FHYB60FJ(FK)7V1 | FHYB71FK7V1 | FHYB71FV1-9 | FHYB100FK7V1 | FHYB125FK7V1 | FHYK35FJV18 | FHYK45FJV18 | FHYK60FJV18 | FHYK71FJV18 | FUY71FJV1 | FUY100FJV1 | FUY125FJV1 | FAY71FJV19 | FAY100FJV19 | FDY125F7V1 | FDY125B7V1 | FDY200F7V1 | FDY200B7V1 | FDY250F7V1 | FDY25087V1 |
| REY18G7V1 REY18GA7V1 REY18GV1B |            |           |            |           |            |           |            |           |             |            |             |            | Р              |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| ARY22A7V1NB (2)                |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| ARY22A7V1NS (2)                |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| ARY22A7V1N9 (2)                |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| REY22G7V1 REY22GA7V1 REY22GV1B |            |           |            |           |            |           |            |           |             |            |             |            |                | P              |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| RY22DA7V19 RY22DB7V1 RY22DAV1B |            |           |            |           |            |           |            |           |             |            |             |            |                | P              |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| ARY35A7V1NB (2)                |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| ARY35A7V1NS (2)                |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| ARY35AA7V1NB (2)               |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| ARY35AA7V1N9 (2)               |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| REY35G7V1 REY35GA7V1 REY35GV1B |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| RY35D7V1 RY35DA7V1             | P          | P         |            |           |            |           |            |           |             |            |             |            |                |                | P               |                 |                 |             |             |              |              | P           |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| REY40G7V1 REY40GA7V1           |            |           |            |           |            |           |            |           |             |            |             |            |                |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| RY45DA7V1 RY45DB7V1            |            |           | P          | P         |            |           |            |           |             |            |             |            |                |                |                 | P               |                 |             |             |              |              |             | P           |             |             |           |            |            |            |             |            |            |            |            |            |            |
| RY60F7V1 RY60FA7V1             |            |           |            |           | P          | P         |            |           |             |            |             |            |                |                |                 |                 | P               |             |             |              |              |             |             | Р           |             |           |            |            |            |             |            |            |            |            |            |            |
| RY71FJ7V1/W1                   | T          | Т         |            |           |            |           | P          | P         |             |            |             |            |                |                | Т               |                 |                 | P           |             |              |              | Т           |             |             | Р           | Р         |            |            | P          |             |            |            |            |            |            |            |
| RY71B7V1/W1                    | T          | T         |            |           |            |           | P          | P         |             |            |             |            |                |                | Т               |                 |                 | P           |             |              |              | Т           |             |             | Р           | Р         |            |            | P          |             |            |            |            |            |            |            |
| RY100FJ7V1/W1                  | T          | T         | T          | T         | T          | T         | T          | Т         | P           | Р          |             |            |                |                | Т               | T               | Т               | Т           |             | P            |              | Т           | Т           | Т           | Т           | Т         | Р          |            | Т          | Р           |            |            |            |            |            |            |
| RY100B7V1/W1                   | T          | T         | T          | Т         | T          | T         | T          | Т         | P           | Р          |             |            |                |                | Т               | T               | Т               | Т           |             | P            |              | Т           | Т           | Т           | Т           | Т         | Р          |            | Т          | Р           |            |            |            |            |            |            |
| RY125FJ7W1                     |            |           | T          | Т         | Т          | Т         | Т          | Т         |             |            | P           | P          |                |                |                 | T               | Т               | Т           |             |              | Р            |             | Т           | Т           | Т           | Т         |            | P          | Т          |             | P          | P          |            |            |            |            |
| RY125B7W1                      |            | Т         | T          | T         | T          | Т         | Т          | Т         |             |            | P           | P          |                |                | Т               | T               | Т               | Т           |             |              | Р            | Т           | Т           | Т           | Т           | Т         |            | P          | T          |             | P          | P          |            |            |            |            |
| RY200F7W1                      |            | Т         | Т          | Т         | Т          | Т         | Т          | Т         | Т           | т          | Т           | Т          |                |                | Т               | Т               | Т               | Т           |             | Т            | Т            | Т           | Т           | Т           | Т           | Т         | Т          | Т          | Т          | Т           | Т          | Т          | P          | P          |            |            |
| RY250F7W1                      |            |           | T          | Т         | T          | Т         | T          | Т         | Т           | Т          | T           | Т          |                |                |                 | T               | Т               | T           |             | Т            | Т            |             | Т           | Т           | Т           | Т         | Т          | Т          | Т          | Т           | T          | T          |            |            | P          | P          |
| MEY32G7V1 MEY32GA7V1           |            |           |            |           |            |           |            |           |             |            |             |            | M              |                |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| MY56D7V1 MY56DA7V1             |            |           |            |           |            |           |            |           |             |            |             |            |                | M              |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |
| MY90CJ7V1/W1                   |            |           |            |           |            |           |            |           |             |            |             |            |                | M              |                 |                 |                 |             |             |              |              |             |             |             |             |           |            |            |            |             |            |            |            |            |            |            |

| R-22,<br>INVERTER CONTROLLED<br>HEAT PUMP | FTX2 5HV1NB(9) | FTX25J(A)V1NB | CTX25GV1NB9 | FTX35HV1NB(9) | FTX35J(A)V1NB | CTX35GV1NB9 | FVXT40GV1NB | CTX45GV1NB | FTX50HV1NB | FVXT50GV1NB | FTXD50JV1B | FTX60HV1NB | FTXD60JV1B | FTXD71JV1B | FLX25HV1NB | FLX35HV1NB | FLX50JV1B | FLX60JV1B | CDX25H(A)V1NB(8) | CDX35H(A)V1NB(8) | CDX50H(A)V1NB(8) | CDX60H(A)V1NB(8) | HYC35,45,60BJV1 | HYC35,45,60B7V1 | HYC71KVE | HYC71BJV1 | HYC71B7V1 | HYB35FJ(FK)7V1 | HYB45FJ(FK)7V1 | HYB60FJ(FK)7V1 | HYB71FK7V1 | HYB71FV1-9 | FVX25KZV1B (**) | FVX35KZV1B (**) | FTXD25KZV1B (***) | FTXD35KZV1B (***) |
|---|----------------|---------------|-------------|---------------|---------------|-------------|-------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|-----------|-----------|------------------|------------------|------------------|------------------|-----------------|-----------------|----------|-----------|-----------|----------------|----------------|----------------|------------|------------|-----------------|-----------------|-------------------|-------------------|
| RX25HV1NB                                 | P              |               |             |               |               |             |             |            |            |             |            |            |            |            |            |            |           |           |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RX25JV1NB(9)                              |                | P             |             |               |               |             |             |            |            |             |            |            |            |            |            |            |           |           |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RX35HV1NB                                 |                |               |             | P             |               |             |             |            |            |             |            |            |            |            |            |            |           |           |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RX35JV1NB(9)                              |                |               |             |               | P             |             |             |            |            |             |            |            |            |            |            |            |           |           |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RXT40GV1NB                                |                |               |             |               |               |             | P           |            |            |             |            |            |            |            |            |            |           |           |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RXT50GV1NB                                |                |               |             |               |               |             |             |            |            | P           |            |            |            |            |            |            |           |           |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RXD50JV1B                                 |                |               |             |               |               |             |             |            |            |             | P          |            |            |            |            |            | P         |           |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RXD60JV1B                                 |                |               |             |               |               |             |             |            |            |             |            |            | P          |            |            |            |           | P         |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RXD71JV1B                                 |                |               |             |               |               |             |             |            |            |             |            |            |            | P          |            |            |           |           |                  |                  |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| RZY71LV1 (inverter sky air)               |                |               |             |               |               |             |             |            |            |             |            |            |            |            |            |            |           |           |                  |                  |                  |                  |                 |                 | P        | P         | P         |                |                |                |            | P          |                 |                 |                   |                   |
| 2MX52HV1NB                                | M              | M             | M           | М             | M             | М           |             | М          | М          |             | М          |            |            |            | М          | М          | M         |           | M                | M                | M                |                  |                 |                 |          |           |           |                |                |                |            |            | M               | M               | M                 | М                 |
| 3MX68GV1NB                                | M              | M             | M           | М             | M             | M           |             | M          |            |             |            |            |            |            |            |            |           |           | М                | M                |                  |                  |                 |                 |          |           |           |                |                |                |            |            |                 |                 |                   |                   |
| 3MX68HV1NB                                | M              | M             | M           | М             | M             | M           |             | M          | М          |             | M          | М          | M          |            | M          | M          | M         | M         | М                | M                | M                | М                |                 |                 |          |           |           |                |                |                |            |            | М               | M               | M                 | M                 |
| 4MX80HV1NB                                | M              | M             |             | М             | M             |             |             |            | М          |             | М          | M          | M          |            | M          | M          | M         | M         | М                | M                | M                | М                |                 |                 |          |           |           |                |                |                |            |            | М               | M               | M                 | M                 |
| RMX140JVMB                                |                | M             |             |               | M             |             |             |            |            |             | М          |            | М          | M          | M          | M          | M         | M         | М                | M                | M                | М                | М               | М               |          | М         | М         | М              | M              | M              | M          |            | M               | M               | M                 | M                 |

| R-407C<br>HEAT PUMP | FTX25GZV1NB(9) | FTX25JZV1NB | FTX35JZV1NB | FHYC35KZV1 | FHYC35BZV1 | FHYC35BZ7V1 | FHYCP35B7V1 | FHYC45KZV1 | FHYC45BZV1 | FHYC45BZ7V1 | FHYCP45B7V1 | FHYCP60B7V1 | FHYC71 KZV1 | FHYC71BZV1 | FHYCP71B7V1 | FHYC100KZV1 | FHYC100BZV1 | FHYCP100B7V1 | FHYC125KZV1 | FHYC125BZV1 | FHYCP125B7V1 | FHY35GZ7V1 | FHYP35BV1 | FHY45GZ7V1 | FHYP45BV1 | FHYP60BV1 | FHY71GZ7V1 | FHYP71BV1 | FHY100GZ7V1 | FHYP100BV1 | FHY125GZ7V1 | FHYP125BV1 | FHY B35GZ/V I | FHYBP358/V1 | FHYB45GZ7V1 | FHYBP45B7V1 | FHYBP60B7V1 | FHYB71GZ7V1 | FHYBP71B7V1 | FHYB100GZ7V1 | FHYBP100B/V1 | FHYB125G2/V1 |
|---------------------|----------------|-------------|-------------|------------|------------|-------------|-------------|------------|------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------|------------|-----------|------------|-----------|-----------|------------|-----------|-------------|------------|-------------|------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|
| RX25GZV1NB          | Р              |             |             |            |            |             |             |            |            |             |             |             |             |            |             |             |             |              |             |             |              |            |           |            |           |           |            |           |             |            |             |            |               | $\perp$     |             |             | $\Box$      | $\Box$      |             |              |              |              |
| RXT25JZV1NB         |                | P           |             |            |            |             |             |            |            |             |             |             |             |            |             |             |             |              |             |             |              |            |           |            |           |           |            |           |             |            |             |            |               |             |             |             |             |             |             |              |              |              |
| RXT35JZV1NB         |                |             | P           |            |            |             |             |            |            |             |             |             |             |            |             |             |             |              |             |             |              |            |           |            |           |           |            |           |             |            |             |            |               |             |             |             |             |             |             |              |              |              |
| RY35E(A)Z7V1        |                |             |             | Р          | Р          | Р           |             |            |            |             |             |             |             |            |             |             |             |              |             |             |              | Р          |           |            |           |           |            |           |             |            |             | - 1        | P             |             |             |             |             |             |             |              |              |              |
| RY45E(A)Z7V1        |                |             |             |            |            |             |             | Р          | Р          | P           |             |             |             |            |             |             |             |              |             |             |              |            |           | P          |           |           |            |           |             |            |             |            |               |             | P           |             |             |             |             |              |              |              |
| RY71GZ7V1/W1        |                |             |             | Т          | Т          | Т           |             |            |            |             |             |             | Р           | Р          |             |             |             |              |             |             |              | Т          |           |            |           |           | Р          |           |             |            |             | Π.         | г             | Т           |             | Т           |             | Р           |             |              | Т            |              |
| RYP71B7V1/W1        |                |             |             |            |            |             | Т           |            |            |             |             |             |             |            | Р           |             |             |              |             |             |              |            | Т         |            |           |           |            | Р         |             |            |             |            | Т             | Т           | П           | П           |             | П           | P           |              | Т            |              |
| RY100GZ7V1/W1       |                |             |             | т          | Т          | Т           |             | Т          | Т          | Т           |             |             | Т           | т          |             | P           | P           |              |             |             |              | Т          |           | Т          |           |           | Т          | П         | Р           | П          | П           | Π.         | г             | T           | Т           | Т           | Т           | Т           | Т           | Р            | Т            | Т            |
| RYP100B7V1/W1       |                |             |             |            |            |             | Т           |            |            |             | т           | Т           |             |            | Т           |             |             | Р            |             |             |              |            | Т         |            | Т         | Т         |            | Т         |             | Р          |             |            | Т             | Т           | T.          | T           | Т           | Т           | Т           | 1            | P            | Т            |
| RY125GZ7W1          |                |             |             | т          | Т          | Т           |             | Т          | Т          | Т           |             |             | Т           | т          |             | Т           | т           |              | Р           | Р           |              | Т          |           | Т          |           |           | Т          | П         | т           | П          | Р           | Π.         | г             | T           | Т           | Т           | Т           | Т           | Т           | Т            | ı            | P            |
| RYP125B7W1          |                |             |             |            |            |             | Т           |            |            |             | т           | Т           |             |            | Т           |             |             | Т            |             |             | Р            |            | Т         |            | Т         | Т         |            | Т         |             | Т          |             | Р          | Т             | Т           | T.          | т :         | т           | Т           | Т           | T            | Г            | P            |
| RYP200B7W1          |                |             |             |            |            |             | Т           |            |            |             | т           | Т           |             |            | Т           |             |             | Т            |             |             | Т            |            | Т         |            | Т         | Т         |            | Т         |             | Т          |             | т          | Т             | т           | T.          | т :         | т           | Т           | т           | T            | г            | T            |
| RYP250B7W1          |                |             |             |            |            |             |             |            |            |             | т           | Т           |             |            | Т           |             |             | Т            |             |             | т            |            |           |            | Т         | Т         |            | Т         |             | Т          |             | т          |               | Т           | Τ.          | т :         | т           | Т           | Т           | 1            | Г            | T            |
| RZP71DV1            |                |             |             |            |            |             |             |            |            |             | Т           | Т           |             |            | Р           |             |             |              |             |             |              |            |           |            | Т         | Т         |            | Р         |             |            |             |            |               | T           | Τ.          | T           | Т           | $\top$      | Р           | $\top$       |              |              |
| RZP100DV1           |                |             |             |            |            |             |             |            |            |             | т           | Т           |             |            |             |             |             | Р            |             |             |              |            |           |            | Т         | Т         |            |           |             | Р          |             |            |               | Т           | Т           | Т           | Т           | Т           |             | 1            | Р            |              |
| RZP125DV1           |                |             |             |            |            |             |             |            |            |             | Т           | Т           |             |            |             |             |             |              |             |             | Р            |            |           |            | Т         | Т         |            |           |             |            |             | Р          | T             | T           | Т           | Т           | T           | $\top$      |             | Т            | Т            | P            |
| RMX140JZVMB         |                |             |             |            |            |             |             |            |            |             |             |             |             |            |             |             |             |              |             |             |              |            |           |            |           |           |            |           |             |            |             |            |               |             |             |             |             |             |             |              |              |              |

| R-407C<br>HEAT PUMP | FAYP71BV1 | FAYP100BV1 | FUYP71BV1 | FUYP71BV17 | FUYP100BV1 | FUYP100BV17 | FUYP125BV1 | FUYP125BV17 | FHYKP35BV1 | FHYKP45BV1 | FHYKP60BV1 | FHYKP71BV1 | FDYP125B7V1 | FDYP200B7V1 | FDYP250B7V1 | FTX25JAV1NB | FTX35JAV1NB | FTXD50JV1B | FTXD60JV1B | FTXD71JV1B | CDX25HAV1NB | CDX35HAV1NB | CDX50HAV1NB | CDX60HAV1NB | FHYB35FK7V1 | HYB45FK7V1 | FHYB60FK7V1 | FHYB71FK7V1 | FHYC35B7V1 | FHYC45B7V1 | FHYC60B7V1 | FHYC71B7V1 | FLX25HV1NB | FLX35HV1NB | FLX50JV1B | FLX60JV1B | FVX25KZV1B (**) | FVX35KZV1B (**) | FTXD35KZV1B (**) | FTXD35KZV1B (**) |
|---------------------|-----------|------------|-----------|------------|------------|-------------|------------|-------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------------|-----------------|------------------|------------------|
| RX25GZV1NB          |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RXT25JZV1NB         |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RXT35JZV1NB         |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RY35E(A)Z7V1        |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             |             |             | П          | П          | П          |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RY45E(A)Z7V1        |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RY71GZ7V1/W1        |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RYP71B7V1/W1        | P         |            | Р         | P          |            |             |            |             | Т          |            |            | P          |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RY100GZ7V1/W1       |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RYP100B7V1/W1       | Т         | P          | Т         | Т          | Р          | Р           |            |             | Т          | Т          | Т          | Т          |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RY125GZ7W1          |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RYP125B7W1          | Т         | Т          | Т         | Т          | Т          | Т           | Р          | Р           | Т          | Т          | Т          | Т          | P           |             |             |             |             |            |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RYP200B7W1          | Т         | Т          | Т         | Т          | Т          | Т           | Т          | Т           | Т          | Т          | Т          | Т          | Т           | Р           |             |             |             |            | П          | П          |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RYP250B7W1          | Т         | Т          | Т         | Т          | Т          | Т           | Т          | Т           |            | Т          | Т          | Т          | Т           |             | Р           |             |             | П          | П          |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RZP71DV1            | P         |            |           | Р          |            |             |            |             |            |            |            |            |             |             |             |             |             |            | T          |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RZP100DV1           |           | Р          |           |            |            | Р           |            |             |            |            |            |            |             |             |             |             |             |            | $\Box$     |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RZP125DV1           |           |            |           |            |            |             |            | Р           |            |            |            |            |             |             |             |             |             | $\neg$     |            |            |             |             |             |             |             |            |             |             |            |            |            |            |            |            |           |           |                 |                 |                  |                  |
| RMX140JZVMB         |           |            |           |            |            |             |            |             |            |            |            |            |             |             |             | М           | м           | м          | м          | м          | м           | м           | м           | м           | м           | м          | м           | М           | M          | М          | М          | М          | М          | М          | М         | м         | М               | м               | М                | м                |

| R-410A,<br>INVERTER CONTROLLED<br>HEAT PUMP | FTXD25KZV1B | FTX2 5AZVIMB | FTXD35KZV1B | FTX3 5AZVIMB | FTX50AZVMB | FTX60AZVMB | FTX71AZVMB | CDX25AZVMB | CDX35AZVMB | CDX50AZVIMB | CDX60AZVIMB | FLX25AZVMB | FLX35AZVMB | FLX50AZVMB | FLX60AZVMB | FVX25KZV1B | FVX25AZVMB | FVX35KZV1B | FVX35AZVMB | FVX50AZVMB |
|---|-------------|--------------|-------------|--------------|------------|------------|------------|------------|------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| RXD25KZV1B                                  | P           |              |             |              |            |            |            |            |            |             |             |            |            |            |            | P          |            |            |            |            |
| RXD35KZV1B                                  |             |              | P           |              |            |            |            |            |            |             |             |            |            |            |            |            |            | P          |            |            |
| RX50AZVMB                                   |             |              |             |              | P          |            |            |            |            |             |             |            |            | P          |            |            |            |            |            | P          |
| RX60AZVMB                                   |             |              |             |              |            | P          |            |            |            |             |             |            |            |            |            |            |            |            |            |            |
| RX71AZVMB                                   |             |              |             |              |            |            | P          |            |            |             |             |            |            |            |            |            |            |            |            |            |
| 3MX52AZVMB                                  |             | M            |             | M            | M          |            |            | М          | М          | М           |             | M          | М          | M          |            |            | M          |            | М          | М          |
| 4MX68AZVMB                                  |             | M            |             | M            | M          | M          |            | M          | М          | М           | М           | M          | М          | M          | M          |            | M          |            | М          | M          |
| 4MX80AZVMB                                  |             | M            |             | M            | M          | M          | M          | M          | M          | M           | M           | M          | M          | M          | M          |            | M          |            | M          | M          |

### Twin - Triple and Double Twin combination - capacity combinations that are allowed

|                                | 71      | 100          | 125          | 200               | 250               |
|--------------------------------|---------|--------------|--------------|-------------------|-------------------|
| valid for sky air              | 35 + 35 | 35 + 71      | 60 + 60      | 100 + 100         | 125 + 125         |
| indoor F-series                |         | 45 + 60      | 45 + 71      | 125 + 71          | 125 + 60 + 60     |
| and indoor                     |         | 45 + 45      | 45 + 45 + 45 | 45 + 71 + 71      | 100 + 100 + 45    |
| B-series                       |         | 35 + 35 + 35 |              | 45 + 45 + 100     | 60 + 60 + 60 + 60 |
|                                |         |              |              | 60 + 60 + 60      |                   |
|                                |         |              |              | 71 + 71 + 71      |                   |
|                                |         |              |              | 45 + 45 + 45 + 45 |                   |
| only valid for                 |         |              | 45 + 35 + 35 | 35 + 71 + 100     | 125 + 45 + 71     |
| sky air indoor                 |         |              |              | 35 + 35 + 125     | 100 + 71 + 71     |
| B-series                       |         |              |              | 45 + 60 + 100     |                   |
|                                |         |              |              | 71 + 60 +60       |                   |
| for sky air<br>inverter R-407C | 35 + 35 | 45 + 45      | 60 + 60      |                   |                   |

#### **REMARKS**

M stands for Multi combination

- **P** stands for Pair combination,
- **T** stands for Twin or Triple or Double Twin combination
- (\*) "Not yet officially decided for mass production"
- (\*\*) The number of connectable FVK(X) models is limited. 2MX52, 3MX68: up to 1 indoor unit. 4MK90, 4MX80: up to 2 indoor units. Not mentioned about multi system in operation manuals
- (\*\*\*) the "outdoor unit silent operation" will not work, although this button is provided on the remote controller
- (2) means "Scheduled for abolishment"

#### **Limitations for Installation**

- For Double Twin: always connect indoor types of the same capacity class
- Installation for Twin, Triple or Double Twin:
  - install all the indoors of 1 system in 1 temperature zone
  - do not select FHYB as base unit with mixed use of units (swing flap function does not exist on FHYB)

#### Regarding inverter multi combinations

- In the combination 3MX68GV1NB with CTX25,35GV1NB(9) there is no auto-restart and no powerful mode
- In the combination 3MX68GV1NB with FTX25,35HV1NB(9), CDX25,35HV1NB only the indoor unit is working in powerful mode







**BEV71-140KVE** 

FUYP71BV17

### 7 FUYP71-125BV17

# 4-way blow ceiling suspended cassette

#### **BACKGROUND**

This new 4-way blow ceiling suspended cassette will replace the current FUYP-BV1 and is connectable to R-407C Sky Air and VRV outdoor units by means of a junction box.

#### **MODEL RANGE**

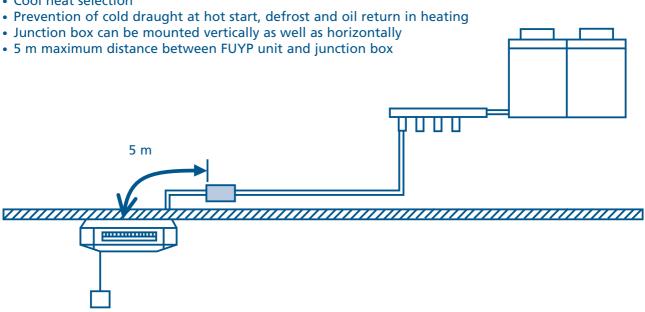
| INDOOR UNIT | JUNCTION BOX |  |
|-------------|--------------|--|
| FUYP71BV17  | BEV71KVE     |  |
| FUYP100BV17 | DEV/140KV/E  |  |
| FUYP125BV17 | BEV140KVE    |  |

#### **FEATURES**

• Group control with other VRV indoor units possible

**BRC1C517** 

• Cool heat selection



#### **SPECIFICATIONS**

| FUYP-BV17            |         |        | 71          | 100         | 125         |
|----------------------|---------|--------|-------------|-------------|-------------|
| Cooling capacity kW  |         | kW     | 7.09        | 10.0        | 12.5        |
| Heating capacity     |         | kW     | 7.7         | 11.0        | 14.0        |
| Nominal input        | cooling | W      | 2.66        | 3.64        | 4.66        |
|                      | heating | W      | 2.62        | 3.6         | 4.91        |
| Dimensions           | HxWxD   | mm     | 165x895x895 | 230x895x895 | 230x895x895 |
| Weight               |         | kg     | 25          | 31          | 31          |
| Air flow rate        | H/L     | m3/min | 19/14       | 29/21       | 32/23       |
| Sound pressure level | H/L     | dB(A)  | 40/35       | 43/38       | 44/39       |
| Sound power level    | H/L     | dB(A)  | 56/51       | 59/54       | 60/55       |

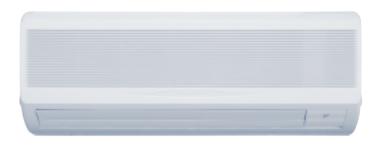
Power supply: VE: 1~, 230V, 50Hz

| BEV-KVE                |       | 71                               | 140            |                |  |
|------------------------|-------|----------------------------------|----------------|----------------|--|
| Connection capacity kW |       | kW                               | 8.0 or less    | 11.2 ~ 16.0    |  |
| Dimensions             | HxWxD | mm                               | 100x350x225    |                |  |
| Weight kg              |       | kg                               | 3.0            | 3.5            |  |
| Casing                 |       |                                  | Galvanised     | steel plate    |  |
| Unit connection        |       |                                  | ø 9.5 / ø 15.9 | ø 9.5 / ø 19.1 |  |
| Header connection      |       | ader connection Ø 6.4 / Ø 12.7 - |                | -              |  |

| ACCESSORIES                            |            |                        |     |  |
|--|------------|------------------------|-----|--|
| FUYP-BV17                              | 71         | 100                    | 125 |  |
| Sealing member of air discharge outlet | KDBHJ49F80 | KDBHJ49F140            |     |  |
| Air discharge decoration panel         | KDBTJ49F80 | KDBTJ49F80 KDBTJ49F140 |     |  |
| Vertical flap kit                      | KDGJ49F80  | KDGJ49F80 KDGJ49F140   |     |  |
| Replacement long life filter           |            | KAFJ495F140            |     |  |
| L-type connection piping kit           | KHFJ49F80  | KHFJ49F80 KHFJ49F140   |     |  |

| CONTROL SYSTEMS                      |              |    |           |     |  |  |
|--------------------------------------|--------------|----|-----------|-----|--|--|
| FUYP-BV17                            |              | 71 | 100       | 125 |  |  |
| Wired remote control                 |              |    | BRC1C517  |     |  |  |
| Infrared remote control              | Cooling only |    | BRC7C529W |     |  |  |
|                                      | Heat pump    |    | BRC7C528W |     |  |  |
| Centralised remote control           |              |    | DCS302B51 |     |  |  |
| Unified on/off control               |              |    | DCS301B51 |     |  |  |
| Schedule timer                       |              |    | DST301B51 |     |  |  |
| Group control adapter (1)            |              |    | KRP4A53   |     |  |  |
| Interface adapter for Sky Air series |              |    | DTA102A52 |     |  |  |
| Installation box for adapter PCB     |              |    | KRP1B97   |     |  |  |
| Remote sensor                        |              |    | KRCS01-1  |     |  |  |

Note:
1. Installation box for adapter PCB (KRP1B97) is necessary



FXYAP20-32LVE

# 8 FXYAP20-32LVE

### Wall mounted unit

#### **BACKGROUND**

The current range of wall mounted units, FXYAP20,25,32KV19 will be replaced by the new L series. The new wall mounted units are compact and suitable for commercial and residential applications.

| MODEL RANGE |             |  |
|-------------|-------------|--|
|             | INDOOR UNIT |  |
|             | FXYAP20LVE  |  |
|             | FXYAP25LVE  |  |
|             | FXYAP32LVE  |  |

\*Model name is not yet fixed

#### **FEATURES**

- new & compact casing:
  - reduction in width from 1,050 to 795 mm
  - reduction in height from 360 to 290 mm
- dramatic weight reduction : from 21 to 11 kg

| SPECIFICATIONS       |       |        |             |               |         |
|----------------------|-------|--------|-------------|---------------|---------|
| FXYAP-LVE            |       |        | 20          | 25            | 32      |
| Cooling capacity     |       | kW     | 2.0         | 2.5           | 3.15    |
| Heating capacity kW  |       | kW     | 2.2         | 2.8           | 3.4     |
| Dimensions           | HxWxD | mm     | 290x230x795 |               |         |
| Weight kg            |       | kg     | 11          |               |         |
| Colour               |       |        |             | white (B-272) |         |
| Air flow rate        | H/L   | m³/min | 7.5/4.5     | 8.0/5.0       | 9.0/5.5 |
| Sound pressure level | H/L   | dBA    | 35/29       | 36/29         | 37/29   |

| ACCESSORIES    |             |    |    |
|----------------|-------------|----|----|
| FXYAP-LVE      | 20          | 25 | 32 |
| Drain pump kit | K-KDU572BVE |    |    |

| CONTROL SYS   | STEMS               |           |           |    |  |
|---|---------------------|-----------|-----------|----|--|
| FXYAP-LVE   |                     | 20        | 25        | 32 |  |
| Wired remote control                                  |                     |           | BRC1C517  |    |  |
| Infrared remote control                               | Cooling only        |           | BRC7C511W |    |  |
|   | Heat pump           |           | BRC7C510W |    |  |
| Centralised remote contr                              | ol                  |           | DCS302B51 |    |  |
| Unified on/off control                                |                     | DCS301B51 |           |    |  |
| Schedule timer  |                     | DST301B51 |           |    |  |
| Wiring adapter  |                     | KRP1B3    |           |    |  |
| Wiring adapter for electri                            | ical appendices (1) | KRP2A51   |           |    |  |
| Wiring adapter for electri                            | ical appendices (2) | KRP4A51   |           |    |  |
| External control adapter                              | for outdoor unit    | DTA104B61 |           |    |  |
| Mix matching adapter fo                               | r « K » indoor unit | DTA106A61 |           |    |  |
| Remote sensor   |                     | KRCS01-1  |           |    |  |
| Electrical box with earth terminal (2 blocks)         |                     | KJB212A   |           |    |  |
| Electrical box with earth terminal (3 blocks)         |                     | KJB311A   |           |    |  |
| Noise filter (for electromagnetic interface use only) |                     | KEK26-1   |           |    |  |









RSX(Y)P5L7W1

RSX(Y)P8L7W1

RSX(Y)P10L7W1

# 9 RSX(Y)P5-10L7W1

#### **BACKGROUND**

Daikin launches a new VRV outdoor range, nl. the RSX(Y)P-L series - an environmental friendly, energy saving series with high COP levels and flexible design characteristics.

#### **MODEL RANGE**

| OUTDOOR UNIT - COOLING ONLY / HEAT PUMP |  |
|---|--|
| RSX(Y)P5L7W1                            |  |
| RSX(Y)P8L7W1                            |  |
| RSX(Y)P10L7W1                           |  |

#### **FEATURES**

• **High COP level**: 3.1 average cooling at standard point

3.2 average heating at standard point

#### · High partial load performance

#### · Environmental friendly

- Ozone friendly refrigerant: R-407C
- Reduction in refrigerant by 10 % or more
- Refrigerant recovery function:

this service mode enables all expansion valves of the VRV system to be opened. In this way the refrigerant can be drained from the VRV piping system and stored in a separate recovery tank

#### • Super aero grille & Powerful fan

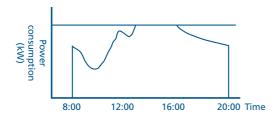
Improved aerodynamic shape of the grille in combination with a newly developed fan results in a 10 % increase in air flow rate

#### • 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

# • I-demand function

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



# e-Bridge circuit

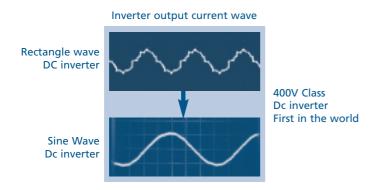
Prevents accumulation of liquid refrigerant in the condenser. This results in more efficient use of the condenser surface under any circumstance and leads in turn to better energy efficiency

# · e-Pass heat exchanger

Optimisation of the path layout 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.

# Sine Wave DC inverter

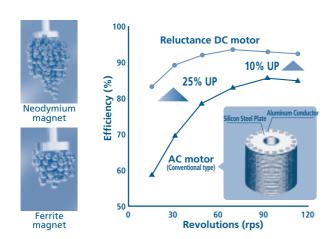
Optimising the sine wave curve results in smoother motor rotation and improved motor efficiency



# Reluctance DC motor

The reluctance DC motor provides significant increases in efficiency compared to conventional AC inverter motors, simultaneously using 2 different forms of torque to produce extra power from small electric currents.

The motor comprises powerful neodymium magnets, which are approximately 10 times stronger than ferrite magnets and make a major contribution to its energy saving characteristics.



# • DC inverter compressor

Switching the electric DC motor from the low pressure side to high pressure side prevents extra heating of the suction gas, thereby raising the volumetric efficiency of the compressor

# • Night quiet operation: external input mode

- The night quiet mode can be activated by inputting the external signal to the outdoor unit PCB.
- ± -8dBA in night quiet mode

# Increased installation flexibility

- Extended piping length from 100 m to 120 m (actual length)
- high ESP fan motor standard (standard setting: 3 mm H<sub>2</sub>O, can be switch to 6 mm H<sub>2</sub>O)

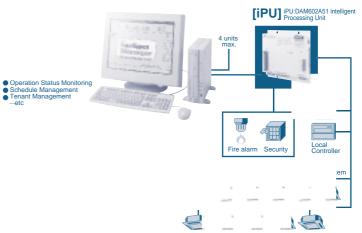
# • Complete compatibility with

- Intelligent Touch Controller
- Intelligent Manager
- BACnet Gateway

| SPECIFICAT              | IONS                 |     |   |                         |                 |
|-------------------------|----------------------|-----|---|-------------------------|-----------------|
| RSX(Y)P-L7W1            |                      |     | 5                                       | 8                       | 10              |
| Cooling capacity        |                      | kW  | 14.0 22.4                               |                         | 28.0            |
| Heating capacity*       |                      | kW  | 16.0                                    | 25.0                    | 31.5            |
| Nominal input           | Cooling              | kW  | 4.58                                    | 6.99                    | 8.97            |
|                         | Heating*             | kW  | 5.10                                    | 8.33                    | 10.24           |
| COP                     | Cooling              |     | > 3.1                                   | > 3.2                   | > 3.1           |
|                         | Heating*             |     | > 3.2                                   | > 3.2                   | > 3.2           |
| Dimensions              | HxWxD mm             |     | 1,440x635x690                           | 1,220x1,280x690         | 1,440x1,280x690 |
| Weight kg               |                      | kg  | 142                                     | 225                     | 246             |
| Air flow rate           | Air flow rate m³/min |     | 90                                      | 168                     | 190             |
| Sound pressure level    |                      | dBA | 54                                      | 57                      | 57              |
| Refrigerant amount kg   |                      | kg  | 5.6                                     | 8.6                     | 9.6             |
| Piping connections      | Liquid               | mm  | Ø 9.5 flare con.                        | Ø 12.7 flare connection |                 |
|                         | Gas                  | mm  | Ø 19.1 brazing con. Ø 28.6 brazing con. |                         | azing con.      |
| Maximum piping length m |                      | m   | 120                                     | 120 120                 |                 |

<sup>\*</sup> for heat pump model only

| ACCESSORIES         |  |             |            |
|---------------------|--|-------------|------------|
| RSX(Y)P-L7W1        | 5  | 8           | 10         |
| Cool/Heat selector  | KRC19-26A                                      |             |            |
| Fixing wiring plate | KKSAJ26A(E)                                    |             |            |
| Fixing box          | KJB111A  |             |            |
| Refnet header       | KHRP26K11H KHRP26K18H (max. 8 branches)        |             |            |
|                     | (max. 4 branches) KHRP26K37H (max. 8 branches) |             |            |
| Refnet joint        | KHRP26K11T                                     | KHRP26K18T, | KHRP26K37T |



# 10 Intelligent Manager

# **BACKGROUND**

Intelligent manager is the end product of field experience gained on D-BACS and represents a considerable leap forward in computerised air conditioning control. Increased reliability - stand alone operation of 48 hours of the central computer, and better site management stemming from its free layout are just a few of the many improvements.

| CONCEPT |                   |                    |  |  |
|---------|-------------------|--------------------|--|--|
| iPU     | Number of indoors | Number of outdoors |  |  |
| 1       | up to 256         | up to 40           |  |  |
| 2       | up to 512         | up to 80           |  |  |
| 3       | up to 768         | up to 120          |  |  |
| 4       | up to 1,024       | up to 160          |  |  |

| MODEL RANGE |           |  |  |  |
|-------------|-----------|--|--|--|
| Hardware    | DAM602A51 |  |  |  |
| Software    | IM1.XX    |  |  |  |

# **FEATURES**

# Management

- Proportional power consumption division
- 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

# 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 cool-heat 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

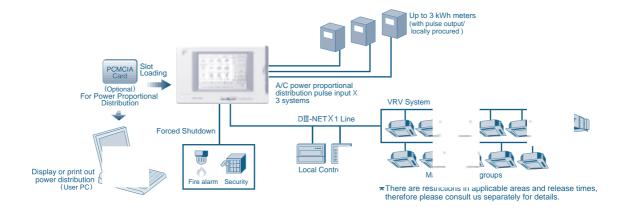
# System layout

- 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)
  - 16 input ports for kWh measurement
  - 3 general input ports
  - 2 digital outputs
- Stand alone operation of the iPU for minimum 48 hours
- Compatible with UPS shutdown software

| Main specifications               |                           |        | Requirement  |   |
|-----------------------------------|---------------------------|--------|--|---|
| PC                                | Performance               | CPU    | Pentium 300MHz or above recommended                            |   |
|                                   |                           | Memory | 64MB or above  |   |
|                                   |                           | HDD    | 4GB minimum, 8GB or above recommended                          |   |
|                                   | Network                   |        | 10Base/T   |   |
|                                   | Operation                 |        | Keyboard/Mouse, Sound and Speaker                              |   |
|                                   | Software                  |        | Windows NT (ver4.0(SP4)) English version, Microsoft Excel 2000 |   |
| CRT                               | SVGA                      |        | 800 x 600, 1,240 x 768   |   |
| Printer                           |                           |        | A4 Page printer  |   |
| Network Equipment                 |                           |        | Multi Port HUB (4 or more ports)                               |   |
| Intelligent Processing unit (iPU) | Reference                 |        | DAM602A51  |   |
|                                   | indoor unit connection    |        | 256 indoor units/1 iPU   |   |
|                                   | Maximum                   |        | 1,024 indoor units/4 iPUs                                      |   |
|                                   | Back-up for power failure |        | Date are filed into non-volatile memory                        |   |
|                                   | Transmission              |        | DIII-NET std : 1 line, Max. 4 lines/1 iPU                      | 1 |
|                                   | Power supply              |        | AC200~240V, ±10 %, 50/60Hz, Max 20W                            | 1 |
|                                   | Ambient temperature       |        | -10 ~ +50°C  | 1 |
|                                   | Ambient humidity          |        | 0 ~ 98 % (condensation is not acceptable)                      | 1 |
|                                   | Dimensions                | mm     | 260(W) x 281(H) x 78.5(D)                                      | 1 |
|                                   | Weight                    | kg     | 4  | 1 |

| UPS (eg. APC SU700, 1000 series) |                 | Requirement                     |
|----------------------------------|-----------------|---------------------------------|
| UPS                              | Capacity        | 200 ~250W/20 min                |
|                                  | Voltage         | As required on the field        |
|                                  | Control signals | Power failure signal (from UPS) |
|                                  |                 | UPS shutdown signal (to UPS)    |
|                                  | Relay           | I/0 module (AP9610)             |

More information can be found in the Intelligent Manager catalogue (PCE00-13A)



# 1 1 Intelligent Controller

# **BACKGROUND**

The intelligent Touch controller is the ideal solution for those applications too small to warrant the use of Intelligent Manager such as small and medium sized buildings with a maximum of 64 indoor units.

# **MODEL RANGE**

| Hardware  | DCS601A51 |
|---|-----------|
| <b>Software</b> (proportional power consumption division) | DCS002A51 |

# **FEATURES**

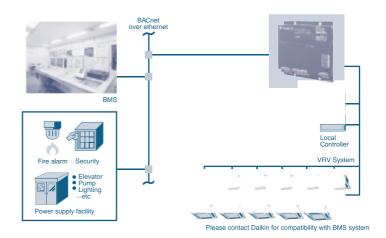
- Powerful functions
  - Yearly schedule
  - Proportional power consumption division
  - Fire emergency stop control
- Simple Operation
  - Touch screen
  - Colour LCD
  - Icon display

- Cost Perfomance
  - Labor saving
  - Easy installation
- Overall energy saving

# **SPECIFICATIONS**

| Intelligent Touch Controller     |                                     |         | DCS601A51   |
|----------------------------------|-------------------------------------|---------|---|
| Maximum number of indoors        |                                     |         | 64  |
| Maximum number of outdoor        | rs                                  |         | 10  |
| PC + display                     |                                     |         | Built-in  |
| Power supply                     |                                     |         | Externally supplied AC100V-240V 50/60Hz                   |
| Installation method condition    | for use                             |         | JIS4 switchbox embedded in indoor wall                    |
| Operation condition              | Surrounding temperature/humidity    |         | 0°C-40°C / less than 85 % RH (if no condensation)         |
| Dimensions                       | Panel size                          | mm      | 230 x 147 x 40  |
| Overseas certification           | Safety of Information Technology Eq | uipment | IEC60730 (including IEC60335)                             |
| LCD panel                        | Size / n° of dots / n° of colours   |         | 5.7 inches / QVGA 320 240 / 4096 colours                  |
| Input                            | Touch panel                         |         | 10 bit encoded analog input                               |
| Communication functions DIII-NET |                                     |         | 1 line of air conditioner equipment for communication use |
|                                  | RS232C                              |         | For servicing x 1 / modem x 1                             |
| Input terminals                  | Digital input                       |         | Compulsory Shutdown input x 1                             |
| Pulse input                      |                                     |         | Power measuring pulse input x 3                           |
| Software                         |                                     |         | DCS002A51   |
|                                  |                                     |         | Proportional power consumption division software          |

More information can be found in the Intelligent Touch Controller catalogue (PCE01-17)



# 12 BACnet Gateway

# **BACKGROUND**

Bacnet Gateway is an integrated control system that connects a VRV system to a BMS system

| MODEL RANGE           |           |  |  |
|-----------------------|-----------|--|--|
| <b>BACnet Gateway</b> | DMS502A51 |  |  |
| DIII board            | DAM411A1  |  |  |

# **FEATURES**

- Interface for BMS system
- Communication via BACnet protocol (connection via Ethernet or RS232C)
- 256 units connectable per BACnet gateway
- Unlimited site size
- Easy and fast installation

| FUNCTIONS                      |  |
|--------------------------------|--|
| Monitoring                     | Air conditioning status monitoring : 64 groups of indoor units and 10 outdoor units                  |
|                                | (Max. 256 groups of indoor units and 40 outdoor units, when optional DIII board is added) (cf. note) |
|                                | Indoor unit error monitoring   |
|                                | Indoor (air inlet) temperature monitoring  |
|                                | Filter sign monitoring   |
| Control, operation and setting | Start/Stop control   |
|                                | Temperature adjustment mode setting  |
|                                | Remote control setting   |
|                                | Temperature setting  |
|                                | Filter sign reset  |
| Display                        | Air conditioner operation setting and status   |
|                                | Set temperature  |
|                                | Indoor unit error  |
|                                | Indoor (air inlet) temperature   |
|                                | Filter sign  |

Note:

If exceeding the stated number of outdoor units, DIII-NET expander adapter (DTA109A51) allows easy system connection as long as restrictions are observed.

### **MAIN SPECIFICATIONS** Transmission BACnet<sup>™</sup> ASHRAE135 (IEEE802.3) BACnet/IP Conformance Class 3 RS232C RS232C (4800,9600bps) Single-phase 200 to 240 VAC ± 10 % at 50/60Hz Power supply Power consumption 20W max Ambient condition -10°C to 50°C within humidity range between 0 % and 98 % (no condensation) Insulation resistance At least 50M $\Omega$ at 500VDC Dimensions WxHxD 260 x 281 x 58.5 Weight kg

| COMMUNICATION SPECIFICATIONS |                      |  |
|------------------------------|----------------------|--|
| Objects                      | Analog input         |  |
|                              | Analog output        |  |
|                              | Analog value         |  |
|                              | Binary input         |  |
|                              | Binary output        |  |
|                              | Binary value         |  |
|                              | Multistate input     |  |
|                              | Multistate output    |  |
| Functionality                | Monitoring           |  |
|                              | Commanding           |  |
|                              | Alarming             |  |
| Datalink                     | Ethernet (IEEE802.3) |  |
|                              | BACnet/IP            |  |

More information can be found in the BACnet Gateway catalogue (PCE00-18A)







EUW5-12HZW1

EUW16-24HZW1

# **13 EUW5-72HZW1**

# Water-cooled chillers using R-407C

# **BACKGROUND**

In order to offer even more possibilities, we are pleased to introduce our new range of small watercooled chillers, the EUW5-72HZ. These chillers do not only replace the old EUW5-20F range, but also allow Daikin to enter a new market not covered until now.

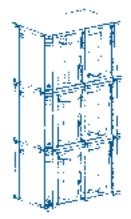
| MODEL RANGE            |               |   |
|------------------------|---------------|---|
| EUW5-8-10-12HZ         | Basic model   |   |
| EUW16-20-24HZ          | Single module | EUW16HZ = 1 x EUWN16HZ + ECB1MUW                |
|                        |               | EUW20HZ = 1 x EUWN20HZ + ECB1MUW                |
|                        |               | EUW24HZ = 1 x EUWN24HZ + ECB1MUW                |
| EUW32-36-40-44-48HZ    | Double module | EUW32HZ = 2 x EUWN16HZ + ECB2MUW                |
|                        |               | EUW36HZ = 1 x EUWN16HZ + 1 x EUWN20HZ + ECB2MUW |
|                        |               | EUW40HZ = 2 x EUWN20HZ + ECB2MUW                |
|                        |               | EUW44HZ = 1 x EUWN20HZ + 1 x EUWN24HZ + ECB2MUW |
|                        |               | EUW48HZ = 2 x EUWN24HZ + ECB2MUW                |
| EUW52-56-60-64-68-72HZ | Triple module | EUW52HZ = 2 x EUWN16HZ + 1 x EUWN20HZ + ECB3MUW |
|                        |               | EUW56HZ = 2 x EUWN20HZ + 1 x EUWN16HZ + ECB3MUW |
|                        |               | EUW60HZ = 3 x EUWN20HZ + ECB3MUW                |
|                        |               | EUW64HZ = 2 x EUWN20HZ + 1 x EUWN24HZ + ECB3MUW |
|                        |               | EUW68HZ = 2 x EUWN24HZ + 1 x EUWN20HZ + ECB3MUW |
|                        |               | EUW72HZ = 3 x EUWN24HZ + ECB3MUW                |

- Daikin scroll compressor
- Optimised design for use with R-407C refrigerant
- Low operating sound level
- Electronic DDC controller
- Low energy consumption
- Compact dimensions and low refrigerant volume
- Easy installation and maintenance
- Stainless steel plate heat exchanger
- Remote cooling or heating selection
- Water/water heat pump, with water reversibility
- Compatible with hydraulic module









EUW5-12HZ

EUW16-24HZ

EUW32-48HZ

EUW52-72HZ

|                            |             |     | EUW5HZ | EUW8HZ       | EUW10HZ       | EUW12HZ | EUW16HZ            | EUW20HZ       | EUW24HZ |  |  |
|----------------------------|-------------|-----|--------|--------------|---------------|---------|--------------------|---------------|---------|--|--|
| Nominal capacity           |             | kW  | 13.0   | 21.5         | 27.5          | 32.5    | 43                 | 55            | 65      |  |  |
| Nominal input              |             | kW  | 3.71   | 5.80         | 7.80          | 9.10    | 11.2               | 11.2 15.6     |         |  |  |
| Capacity steps             |             | %   |        |              | 1             |         | 2                  |               |         |  |  |
| Refrigerant                | type        |     |        | R-4          | 07C           |         | R-407C             |               |         |  |  |
| Compressor                 | type        |     |        | hermetically | sealed scroll | herr    | metically sealed s | croll         |         |  |  |
| No. refrigerant circuits / | compressors |     | 1/1    | 1/1          | 1/1           | 1/1     | 2/2                | 2/2           | 2/2     |  |  |
| Dimensions                 | HxWxD       | mm  |        | 600x6        | 00x600        |         |                    | 600x600x1,200 |         |  |  |
| Machine weight             |             | kg  | 113    | 150          | 160           | 167     | 300                | 320           | 334     |  |  |
| Sound power level          |             | dBA | 64     | 64           | 64            | 64      | 67                 | 67            | 67      |  |  |
| Power supply               |             | W1  |        | 3N~/40       | 0V/50Hz       |         |                    | 3N~/400V/50Hz | Z       |  |  |

|                              |             |        | EUW32HZ       | EUW36HZ | EUW40HZ                  | EUW44HZ | EUW48HZ |  |  |
|------------------------------|-------------|--------|---------------|---------|--------------------------|---------|---------|--|--|
| Nominal capacity             |             | kW     | 86            | 98      | 110                      | 120     | 130     |  |  |
| Nominal input                |             | kW     | 22.4          | 26.8    | 31.2                     | 33.9    | 36.6    |  |  |
| Capacity steps               |             | %      |               |         | 4                        |         |         |  |  |
| Refrigerant                  | type        | R-407C |               |         |                          |         |         |  |  |
| Compressor                   | type        |        |               |         | hermetically sealed scro | II      |         |  |  |
| No. refrigerant circuits / o | compressors |        | 4/4           | 4/4     | 4/4                      | 4/4     | 4/4     |  |  |
| Dimensions                   | HxWxD       | mm     |               |         | 1,200x600x1,200          |         |         |  |  |
| Machine weight               |             | kg     | 600           | 620     | 640                      | 654     | 664     |  |  |
| Sound power level            |             | dBA    | 70            | 70      | 70                       | 70      | 70      |  |  |
| Power supply                 |             | W1     | 3N~/400V/50Hz |         |                          |         |         |  |  |

|                          |               |     | EUW52HZ | EUW56HZ | EUW60HZ      | EUW64HZ       | EUW68HZ | EUW72HZ |
|--------------------------|---------------|-----|---------|---------|--------------|---------------|---------|---------|
| Nominal capacity         |               | kW  | 141     | 153     | 165          | 175           | 185     | 195     |
| Nominal input            |               | kW  | 38.0    | 42.4    | 46.8         | 49.5          | 52.2    | 54.9    |
| Capacity steps           |               | %   |         |         | (            | 5             |         |         |
| Refrigerant              | type          |     |         |         | R-4          | 07C           |         |         |
| Compressor               | type          |     |         |         | hermetically | sealed scroll |         |         |
| No. refrigerant circuits | / compressors |     | 6/6     | 6/6     | 6/6          | 6/6           | 6/6     | 6/6     |
| Dimensions               | HxWxD         | mm  |         |         | 1,800x60     | 00x1,200      |         |         |
| Machine weight           |               | kg  | 920     | 940     | 960          | 974           | 988     | 1,002   |
| Sound power level        |               | dBA | 72      | 72      | 72           | 72            | 72      | 72      |
| Power supply             |               | W1  |         |         | 3N~/40       | 0V/50Hz       |         |         |

# **OPTIONS**

| option | option description   |   |   |    |    |    |    |    |    | uı | nit s | ize |    |    |    |    |    |    |    | availability  |
|--------|--|---|---|----|----|----|----|----|----|----|-------|-----|----|----|----|----|----|----|----|---------------|
| number |  | 5 | 8 | 10 | 12 | 16 | 20 | 24 | 32 | 36 | 40    | 44  | 48 | 52 | 56 | 60 | 64 | 68 | 72 |               |
|        | Not completely combinable options                          |   |   |    |    |    |    |    |    |    |       |     |    |    |    |    |    |    |    |               |
| zh     | glycol application chilled water temperature down to -5°C  | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0     | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | fact. mounted |
| zl     | glycol application chilled water temperature down to -10°C | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0     | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | fact. mounted |
|        | Available kit  |   |   |    |    |    |    |    |    |    |       |     |    |    |    |    |    |    |    |               |
| EKDME  | Evaporator hydronic connection double module               | - | - | -  | -  | -  | -  | -  | 0  | 0  | 0     | 0   | 0  | -  | -  | -  | -  | -  | -  | kit           |
| EKTME  | Evaporator hydronic connection triple module               | - | - | -  | -  | -  | -  | -  | -  | -  | -     | -   | -  | 0  | 0  | 0  | 0  | 0  | 0  | kit           |
| EKDMC  | Condensor hydronic connection double module                | - | - | -  | -  | -  | -  | -  | 0  | 0  | 0     | 0   | 0  | -  | -  | -  | -  | -  | -  | kit           |
| EKTMC  | Condensor hydronic connection triple module                | - | - | -  | -  | -  | -  | -  | -  | -  | -     | -   | -  | 0  | 0  | 0  | 0  | 0  | 0  | kit           |

Impossible option combinations: ZH + ZL

available

not available





EUWA\*80-120MZY1

# 14 EUWA\*40-200MZY1

# Air-cooled water chillers using R-407C

# **BACKGROUND**

The current EUWA\*40-200LZ series will be replaced by the new MZ series. These chillers contain the new G-type compressor and are equipped with the new pCO<sup>2</sup> controller (see chapter 17).

| MODEL RANGE |            |
|-------------|------------|
| EUWA40MZY   | EUWA120MZY |
| EUWA50MZY   | EUWA140MZY |
| EUWA60MZY   | EUWA160MZY |
| EUWA80MZY   | EUWA180MZY |
| EUWA100MZY  | EUWA200MZY |

- PED approved units
- Daikin single screw compressor
- All components optimised for use with R-407C refrigerant
- Advanced pCO<sup>2</sup> DDC controller
- Modular format
- Standard operating range down to -15°C ambient
- High quality, anti-corrosion treated components as standard
- Moisture indicator as standard
- Victaulic joints as standard
- Chilled water temperatures down to -10°C on standard unit. (Parameter in the service menu of the DDC controller must be set by the installer)
- DICN operation as standard between all listed units.
- Evaporator heater tape as standard on all units
- Multiple capacity steps
- Double refrigeration circuit (from 160HP on)

|                         |       |     | EUWA*40MZ      | EUWA*50MZ         | EUWA*60MZ               | EUWA*80MZ | EUWA*100MZ |  |  |  |  |  |
|-------------------------|-------|-----|----------------|-------------------|-------------------------|-----------|------------|--|--|--|--|--|
| Nominal cooling capac   | city  | kW  | 111            | 144               | 164                     | 203       | 274        |  |  |  |  |  |
| Nominal power input     |       | kW  | 43             | 53                | 65                      | 80        | 103        |  |  |  |  |  |
| Capacity steps          |       |     |                |                   |                         |           |            |  |  |  |  |  |
| Compressor type         |       |     |                | Semi - h          | ermetic single screw co | mpressor  |            |  |  |  |  |  |
| Refrigerant type        |       |     | R-407C         |                   |                         |           |            |  |  |  |  |  |
| No. of circuits/compres | ssors |     | 1/1            | 1/1               | 1/1                     | 1/1       | 1/1        |  |  |  |  |  |
| Dimensions              | HxWxD | mm  |                | 2,250x2,340x2,238 |                         | 2,250x4,2 | 80x2,238   |  |  |  |  |  |
| Machine weight          |       | kg  | 1,346          | 1,610             | 1,637                   | 2,833     | 2,565      |  |  |  |  |  |
| Operation weight        |       | kg  | 1,354          | 1,623             | 1,653                   | 2,853     | 2,592      |  |  |  |  |  |
| Sound power level       |       | dBA | 91             | 91 94 95 98       |                         |           |            |  |  |  |  |  |
| Power supply            |       | Y1  | 3~, 50Hz, 400V |                   |                         |           |            |  |  |  |  |  |

|   |              |     | EUWA*120MZ        | EUWA*140MZ     | EUWA*160MZ              | EUWA*180MZ           | EUWA*200MZ           |  |  |  |
|---|--------------|-----|-------------------|----------------|-------------------------|----------------------|----------------------|--|--|--|
| Nominal cooling capacity                                |              | kW  | 313               | 392            | 419                     | 479                  | 539                  |  |  |  |
| Nominal power input                                     |              | kW  | 130               | 150            | 190                     | 213                  |                      |  |  |  |
| Capacity steps  | city steps % |     |                   | 100-74-48-36-0 | 100-87-74-61-48-24-0    | 100-89-74-63-48-27-0 | 100-87-74-61-48-24-0 |  |  |  |
|   |              |     |                   |                | (100% compressor leads) |                      |                      |  |  |  |
| Compressor type Semi - hermetic single screw compressor |              |     |                   |                |                         |                      |                      |  |  |  |
| Refrigerant type  |              |     |                   |                | R-407C                  |                      |                      |  |  |  |
| No. of circuits/compressors                             |              |     | 1/1               | 1/1            | 1/1 2/2 2/2             |                      |                      |  |  |  |
| Dimensions  | HxWxD        | mm  | 2,250x4,280x2,238 |                | 2,250x5,9               | 006x2,238            |                      |  |  |  |
| Machine weight  |              | kg  | 3,404             | 4,500          | 5,002                   | 5,044                | 5,086                |  |  |  |
| Operation weight  |              | kg  | 3,438             | 4,574          | 5,125                   | 5,174                |                      |  |  |  |
| Sound power level                                       |              | dBA | 99                | 102            |                         |                      |                      |  |  |  |
| Power supply  |              | Y1  |                   |                | 3~, 50Hz, 400V          |                      |                      |  |  |  |

# **OPTIONS**

| option | option description                          | n   | odel-ty | pe  |    |    |    | ur | it si | ze  |     |     |     | availability  |
|--------|---|-----|---------|-----|----|----|----|----|-------|-----|-----|-----|-----|---------------|
| number |   | PED | d       | s   | 40 | 50 | 60 | 80 | 100   | 120 | 160 | 180 | 200 |               |
|        | Completely combinable options               |     |         |     |    |    |    |    |       |     |     |     |     |               |
| op03   | dual pressure relief valve on the condenser | 0   | std     | std | 0  | 0  | 0  | 0  | 0     | 0   | 0   | 0   | 0   | fact. mounted |
| op12   | suction stop valve                          | 0   | std     | std | 0  | 0  | 0  | 0  | 0     | 0   | 0   | 0   | 0   | fact. mounted |
| op52   | main isolator switch (only y1-model)        | 0   | 0       | 0   | 0  | 0  | 0  | 0  | 0     | 0   | 0   | 0   | 0   | fact. mounted |
| op57   | a-meter, V-meter                            | 0   | 0       | 0   | 0  | 0  | 0  | 0  | 0     | 0   | 0   | 0   | 0   | fact. mounted |
| OPLN   | low noise operation                         | 0   | 0       | 0   | 0  | 0  | 0  | 0  | 0     | 0   | 0   | 0   | 0   | fact. mounted |
| OPCG   | condenser protection grilles                | 0   | 0       | 0   | 0  | 0  | 0  | 0  | 0     | 0   | 0   | 0   | 0   | fact. mounted |

o available std standard





EUWA\*80-120MXY1/T1

# 15 EUWA\*40-200MXY1/T1

# Air-cooled water chillers using R-134a

# **BACKGROUND**

The current EUWA\*40-200K(A)X series will be replaced by the new MX series. These chillers contain the new G-type compressor and are equipped with the new pCO<sup>2</sup> controller (see chapter 17).

| MODEL RANGE |            |
|-------------|------------|
| EUWA40MXY   | EUWA40MXT  |
| EUWA50MXY   | EUWA50MXT  |
| EUWA60MXY   | EUWA60MXT  |
| EUWA80MXY   | EUWA80MXT  |
| EUWA100MXY  | EUWA100MXT |
| EUWA120MXY  | EUWA120MXT |
| EUWA160MXY  |            |
| EUWA180MXY  |            |
| EUWA200MXY  |            |

- All models are PED pressure vessel approved.
- Daikin single screw compressor
- All components optimised for use with R-134a refrigerant
- Advanced pCO<sup>2</sup> DDC controller
- Electronic expansion valve for refrigerant circuits >= 80HP
- Modular format
- Standard operating range down to -15°C ambient
- High quality, anti-corrosion treated components as standard
- Moisture indicator as standard
- · Victaulic joints as standard
- Chilled water temperatures down to -10°C on standard unit. (Parameter in the service menu of the DDC controller must be set by the installer)
- DICN operation as standard between all listed air-cooled and listed water-cooled units. (air-cooled and water-cooled can not be mixed)
- Liquid line solenoid valves standard on all units
- Evaporator heater tape as standard on all units
- Multiple capacity steps
- Double refrigeration circuit (from 80HP on for air-cooled units)

|                        |            |     | EUWA*40MX      | EUWA*50MX                             | EUWA*60MX      | EUWA*80MX               | EUWA*100MX     |  |  |  |  |  |
|------------------------|------------|-----|----------------|---------------------------------------|----------------|-------------------------|----------------|--|--|--|--|--|
| Nominal cooling capac  | city       | kW  | 111            | 140                                   | 166            | 211                     | 276            |  |  |  |  |  |
| Nominal power input    |            | kW  | 39.1           | 53.7                                  | 64.0           | 79                      | 110            |  |  |  |  |  |
| Capacity steps         |            | %   |                | 100-75-55-0                           |                | 100-88-76-63-50-38-25-0 |                |  |  |  |  |  |
| Compressor type        |            |     |                | semi-hermetic single screw compressor |                |                         |                |  |  |  |  |  |
| Refrigerant type       |            |     | R-134a         |                                       |                |                         |                |  |  |  |  |  |
| No. of circuits/compre | ssors      |     | 1/1            | 1/1                                   | 1/1            | 2/2                     | 2/2            |  |  |  |  |  |
| Dimensions             | HxWxD      | mm  |                | 2,221x3,973x1,109                     |                | 2,248x3,9               | 73x2,216       |  |  |  |  |  |
| Machine weight         |            | kg  | 1,391          | 1,600                                 | 1,705          | 2,710                   | 3,210          |  |  |  |  |  |
| Operation weight       |            | kg  | 1,439          | 1,655                                 | 1,798          | 2,790                   | 3,345          |  |  |  |  |  |
| Sound power level      |            | dBA | 91             | 97                                    | 94             | 100                     |                |  |  |  |  |  |
| Power supply           | ver supply |     | 3~, 50Hz, 400V |                                       |                |                         |                |  |  |  |  |  |
|                        |            | T1  | 3~, 50Hz, 230V | 3~, 50Hz, 230V                        | 3~, 50Hz, 230V | 3~, 50Hz, 230V          | 3~, 50Hz, 230V |  |  |  |  |  |

|                             |                       |    | EUWA*120MX                            | EUWA*160MX                 | EUWA*180MX                 | EUWA*200MX                 |  |  |  |  |
|-----------------------------|-----------------------|----|---------------------------------------|----------------------------|----------------------------|----------------------------|--|--|--|--|
| Nominal cooling capacity    |                       | kW | 316                                   | 400                        | 438                        | 475                        |  |  |  |  |
| Nominal power input         | nal power input       |    | 130                                   | 164                        | 178                        | 191                        |  |  |  |  |
| Capacity steps              | y steps               |    | 100-88-76-63-50-38-25-0               | 100-87-74-61-48-42-36-18-0 | 100-88-74-62-48-43-36-20-0 | 100-87-74-61-48-42-36-18-0 |  |  |  |  |
| Compressor type             |                       |    | semi-hermetic single screw compressor |                            |                            |                            |  |  |  |  |
| Refrigerant type            |                       |    | R-134a                                |                            |                            |                            |  |  |  |  |
| No. of circuits/compressors |                       |    | 2/2                                   | 2/2                        | 2/2                        | 2/2                        |  |  |  |  |
| Dimensions                  | HxWxD                 | mm | 2,248x3,973x2,216                     |                            | 2,250x5,906x2,238          |                            |  |  |  |  |
| Machine weight              | -                     | kg | 3,260                                 | 5,400                      | 5,500                      |                            |  |  |  |  |
| Operation weight            |                       | kg | 3,385                                 | 5,488                      | 5,544                      | 5,603                      |  |  |  |  |
| Sound power level           | Sound power level dBA |    | 98                                    | 99                         | 100                        | 100                        |  |  |  |  |
| Power supply                | Power supply Y1       |    |                                       | 3~, 50H                    | z, 400V                    |                            |  |  |  |  |
|                             |                       | T1 | 3~, 50Hz, 230V                        | -                          | -                          | -                          |  |  |  |  |

# **OPTIONS**

| option | option description                          | m   | odel-ty | pe  |    |    |    | ur | nit si | ze  |     |     |     | availability  |
|--------|---|-----|---------|-----|----|----|----|----|--------|-----|-----|-----|-----|---------------|
| number |   | PED | d       | S   | 40 | 50 | 60 | 80 | 100    | 120 | 160 | 180 | 200 |               |
|        | Completely combinable options               |     |         |     |    |    |    |    |        |     |     |     |     |               |
| op01   | liquid line solenoid valve                  | std | std     | std |    |    |    |    |        |     |     |     |     |               |
| op03   | dual pressure relief valve on the condenser | 0   | std     | std | 0  | 0  | 0  | 0  | 0      | 0   | 0   | 0   | 0   | fact. mounted |
| op12   | suction stop valve                          | 0   | std     | std | 0  | 0  | 0  | 0  | 0      | 0   | 0   | 0   | 0   | fact. mounted |
| op52   | main isolator switch                        | 0   | 0       | 0   | 0  | 0  | 0  | 0  | 0      | 0   | 0   | 0   | 0   | fact. mounted |
| op57   | a-meter, V-meter                            | 0   | 0       | 0   | 0  | 0  | 0  | 0  | 0      | 0   | 0   | 0   | 0   | fact. mounted |
| OPLN   | low noise operation                         | 0   | 0       | 0   | 0  | 0  | 0  | 0  | 0      | 0   | 0   | 0   | 0   | fact. mounted |
| OPCG   | condenser protection grilles                | 0   | 0       | 0   | 0  | 0  | 0  | 0  | 0      | 0   | 0   | 0   | 0   | fact. mounted |

o available std standard





EUWL\*40-100MX

EUW\*120-200MX

# 16 EUW(L)\*40-200MXY1/T1

# Water-cooled (remote condenser) chillers using R-134a

# **BACKGROUND**

The current EUW(L)\*40-200KX series will be replaced by the new MX series. These chillers contain the new G-type compressor and are equipped with the new pCO<sup>2</sup> controllers (see chapter 17).

# MODEL RANGE

| Water-cooled water ch | nillers   | Remote condenser chi | llers      |
|-----------------------|-----------|----------------------|------------|
| EUW40MXY              | EUW40MXT  | EUWL40MXY            | EUWL40MXT  |
| EUW60MXY              | EUW60MXT  | EUWL60MXY            | EUWL60MXT  |
| EUW80MXY              | EUW80MXT  | EUWL80MXY            | EUWL80MXT  |
| EUW100MXY             | EUW100MXT | EUWL100MXY           | EUWL100MXT |
| EUW120MXY             | EUW120MXT | EUWL120MXY           | EUWL120MXT |
| EUW140MXY             | EUW140MXT | EUWL140MXY           | EUWL140MXT |
| EUW160MXY             | EUW160MXT | EUWL160MXY           | EUWL160MXT |
| EUW180MXY             | EUW180MXT | EUWL180MXY           | EUWL180MXT |
| EUW200MXY             | EUW200MXT | EUWL200MXY           | EUWL200MXT |

- All models are PED pressure vessel approved
- Daikin single screw compressor
- All components optimised for use with R-134a refrigerant
- Advanced pCO<sup>2</sup> DDC controller
- Electronic expansion valve for refrigerant circuits >= 80HP
- Modular format
- Standard operating range down to -15°C ambient
- High quality, anti-corrosion treated components as standard
- Moisture indicator as standard
- · Victaulic joints as standard
- Chilled water temperatures down to -10°C on standard unit.
   (Parameter in the service menu of the DDC controller must be set by the installer)
- DICN operation as standard between all listed air-cooled and listed water-cooled units. (air-cooled and water-cooled can not be mixed)
- Evaporator heater tape as standard on all units
- Multiple capacity steps
- Double refrigeration circuit (from 120HP on)

|                            |         |       | EUW*40MX     | EUW*60MX                   | EUW*80MX       | EUW*100MX       | EUW*120MX           |  |  |  |
|----------------------------|---------|-------|--------------|----------------------------|----------------|-----------------|---------------------|--|--|--|
| Nominal capacity           | cooling | kW    | 120          | 190                        | 249            | 290             | 380                 |  |  |  |
|                            | heating | kW    | 149          | 237                        | 313            | 362             | 474                 |  |  |  |
| Nominal input              | cooling | kW    | 30.0         | 48.6                       | 66.1           | 74              | 97.2                |  |  |  |
|                            | heating | kW    | 35.1         | 57.2                       | 75.5           | 87.3            | 114.0               |  |  |  |
| Capacity steps             |         | %     | 100 74 49    | 12(start up)               | 100 74 49 2    | 6-12(start up)  | 100-88-76-63-50-38- |  |  |  |
|                            |         |       | 100-74-46-   | 12(Start up)               | 0-12(Start up) | 25-12(start up) |                     |  |  |  |
| Refrigerant circuit        | type    |       | R-134a       | R-134a                     | R-134a         | R-134a          | R-134a              |  |  |  |
| Compressor                 | type    |       |              | semi-hermetic single screw |                |                 |                     |  |  |  |
| No. of circuits/compressor | 'S      |       | 1/1          | 1/1                        | 1/1            | 1/1             | 2/2                 |  |  |  |
| Dimensions                 |         | mm    |              | 1,014 x 2,                 | 672 x 898      |                 | 2,000 x 2,672 x 898 |  |  |  |
| Machine weight             |         | kg    | 990          | 1,320                      | 1,640          | 1,680           | 2,640               |  |  |  |
| Operation weight           |         | kg    | 1,020        | 1,370                      | 1,710          | 1,760           | 2,740               |  |  |  |
| Sound power level          |         | dB(A) | 90           | 96                         | 96             | 98              | 99                  |  |  |  |
| Power supply               |         | Y1    | 3~/400V/50Hz |                            |                |                 |                     |  |  |  |
|                            |         | T1    | 3~/230V/50Hz |                            |                |                 |                     |  |  |  |

|                           |         |       | EUW*140MX                          | EUW*160MX    | EUW*180MX                   | EUW*200MX |  |  |  |  |
|---------------------------|---------|-------|------------------------------------|--------------|-----------------------------|-----------|--|--|--|--|
| Nominal capacity          | cooling | kW    | 439                                | 498          | 539                         | 580       |  |  |  |  |
|                           | heating | kW    | 626                                | 675          | 724                         |           |  |  |  |  |
| Nominal input             | cooling | kW    | 115                                | 132          | 140                         | 148       |  |  |  |  |
|                           | heating | kW    | 133.0                              | 151          | 163                         | 175       |  |  |  |  |
| Capacity steps            |         | %     | 100-88-76-63-50-38-25-12(start up) | 100-8        | 37-74-68-50-37-24-18-12(sta | art up)   |  |  |  |  |
| Refrigerant circuit       | type    |       | R-134a                             | R-134a       | R-134a                      | R-134a    |  |  |  |  |
| Compressor                | type    |       |                                    | semi hermeti | c single screw              |           |  |  |  |  |
| No. of circuits/compresso | ors     |       | 2/2                                | 2/2          | 2/2                         | 2/2       |  |  |  |  |
| Dimensions                |         | mm    |                                    | 2,000 x 2,   | 672 x 898                   |           |  |  |  |  |
| Machine weight            |         | kg    | 2,960                              | 3,280        | 3,320                       | 3,360     |  |  |  |  |
| Operation weight          |         | kg    | 3,080                              | 3,420        | 3,470                       | 3,520     |  |  |  |  |
| Sound power level         |         | dB(A) | 99                                 | 99 99 100    |                             |           |  |  |  |  |
| Power supply Y1           |         |       | 3~/400V/50Hz                       |              |                             |           |  |  |  |  |
|                           |         | T1    |                                    | 3~/230V/50Hz |                             |           |  |  |  |  |

# OPTIONS

| option | option description                          | n | odel-ty | pe  | unit size |    |    |    |     |     |     |     | availability |     |               |
|--------|---|---|---------|-----|-----------|----|----|----|-----|-----|-----|-----|--------------|-----|---------------|
| number | number                                      |   | d       | s   | 40        | 50 | 60 | 80 | 100 | 120 | 140 | 160 | 180          | 200 |               |
|        | Completely combinable options               |   |         |     |           |    |    |    |     |     |     |     |              |     |               |
| op01   | liquid line solenoid valve                  | 0 | std     | std | 0         | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0            | 0   | fact. mounted |
| op03   | dual pressure relief valve on the condenser | 0 | std     | std | 0         | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0            | 0   | fact. mounted |
| op12   | suction stop valve (only Y1-model)          | 0 | std     | std | 0         | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0            | 0   | fact. mounted |
| op52   | main isolator switch                        | 0 | 0       | 0   | 0         | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0            | 0   | fact. mounted |
| op57   | a-meter, V-meter                            | 0 | 0       | 0   | 0         | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0            | 0   | fact. mounted |
| OPLN   | low noise operation                         | 0 | 0       | 0   | 0         | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0            | 0   | fact. mounte  |

o available std standard

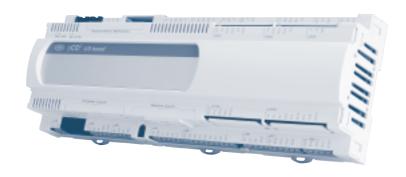
|                            |         |       | EUWL*40MX    | EUWL*60MX     | EUWL*80MX   | EUWL*100MX         | EUWL*120MX          |  |  |
|----------------------------|---------|-------|--------------|---------------|-------------|--------------------|---------------------|--|--|
| Nominal capacity           | cooling | kW    | 119          | 188           | 246         | 287                | 376                 |  |  |
| Nominal input              | cooling | kW    | 30.5         | 49.4          | 67.2        | 75.3               | 98.9                |  |  |
| Capacity steps             |         | %     | 100 74 49    | -12(start up) | 100 74 49 2 | 6-12(start up)     | 100-88-76-63-50-    |  |  |
|                            |         |       | 100-74-40-   | -12(Start up) | 100-74-40-3 | 38-25-12(start up) |                     |  |  |
| Refrigerant circuit        | type    |       | R-134a       | R-134a        | R-134a      | R-134a             | R-134a              |  |  |
| Compressor                 | type    |       |              | Se            | 2W          |                    |                     |  |  |
| No. of circuits/compressor | S       |       | 1/1          | 1/1           | 1/1         | 1/1                | 2/2                 |  |  |
| Dimensions                 |         | mm    |              | 1,014 x 2,    | 672 x 898   |                    | 2,000 x 2,672 x 898 |  |  |
| Machine weight             |         | kg    | 882          | 1,100         | 1,370       | 1,410              | 2,200               |  |  |
| Operation weight           |         | kg    | 895          | 1,120         | 1,397       | 1,444              | 2,240               |  |  |
| Sound power level          |         | dB(A) | 90           | 96            | 96          | 98                 | 99                  |  |  |
| Power supply Y1            |         |       | 3~/400V/50Hz |               |             |                    |                     |  |  |
| T1 3~/230V/50Hz            |         |       |              |               |             |                    |                     |  |  |

|                           |         |       | EUWL*140MX                 | EUWL*160MX                            | EUWL*180MX                 | EUWL*200MX |  |  |  |  |
|---------------------------|---------|-------|----------------------------|---------------------------------------|----------------------------|------------|--|--|--|--|
| Nominal capacity          | cooling | kW    | 434                        | 493                                   | 533                        | 574        |  |  |  |  |
| Nominal input             | cooling | kW    | 117 134                    |                                       | 143                        | 151        |  |  |  |  |
| Capacity steps            |         | %     | 100-88-76-63-50-           | 100.9                                 | 77 74 60 E0 27 24 10 12/c+ | ort un)    |  |  |  |  |
|                           |         |       | 38-25-12(start up)         | 100-87-74-68-50-37-24-18-12(start up) |                            |            |  |  |  |  |
| Refrigerant circuit       | type    | type  |                            | R-134a R-134a R-134a                  |                            |            |  |  |  |  |
| Compressor                | type    |       | semi hermetic single screw |                                       |                            |            |  |  |  |  |
| No. of circuits/compresso | ors     |       | 2/2                        | 2/2                                   | 2/2                        | 2/2        |  |  |  |  |
| Dimensions                |         | mm    |                            | 2,000 x 2,                            | 672 x 898                  |            |  |  |  |  |
| Machine weight            |         | kg    | 2,470                      | 2,740                                 | 2,780                      | 2,820      |  |  |  |  |
| Operation weight          |         | kg    | 2,517                      | 2,794                                 | 2,841                      | 2,888      |  |  |  |  |
| Sound power level         |         | dB(A) | 99 99 100 100              |                                       |                            |            |  |  |  |  |
| Power supply              |         | Y1    |                            | 3~/400                                | V/50Hz                     |            |  |  |  |  |
|                           |         | T1    | 3~/230V/50Hz               |                                       |                            |            |  |  |  |  |

# OPTIONS

| option | option description                          | n   | nodel-ty | ре  |    |    |    |    | unit | size | •   |     |     |     | availability  |
|--------|---|-----|----------|-----|----|----|----|----|------|------|-----|-----|-----|-----|---------------|
| number |   | PED | d        | S   | 40 | 50 | 60 | 80 | 100  | 120  | 140 | 160 | 180 | 200 |               |
|        | Completely combinable options               |     |          |     |    |    |    |    |      |      |     |     |     |     |               |
| op01   | liquid line solenoid valve                  | std | std      | std | 0  | 0  | 0  | 0  | 0    | 0    | 0   | 0   | 0   | 0   | fact. mounted |
| op03   | dual pressure relief valve on the condenser | 0   | std      | std | 0  | 0  | 0  | 0  | 0    | 0    | 0   | 0   | 0   | 0   | fact. mounted |
| op12   | suction stop valve                          | 0   | std      | std | 0  | 0  | 0  | 0  | 0    | 0    | 0   | 0   | 0   | 0   | fact. mounted |
| op52   | main isolator switch                        | 0   | 0        | 0   | 0  | 0  | 0  | 0  | 0    | 0    | 0   | 0   | 0   | 0   | fact. mounted |
| op57   | a-meter, V-meter                            | 0   | 0        | 0   | 0  | 0  | 0  | 0  | 0    | 0    | 0   | 0   | 0   | 0   | fact. mounted |
| OPLN   | low noise operation                         | 0   | 0        | 0   | 0  | 0  | 0  | 0  | 0    | 0    | 0   | 0   | 0   | 0   | fact. mounted |

o available std standard



pCO<sup>2</sup> controller

# 17 pCO<sup>2</sup> CONTROLLER

### **BACKGROUND**

To respond to the increasing market demand for accurate control, all Daikin chillers will be equipped with the newest pCO<sup>2</sup> controller.

# **FUNCTIONS**

Advanced pCO<sup>2</sup> DDC controller offering following functions:

- **Schedule timer**: Four timer groups can be used, in which up to nine time related actions can be defined. Days appointed to a timer group will follow the time related action settings of that group. Holiday periods that can also be entered by date. All days in such periods will work according to the settings in the holiday group, which is defined in the same way as the timer groups. (Note: for this to work correctly the internal time, date and day need to be set correctly)
- Floating setpoint: adjustment of setpoint according to ambient temperature
- Free cooling: feature that allows the unit to be integrated into a free cooling application
- **Double evaporator pump**: enables the use of two evaporator pumps (together or as a backup)
- Lead-lag of compressors: the compressors can be set for lead-lag operation
- **Manual pump on**: the facility to turn the pump on manually if the unit is off, in order to test the pump operation
- Time and date information: time, date and day can be set
- **Daily pump on**: the facility to turn on the pump automatically each day at a set time to avoid pump blockage as a result of its being idle for a long time
- **Changeable digital inputs/outputs**: several digital inputs/outputs can be given a series of functions depending on user preference.
  - Changeable digital inputs are: remote on/off, remote cooling/heating, dual setpoint and limit capacity.
  - Changeable digital outputs are: heating mode/cooling mode output signal, 100% unit signal and condenser pump (facility to steer condenser pump).
- **Temperature probe fine tuning**: the facility to adjust the water temperature probes in order to fine tune the measurement
- Advanced freeze-up control: either normal freeze-up alarm can be used or the unit can be allowed to go into freeze-up several times in a certain time period without generating an alarm, the unit will only cease operating for a certain time.
- Extended alarm history: up to 20 alarms can be reviewed
- Languages: 5 languages can be selected on the controller (English, German, French, Italian, Spanish)







FWV3C(F)6V1

FWH3C(F)6V1

FWM3A(F)6V1

# 18 FWV/FWH1-10C(F)6V1

# Low wall unit / flexi type unit

# FWM1-10A(F)6V1

# Concealed flexi type unit

# **BACKGROUND**

A completely new range of fan coils will be available by spring next year. Main features of these units will be their low sound level, their new modern design and controls. Moreover, each model will be available in 7 capacity versions, both 2- and 4-pipe.

| MODEL RANGE  |              |              |
|--------------|--------------|--------------|
| FWV1C(F)6V1  | FWH1C(F)6V1  | FWM1A(F)6V1  |
| FWV2C(F)6V1  | FWH2C(F)6V1  | FWM2A(F)6V1  |
| FWV3C(F)6V1  | FWH3C(F)6V1  | FWM3A(F)6V1  |
| FWV4C(F)6V1  | FWH4C(F)6V1  | FWM4A(F)6V1  |
| FWV6C(F)6V1  | FWH6C(F)6V1  | FWM6A(F)6V1  |
| FWV8C(F)6V1  | FWH8C(F)6V1  | FWM8A(F)6V1  |
| FWV10C(F)6V1 | FWH10C(F)6V1 | FWM10A(F)6V1 |

- Low wall unit FWV:
  - new casing
  - vertical air outlet
  - adjustable air outlet grille
  - with side doors
  - new electronic or mechanical controller
- Flexi type unit FWH:
  - new modern casing
  - adjustable air outlet grille
  - can be installed on either floor or ceiling
- Concealed flexi type unit FWM :
  - FWHM and FWVM are integrated into 1 model
  - standard drainpan for both vertical and horizontal use

| SPECIFICATION             | S           |      |           |           |             |           |           |               |               |
|---------------------------|-------------|------|-----------|-----------|-------------|-----------|-----------|---------------|---------------|
| FWV/FWH-C(F)6V1           |             |      |           |           |             |           |           |               |               |
| FWM-A(F)6V1               |             |      | 1         | 2         | 3           | 4         | 6         | 8             | 10            |
| Total cooling capacity    | Н           | W    | 1,540     | 2,090     | 2,930       | 4,330     | 4,770     | 6,710         | 8,710         |
| Sensible capacity         | Н           | W    | 1,200     | 1,500     | 2,250       | 3,420     | 3,650     | 4,900         | 6,380         |
| Heating capacity (2-pipe) | Н           | W    | 3,410     | 4,370     | 6,050       | 8,940     | 9,760     | 13,560        | 17,620        |
| Heating capacity (4-pipe) | Н           | W    | 2,260     | 2,340     | 3,330       | 5,110     | 5,270     | 8,000         | 9,430         |
| Power input               | H/L         | W    | 36/21     | 46/21     | 62/30       | 87/41     | 89/42     | 182/86        | 244/109       |
| Water flow rate (2-pipe)  | cooling (H) | l/h  | 266       | 359       | 509         | 732       | 817       | 1,130         | 1,487         |
|                           | heating (H) | l/h  | 299       | 383       | 530         | 784       | 856       | 1,190         | 1,545         |
| Water flow rate (4-pipe)  | Н           | l/h  | 198       | 205       | 292         | 448       | 462       | 702           | 827           |
| Air flow rate             | H/L         | m³/h | 319/178   | 344/211   | 442/241     | 706/361   | 785/470   | 1,011/570     | 1,393/642     |
| Sound power level         | H/L         | dBA  | 47/34     | 52/36     | 50/38       | 55/40     | 59/44     | 59/44         | 66/48         |
| Dimensions (FWH)          | HxWxD       | mm   | 226x77    | 74x564    | 226x984x564 | 226x1,1   | 94x564    | 251x1,404x564 | 251x1,614x564 |
| Dimensions (FWV)          | HxWxD       | mm   | 564x77    | 74x226    | 564x984x226 | 564x1,1   | 94x226    | 564x1,404x251 | 564x1,614x251 |
| Dimensions (FWM)          | HxWxD       | mm   | 535x49    | 98x224    | 535x708x224 | 535x9     | 18x224    | 535x1,128x249 | 535x1,338x249 |
| Weight (FWH) (2-/4-pipe)  |             | kg   | 20.9/22   | 22.1/23.2 | 27.7/29     | 33.3/35   | 33.3/35   | 42.3/44.6     | 43.1/45.4     |
| Weight (FWV) (2-/4-pipe)  |             | kg   | 20.1/21.2 | 20.6/21.7 | 26.1/27.4   | 31.8/33.5 | 31.8/33.5 | 40.8/43.1     | 40.8/43.1     |
| Weight (FWM) (2-/4-pipe)  |             | kg   | 14.6/15.7 | 15.1/16.2 | 19.5/20.8   | 23.8/25.5 | 24.6/26.3 | 31.8/34.1     | 31.8/34.1     |



FWD12A(F)6

# 19 FWD4-18A(F)6V1

# Concealed ceiling unit

# **BACKGROUND**

Next spring, to expand the range of existing duct units (FWM), Daikin will introduce a range of high ESP fan coil units.

| MODEL RANGE  |  |
|--------------|--|
| FWD4A(F)6V1  |  |
| FWD6A(F)6V1  |  |
| FWD8A(F)6V1  |  |
| FWD10A(F)6V1 |  |
| FWD12A(F)6V1 |  |
| FWD16A(F)6V1 |  |
| FWD18A(F)6V1 |  |

- extension of the range up to 18.3 kW cooling capacity
- external static pressure from 90 Pa (FWD4) to 185 Pa (FWD18)
- standard filter
- low height
- small dimensions
- low noise levels

| <b>SPECIFICATION</b>      | IS      |      |             |             |         |        |               |        |         |
|---------------------------|---------|------|-------------|-------------|---------|--------|---------------|--------|---------|
| FWD-A(F)6V1               |         |      | 4           | 6           | 8       | 10     | 12            | 16     | 18      |
| Total cooling capacity    |         | kW   | 3.9         | 6.2         | 7.8     | 8.82   | 11.9          | 16.4   | 18.3    |
| Sensible capacity         |         | kW   | 3.08        | 4.65        | 6.52    | 7.36   | 9.36          | 12.8   | 14.3    |
| Heating capacity (2-pipe) |         | kW   | 10.1        | 16.1        | 19.6    | 22.4   | 30.0          | 40.9   | 45.0    |
| Heating capacity (4-pipe) |         | kW   | 5.63        | 8.24        | 11.5    | 11.5   | 19.7          | 26.2   | 26.2    |
| Maximum power input       |         | W    | 250         | 410         | 500     | 500    | 700           | 1,100  | 1,100   |
| Available static pressure |         | Pa   | 90          | 88          | 100     | 95     | 130           | 205    | 185     |
| Water flow rate (2-pipe)  | cooling | l/h  | 674         | 1,071       | 1,469   | 1,659  | 2,056         | 2,833  | 3,162   |
|                           | heating | l/h  | 872         | 1,391       | 1,840   | 2,116  | 2,592         | 3,533  | 3,887   |
| Water flow rate (4-pipe)  |         | l/h  | 968         | 1,417       | 1,978   | 1,978  | 3,388         | 4,490  | 4,490   |
| Air flow rate             |         | m³/h | 800         | 1,250       | 1,600   | 1,600  | 2,200         | 3,000  | 3,000   |
| Sound power level         |         | dBA  | 66          | 69          | 72      | 72     | 74            | 78     | 78      |
| Dimensions                | HxWxD   | mm   | 280x754x559 | 280x964x559 | 280x1,1 | 74x559 | 352x1,174x718 | 352x1, | 384x718 |
| Weight                    |         | kg   | 32.5        | 40.6        | 47.3    | 48.7   | 65.3          | 77     | 79.5    |





LGYP2,3B7V1

# 20 LDYP3-4B7V1 / LGYP2-3B7V1

# Medium temperature range refrigeration units

# **BACKGROUND**

**MODEL RANGE** 

Daikin Europe NV launches the Refrigeration business in Europe. The objective of Refrigeration is to cool or to freeze products, as well as to keep the right temperature for employees working in the processing areas. This business contains the Medium, Chilled and Frozen range.

| INDOOR UNITS | OUTDOOR UNITS |  |
|--------------|---------------|--|
| LDYP3B7V1    | RYP71B7W1     |  |
| LDYP4B7V1    | RYP100B7W1    |  |
| LDYP4B7V1    | RYP125B7W1    |  |
| LGYP3B7V1    | RYP71B7W1     |  |

RYP100B7W1

RYP125B7W1

# **FEATURES**

LGYP2B7V1

LGYP2B7V1

- Low sound level
- High reliability
- Long piping length: up to 50m
- Wide outdoor operation range: -15°C to 46°CDB in cooling mode, -9°C to 21°CDB in heating mode
- Indoor unit operation range: down to 14°C
- Possible applications are wine storage & selling area, food processing work shop and various areas where lower temperature air conditioning is required for the food quality and sanitary conditions.

|                               |                      |  | 3HP   | 4HP                    | 5HP       | 3HP                    | 4HP                    | 5HP   |
|-------------------------------|----------------------|--|---|------------------------|-----------|------------------------|------------------------|-------|
| INDOOR UNIT                   |                      | LDYP3B7V1  | LDYP4B7V1   |                        | LGYP3B7V1 | LGYP2B7V1              |                        |       |
|                               |                      | Pair   | Pair  |                        | Pair      | Twin                   |                        |       |
| Capacity                      | cooling              | kW   | 6.4   | 9.0                    | 11.0      | 6.4                    | 9.0                    | 11.0  |
|                               | heating              | kW   | 7.9   | 11.4                   | 14.9      | 7.9                    | 11.4                   | 14.9  |
| Power input                   | cooling              | kW   | 2.5   | 3.4                    | 4.4       | 2.5                    | 3.4                    | 4.4   |
|                               | heating              | kW   | 2.4   | 3.3                    | 4.3       | 2.4                    | 3.3                    | 4.3   |
| Sound power level (M)         | cooling              | dB(A)  | 75  | 3                      | 31        | 56 (H)                 | 53 (H)                 |       |
|                               | heating              | dB(A)  | 75  | 3                      | 31        | 56 (H)                 | 53 (H)                 |       |
| Sound pressure level (M)      | cooling              | dB(A)  | 44  | 45                     |           | 40/35 (H/L)            | 37/32 (H/L)            |       |
|                               | heating              | dB(A)  | 44  | 4                      | 15        | 40/35 (H/L)            | 37/32 (H/L)            |       |
| Air flow rate (M)             | cooling              | m³/min   | 43  | 69                     |           | 31/24 (H/L)            | 28/21                  | (H/L) |
|                               | heating              | m³/min   | 43  | 69                     |           | 31/24 (H/L)            | 28/21 (H/L)            |       |
| External static pressure      |                      | Pa   | 150   | 250                    |           | -                      | -                      |       |
| Fan speed                     |                      |  | 3 steps (direct drive)                                    | 3 steps (direct drive) |           | 2 steps (direct drive) | 2 steps (direct drive) |       |
| Piping connections            | liquid / gas (flare) | mm   | 9.5/15.9  | 9.5                    | 9.5/19.1  |                        | 9.5/19.1               |       |
|                               | drain ID / OD        | mm   | mm 23/25  |                        |           |                        | 25/32 (VP25)           |       |
| Heat insulation               |                      |  | conduites de liquide et de gaz                            |                        |           |                        |                        |       |
| Operation range               | cooling              |  | 14°CDB ~ 30°CDB / 10°CWB ~ 24°CWB (Humidity 80% or below) |                        |           |                        |                        |       |
|                               | heating              |  | 14°CDB ~ 24°CDB   |                        |           |                        |                        |       |
| Operation mode                |                      |  | cooling, heating, auto and fan only                       |                        |           |                        |                        |       |
| Dimensions                    | HxWxD                | mm   | 350x1,400x662   | 450x1,4                | 00x900    | 288x840x840            | 288x84                 | 0x840 |
| Weight                        |                      | kg   | 59  | 59 90                  |           | 27                     | 2                      | 7     |
| Refrigerant                   |                      | R-407C   | R-407C  |                        | R-407C    | R-407C                 |                        |       |
| OUTDOOR UNIT                  |                      | RYP71B7W1  | RYP100B7W1  | RYP125B7W1             | RYP71B7W1 | RYP100B7W1             | RYP125B7W1             |       |
| Sound power level (M)         | cooling/heating      | dB(A)  | 63/-  | 66/-                   | 67/-      | 63/-                   | 66/-                   | 67/-  |
| Sound pressure level (M)      | cooling/heating      | dB(A)  | 50/52   | 53/56                  | 53/56     | 50/52                  | 53/56                  | 53/56 |
| Max. piping length & height m |                      | Max. piping length: 50m, Max. level difference: 30m, chargeless piping length: up to 30m |   |                        |           |                        |                        |       |
| Operation range cooling       |                      | -15°CDB ~ 46°CDB   |   |                        |           |                        |                        |       |
| heating                       |                      |  | -9°CDB ~ 21°CDB / -10°CWB ~ 15°CWB                        |                        |           |                        |                        |       |

# Notes:

- 1. Nominal cooling capacities are based on indoor temperature 14°CDB, 80% RH outdoor temperature 35°CDB refrigerant piping length 7,5m level difference: 0m.
- 2. Nominal heating capacities are based on indoor temperature 14°CDB outdoor temperature 7°CDB/6°CWB refrigerant piping length 7.5m level difference: 0m.
- 3. Sound level in cooling mode is based on indoor temperature 27°CDB / 19°CWB  $\bullet$  outdoor temperature 35°C
- 4. Sound level in heating mode is based on indoor temperature 20°CDB outdoor temperature 7°CDB/6°CWB
- 5. Sound pressure level is measured at 1 m distance from the unit
- 6. Sound and air flow rate of LGYP2B7V1: values shown in the above table are for one unit in twin application
- 7. The following models have reducers to adjust indoor auxiliary piping and field piping (standard accessories)

|           | Liquid side | Gas side   |
|-----------|-------------|------------|
| LDYP3B7V1 | -           | 19.1> 15.9 |
| LDYP4B7V1 | 12.7—>9.5   | 28.6> 19.1 |
| LGYP3B7V1 | -           | 19.1> 15.9 |

# **OPTIONS**

|   | Item   | Model |             | LGYP2B7V1   | LGYP3B7V1 |
|---|--|-------|-------------|-------------|-----------|
| 1 | Decoration panel   |       | BYC125KJW1  |             |           |
| 2 | Filter related replacement long life filter non-woven type |       | KAFJ551K160 |             |           |
| 3 | 3 Sealing member of air discharge outlet                   |       |             | KDBHJ55B160 |           |
| 4 | Panel spacer   |       | KDBJ55K160W |             |           |
| 5 | Branch duct chamber  |       |             | KDJ55B160   |           |
| 6 | Chamber connection kit                                     |       | KKSJ55K160  |             |           |
| 7 | Refrigerant branch piping (For twin application)           |       | KHRP928A4T  | -           |           |

# **OPTIONS**

|   | Item         | Model | LDYP3B7V1 | LDYP4B7V1 |  |
|---|--------------|-------|-----------|-----------|--|
| 1 | 1 Drain pump |       | EKDU125A1 |           |  |

# **CONTROL SYSTEM**

|     | Item   | LGYP2B7V1 | LGYP3B7V1 |
|-----|--|-----------|-----------|
| 1   | Wired remote controller                                    | BRC1C517  |           |
| 2-1 | 2-1 Wiring adaptor for electrical appendices (1) KRP1B57 * |           | 357 *     |
| 2-2 | Wiring adaptor for electrical appendices (2)               | KRP4      | \53 *     |
| 3   | Remote sensor  | KRC       | 501-1     |
| 4   | 4 Installation box for adaptor PCB KRP1C98                 |           | IC98      |
| 5   | Central remote controller                                  | DCS302B51 |           |
| 5-1 | 5-1 Electrical box with earth terminal (3 blocks) KJB311A  |           | 311A      |
| 6   | 6 Unified ON/OFF controller DCS301B51                      |           | O1B51     |
| 6-1 | Electrical box with earth terminal (2 blocks)  KJB212A     |           | ?12A      |
| 6-2 | Noise filter (for electromagnetic interface use only)      | KEK26-1   |           |
| 7   | Schedule timer   | DST301B51 |           |
| 8   | Interface adaptor for Sky Air series DTA102A52             |           | )2A52     |

Note: installation box is necessary for each adaptor marked  $\!\!\!\!\!\!\!^\star$ 

# **CONTROL SYSTEM**

|   | Item                                     | LDYP3B7V1 | LDYP4B7V1 |
|---|--|-----------|-----------|
| 1 | Wired remote controller                  | BRC1C517  |           |
| 2 | Wiring adaptor for electrical appendices | KRP4A51   |           |
| 3 | Central remote controller                | DCS302B51 |           |
| 4 | Unified ON/OFF controller                | DCS301B51 |           |
| 5 | Electric heater PCB kit                  | EKRP1B2   |           |
| 6 | Schedule timer                           | DST301B51 |           |
| 7 | Interface adaptor for Sky Air series     | DTA102A52 |           |

# **POWER SUPPLY**

T1 = 3~, 220V, 50Hz W1 = 3N~, 400V, 50Hz V1 = 1~, 230V, 50Hz Y1 = 3~, 400V, 50Hz

VE = 1~, 230V, 50Hz

# **MEASURING CONDITIONS**

# **COOLING ONLY**

1) nominal cooling capacities are based on:

indoor temperature 27°CDB/19°CWB

outdoor temperature 35°CDB

refrigerant piping length 7.5m - 8/5m VRV

level difference 0m

# **HEAT PUMP**

1) nominal cooling capacities are based on:

indoor temperature 27°CDB/19°CWB

outdoor temperature 35°CDB

refrigerant piping length 7.5m - 8/5m VRV

level difference 0m

2) nominal heating capacities are based on:

indoor temperature 20°CDB outdoor temperature 7°CDB/6°CWB refrigerant piping length 7.5m - 8/5m VRV

level difference 0m

# **HYDRONIC SYSTEMS**

Air-cooled chillers Evaporator: 12°C/7°C; ambient: 35°C

Water-cooled chillers Evaporator: 12°C/7°C

Condenser: 30°C/35°C

Fan coil units cooling Entering air temperature: 27°CDB / 19°CWB

Entering water temperature: 7°C

Water temperature rise: 5K

heating Entering air temperature: 20°C

Entering water temperature: 70°C (FWV/FWH/FWM); 80°C (FWD)

Water temperature decrease: 10K

The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment (for measuring conditions: please refer to the technical databooks).

The sound power level is an absolute value indicating the "power" which a sound source generates.

For more detailed information please consult our technical databooks.

# **NOTES**



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

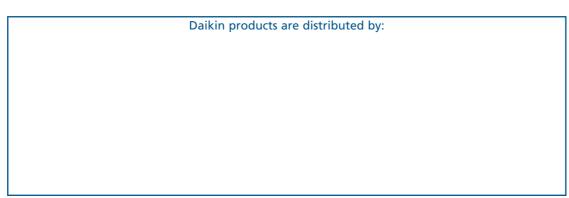


Daikin Europe NV is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard.

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.



Specifications are subject to change without prior notice

# DAIKIN EUROPE NV

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