

Air Conditioning Systems





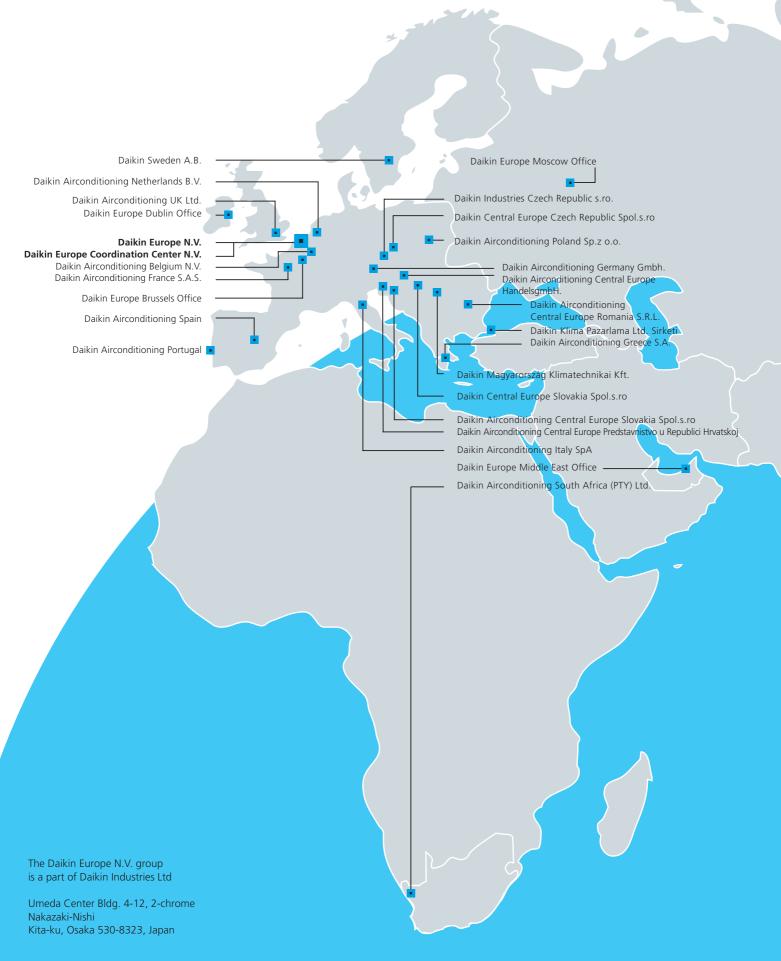




RESIDENTIAL & COMMERCIAL CATALOGUE 2008

www.daikinafrica.com

# DAIKIN









Foreword

### THE LEADER IN MANUFACTURING QUALITY AND CUSTOMER SERVICE

Since our establishment in Ostend (Belgium) in 1972, we have updated and expanded our manufacturing facilities, including those opened more recently in Plzen and Brno (Czech Republic) and Cecchina (Italy) – through the acquisition of McQuay - to a point where they are now acknowledged as the most advanced in their field in Europe. Furthermore, all our plants benefit from our Japanese parent's policy of zero defect production, super efficient supply chain management and unrivalled research and development support.

These substantial production facilities are under pinned by a network of wholly owned affiliate companies in the UK, France, Germany, Italy, Spain, Portugal, Poland, Greece, Belgium, Holland and Central Europe, as well as numerous independent distributors throughout Europe, Africa and the Middle East supported by several head offices in Ireland, Russia, Turkey, South Africa and the Middle East. Experienced and professional support of this order enables us to maintain an enviably close relationship with international markets, tailor our product programme to suit precise regional requirements and respond quickly and efficiently to any area of potential market expansion.

#### THE LEADER IN PRODUCT QUALITY

Daikin produces a highly energy efficient and comprehensive range of quality indoor climate control products and systems for commercial, residential and industrial applications. Our product portfolio is based on four distinct core 'pillars':

- state of the art direct expansion air conditioning
- heat pump residential and light commercial heating, domestic hot water and cooling
- applied central cooling and heating
- medium to low temperature refrigeration

Each pillar harnesses advanced technologies to deliver maximum energy efficiency and minimum fuel consumption and running costs throughout the equipment life cycle. The width of our product range is also extensive and embracing in its coverage of these key indoor climate control disciplines to a point where we are confident of its ability to meet the requirements of our end user, specifier, contractor and installer customer base at all times.

#### RESPECT FOR THE ENVIRONMENT

Daikin has an enviable record in concern for environmental issues and applies it to all areas of the business, implementing and in many cases pre-empting, international and local environmental protective legislation. We seek to operate a zero waste and zero emissions policy in our manufacturing plants. Our products reflect the concept of combining maximising energy efficiency with maximum respect for the environment. Their utilisation of heat pump technology for example, results in far lower energy consumption and in the case of heating, drastically less CO2 emissions than are achievable with fossil fuel burning systems. Also their incorporation of numerous detailed features such as inverter control, heat recovery, economy and quiet operating modes, movement sensors among others, enhance user comfort without compromise to either efficiency or the environment.

Thus, the products contained in this catalogue are designed to represent the best possible answer to your air conditioning needs. Feel free to contact your local Daikin representative for further information and assistance. We are here to serve you!

#### THE FUTURE LEADER

Daikin's position at the forefront of air conditioning manufacturing and marketing is well established and widely acknowledged. Nevertheless, over the last few years we widened our product portfolio in order to offer customers a more comprehensive choice of indoor climate control solutions for the home, in business and at play. The successful moves into heat pump heating for residential and commercial applications and medium to low temperature refrigeration for retail and wholesale food outlets are testament to this policy. But our search for innovative solutions is ongoing and there will certainly be many more successes to come. The common denominators however, will remain, as they are today, the provision of individual comfort allied to innovation, quality, energy efficiency and environmental acceptability.



### Table of Contents

Foreword	1	AFF THE
Table of contents	3	Marie Sales
Energy labeling	4	Windson,
Photocatalytic air purifier	6	



### Air Conditioning

Residential & Commercial  Wall mounted units  Concealed ceiling units  Cassette units  4-Way blow ceiling suspended cassette  Ceiling suspended units	10 11 18 26 32 34
Rooftops Rooftops	<b>37</b> 37
Twin, Triple, Double Twin & Multi Application Twin, Triple, Double twin applications Multi model applications	<b>38</b> 40 44
Ventilation Air handling applications	<b>53</b> 55



# Energy Labeling

Energy Manufacturer Outside unit Inside unit More efficient Less efficient Annual energy consumption, kWh in cooling mode (Actual consumption will depend on how the apliance is used and climate) kW **Cooling output** Energy efficiency ratio Full load (the higher the better) Туре Cooling only Cooling + Heating Air cooled Water cooled Heat output kW Heating performance A: higher G: lower Noise (dB(A) re 1 pW) Further information is contained Air-conditioner Energy Label Directive 2002/31/EC

Energy labeling is part of a wider European Climate Change program that targets energy efficiency as one method of reducing CO2 emissions in order to meet the targets of the Kyoto protocol. By this means the European Commission hopes that improved awareness will result in customers purchasing the most economical (ecological) answer to their needs.

#### WHAT?

The energy label provides information on the energy consumption of the unit. Air conditioning units (with cooling capacity 12kW) are classified in seven different categories (A to G), according to their energy consumption and color coded according to the category to which they belong. The most energy efficient units will be included in the A category, indicated by a green arrow on the label – less efficient units will belong in G class, indicated by a red arrow on the label. The end user can easily compare the efficiency of equal types of units from different brands.

### THE LABEL? WHAT IS MENTIONED ON THE LABEL?

Logo and name of manufacturer; name of indoor and outdoor unit (\*)

Energy efficiency class of the unit in cooling mode:

A EER > 3.20

B  $3.20 \ge EER > 3.00$ 

C  $3.00 \ge EER > 2.80$ 

D  $2.80 \ge EER > 2.60$ 

E  $2.60 \ge EER > 2.40$ 

F  $2.40 \ge EER > 2.20$ 

G 2.20 ≥ EER

#### INDICATED ANNUAL ENERGY CONSUMPTION

This figure indicates the approximate amount of energy consumed per year by the unit, based on a standard household model. The annual consumption is calculated by multiplying the total power input by an average of 500 hr per year IN COOLING MODE AT FULL LOAD.

In order to calculate the cost of annual energy consumption, you merely multiply this figure by your electricity tariff.

#### **COOLING OUTPUT**

Cooling output is defined as the cooling capacity in kW of the appliance, operating in cooling mode at full load. It is important to choose an air conditioning unit with a rated output sufficient for your cooling/heating requirements. An oversized unit can result in frequent on/off cycling, which shortens its service life - an undersized unit will not provide adequate cooling/heating. To determine the appropriate output, contact the manufacturer or your local dealer/installer.

#### **ENERGY EFFICIENCY RATIO (EER)**

This is the cooling output of the unit divided by the amount of electricity the unit requires to deliver it (total power input). In other words, the higher the EER, the greater the energy efficiency.

#### **TYPE**

TYPE OF UNIT: it indicates if the unit is a cooling only or cooling/heating system COOLING MODE: it indicates if the unit is air cooled or water cooled

#### **HEATING OUTPUT**

Heating output is defined as the heating capacity in kW of the appliance, operating in heating mode at full load.

#### **ENERGY EFFICIENCY CLASS OF THE UNIT IN HEATING MODE:**

A EER > 3.60

B  $3.60 \ge EER > 3.40$ 

C  $3.40 \ge EER > 3.20$ 

D  $3.20 \ge EER > 2.80$ 

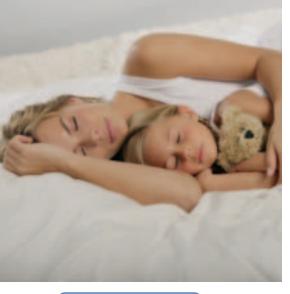
E  $2.80 \ge EER > 2.60$ 

F  $2.60 \ge EER > 2.40$ 

G  $2.40 \ge EER$ 

Noise level: only for portable units.

<sup>(\*):</sup> For multi-models Daikin chooses only to mention 1 outdoor unit with a maximum of 2 indoor units (wall mounted type) - for other units we refer to the multi brochure.



# MC707VM-W MC707VM-S

Photocatalytic Air Purifier



#### PURE AIR FOR FREE AND HEALTHY BREATHING

- stylish design
- improved performance
- unprecedented comfort
- super quiet operation
- easy to maintain
- portable
- no installation

### THREE TIMES PURIFICATION, A GOOD DEED FOR YOUR HEALTH

Pollen, dust and pet hair are just some of the potential causes of allergies, asthma and respiratory problems. A Daikin air purifier cleans the air and relieves you of these troubles thanks to a three-part operation:

- allergen removal
- virus and bacteria removal
- odour removal

Daikin has already received great praise for its air purifiers: a UK allergy certificate and the daikin TüV award confirm the efficiency of our units.





Pre-filter (with catechin)
Removes large dust particles and pet hairs.

Bio-antibody filter
Airborne viruses are captured and removed.

Plasma ionizer
Dust and pollen are positively charged and sent to the electrostatic filter.

**Dirty** air

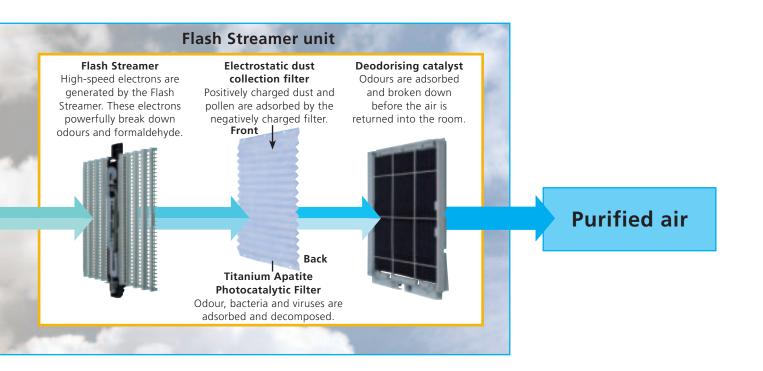




MC707VM-W

MC707VM-S

MC707VM-W/S								
Model			MC707VM-W/S					
Power supply				1-	-, 220-240/220-230V, 50/60Hz	!		
Dimensions	HxWxD	mm	533x425x213					
Colour				(W) = White + sparkling	g silver or (S) = Sparkling silver	+ metallic ocean blue		
Weight		Kg			8.7			
Mode (50Hz)			Turbo	Н	M	L	Silent	
Power input kW		kW	0.055	0.023	0.014	0.010	0.008	
Sound pressure level dB(A)		dB(A)	47	38	31	24	16	
Sound power level	Sound power level dB(A)		62	52	40	39	31	
Air flow rate		m³/h	420	285	180	120	60	
Dust collecting method			Plasma ionizer (electrostatic dust collection) + Electrostatic dust collection filter					
Deodorising	Method		Flash Streamer + Titanium apatite photocatalytic filter + Deodorising catalyst					
	Deodorising per	formance (%)	95					
	Regenerate met	hod	The Flash Streamer activates the photocatalytic reaction					
Bacteria filtering method			Bio-Antibody filter + Flash Streamer + Titanium apatite photocatalytic filter					
Filter	Dust	Form		·	Pleated filter	·		
	collection and	Function		Deodorisation + d	isinfection + dust collection + a	adjuvant removal		
	deodorisation	Lifetime	•		1 filter/1 year		•	
	Bio-Antibody filt	ter			New			
	Pre-filter				Catechin pre-filter			





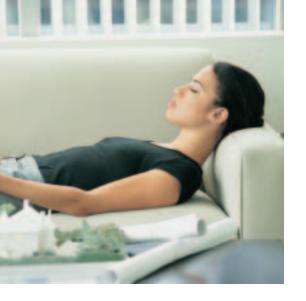
Daikin residential air conditioning is the modern, economic and efficient way to switch on to springtime - in the living room, dining room, kitchen or bedroom, night and day, throughout the year.

Daikin air conditioning units are easy to install, easy to use, ultra reliable, quiet running and come in an elegant and up to date range of wall, floor and ceiling mounted indoor models.

Also, the incorporation of inverter control enables Daikin to bring air conditioning technology of the future to the residential market today. Inverter control cuts start up time and energy consumption by almost a third, alters unit output to suit outdoor conditions, improves performance relative to power input, ensures a more even room temperature and eliminates power surges and stop/start cycles.

# Residential & Commercial

1. Wall mounted unit		3. Cassette units	
	11	FFQ-B / RKS-G	26
	13	FFQ-B / RN-E	27
	14	FCQ-C / RKS-G	28
	15	FCQ-C / RN-E	29
FAQ-B / RR-B	16	FCQ-C / RR-B	30
		FCQ-C / REQ-B	31
2. Concealed ceiling units			
		4. 4-Way blow ceiling suspended cassettes	
FBQ-B / RKS-G	18		
FBQ-B / RN-E	19	FUQ-B / RR-B	32
FBQ-B / RR-B	20		
FBQ-B / REQ-B	21	5. Ceiling suspended units	
FDQ-B / RR-B	22	-	
·	23	FHQ-B / RN-E	34
	24	FHQ-B / RR-B	35
		FHQ-B / REQ-B	36
		6. Rooftops	
		UATP-A	37









#### **URURU SARARA**

### A unique combination of humidification, dehumidification, ventilation and air purification

Good temperature control is not all that is needed for a comfortable indoor climate. Precision control of humidity and ventilation of the room is essential. Thanks to the URURU SARARA, you can humidify, dehumidify, ventilate and purify. The unit is fitted with filters that also filter dust, pollen and smoke. You can also adjust the air purification to meet your specific needs. Thanks to the ventilation system, contaminated indoor air in a space is replaced with fresh outdoor air.

### URURU humidification: Pleasant, even during heating

The URURU humidification system absorbs moisture from the outdoor air and transports it to the indoor unit, quickly and efficiently humidifying the room. Thanks to the perfect combination of humidification and air conditioning, your room heats evenly.

### SARARA dehumidification: Feel the difference!

When humidity is too high, the SARARA dehumidication system ensures that it is lowered without changing the room temperature. That is ideal for you, because lower humidity means you feel more comfortable.

- The ideal humidity
- Comfortable air flow
- Powerful air purification
- Stylish design (good design award)
- Energy saving and high efficiency: one unit of energy is converted into more than five units of energy for cooling or heating





### FTXR-E / RXR-E

### Wall Mounted Unit



- URURU humidification: maintains a comfortable humidity level without any separate water supply
- SARARA dehumidification: maintains a comfortable and fresh indoor environment by removing moisture from the air without lowering the temperature
- Energy efficient: full range A class labels (EER = 5.00/COP = 5.14
- Powerful ventilation: refreshes the room within 2
- Powerful air purification: increases indoor air quality with Daikin Flash Streamer technology
- Comfortable air flow
- Stylish design
- Other features: moisturizing operation mode, breeze cooling air flow, comfort sleep operation, mould shock operation





































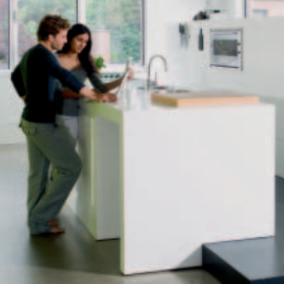






HEAT PUMP				INVERTER					
Indoor Units				FTXR28EV1B9	FTXR42EV1B9	FTXR50EV1B9			
Capacity	Cooling capacity	Minimum	kW		1.55				
		Standard	kW	2.8	4.2	5.0			
		Maximum	kW	3.6	4.60	5.50			
	Heating capacity	Minimum	kW		1.30				
		Standard	kW	3.6	5.1	6.0			
		Maximum	kW	5.00	5.6	6.20			
EER / COP	Cooling / Heatin	g		5.00 / 5.14	4.00 / 4.32	3.42 / 3.97			
Annual energy consu	Annual energy consumption kWh			280	525	730			
Energy Label	cooling / heating	]		A/A					
Dimensions	(Height x Width	x Depth)	mm	209x890x305					
Weight	· ·		kg	14					
Air Flow Rate	Cooling	High Medium Low Silent Operation	m³/min	11.1 / 8.8 / 6.5 / 5.7	12.4 / 9.6 / 6.8 / 6.0	13.3 / 10.3 / 7.3 / 6.5			
	Heating	High Medium Low Silent Operation	m³/min	12.4 / 9.8 / 7.3 / 6.5	12.9 / 10.2 / 7.7 / 6.8	14.0 / 11.1 / 8.3 / 7.3			
Sound Power	Cooling	Medium	dBA	55	58	60			
	Heating	Medium	dBA	57	58	60			
Sound Pressure	Cooling	High Medium Low Silent Operation	dBA	39 / 33 / 26 / 23	42 / 35 / 27 / 24	44 / 37 / 29 / 26			
	Heating	Heating High Medium Low Sient Operation		41 / 35 / 28 / 25	42 / 36 / 29 / 26	44 / 38 / 31 / 28			
Refrigerant			Туре	R-410A					
Power Supply				1~/220-240V/50Hz					

Outdoor Unit				RXR28EV1B9	RXR42EV1B9	RXR50EV1B9				
Dimensions (Height x Width x Depth)		Height x Width x Depth)		693x795x285						
Weight	•		kg		48					
Operation Range	Cooling	Min~Max	°CDB		-10~43					
	Heating	Min~Max	°CWB	-20~18						
Sound Power	ound Power Cooling dBA			60 62						
Sound Pressure (Standard	)	Cooling	dBA	46 48						
		Heating	dBA	46	48	50				
Refrigerant			Туре	R-410A						
Power Supply				1~/220-240V/50Hz						
Piping connections	Liquid (OD)/G	Liquid (OD)/Gas/Drain mm 6.35 / 9.52 / 18								
Piping Length (Maximum)	•		m		10					



# Designed for people who do not only care for quality but also care for stylish design

#### STYLISH AND COMPACT DESIGN

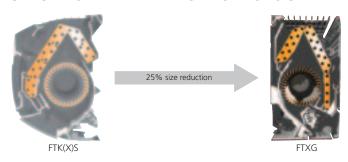
Daikin succeeded in creating an indoor unit with such a sleek profile, that you won't believe it is an air conditioning unit. In standby mode, the discharge opening is closed, resulting in a compact depth of only 15cm.

When starting the unit up, the entire front panel slides smoothly open.



For this model, Daikin even received the "Good Design Award" in Japan.

#### SENSATIONAL THINNING TECHNOLOGY



- · High efficiency slit fin heat exchanger
- Miniature cross flow fan

The blade configuration has been optimized to achieve quiet operation and powerful air flow, while reducing the fan's diameter by 20% compared to conventional models.

### **SUPERB ENERGY EFFICIENCY**

Daikin has further improved the energy efficiency. At the same time it realized substantial energy savings compared to conventional models by achieving an industrial top class EER of 4.03 and COP of 4.15.

These top of the class values are achieved by the following 3 technologies:

- PAM Inverter control
- Reluctance DC motor + DC Fan motor
- Swing compressor

### CLEAN AND COMFORTABLE AIR FLOW

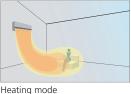
For the fist time in history, a titanium apatite photocatalytic air purification filter is integrated in an air conitioning unit. This to increase the active surface area for effective purification and deodorisation, even when a high volume of air is required.

#### Super quiet:

The indoor/outdoor unit silent operation function brings us comfort by offering an industry top-level quiet operation of 22dB(A) for the indoor unit and 43dB(A) for the outdoor unit.



**COMFORT MODE** 



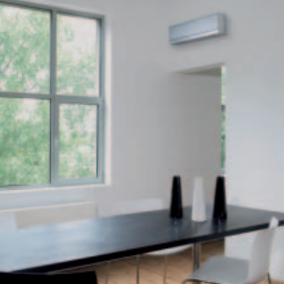
ing mode reading

The new wide-angle distribution flap reassures draught free operation. During cooling operation the flap angle turns horizontally to prevent cold air blowing directly on the body, while during heating operation it turns downward vertically to send the warm air directly to the feet.



#### 3-D AIR FLOW

This function combines Vertical and Horizontal auto-swing to circulate a stream of cool/warm air right to the corners of even large spaces.

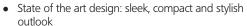




# FTXG-E / RXG-E

### Wall Mounted Unit





- Available in 2 colour variations: mat crystal white and mat crystal silver
- Lightweight and compact
- Easy to clean flat suction grille
- Superb energy efficiency
- Movement sensor saves power consumption in unoccupied rooms
- Comfort mode reassures draught free operation thanks to the new wide angle distribution flap
- The new titanium apatite photocatalytic air purification filter increases the active surface area for effective purification and deodorisation
- Horizontal and vertical auto-swing 3D-air flow ensure efficient air and temperature distribution.
- Powerful mode can be selected for rapid cooling or heating
- Indoor / outdoor unit silent operation





















































#### **HEAT PUMP INVERTER** Indoor Units FTXG25EV1BW FTXG25EV1BS FTXG35EV1BW FTXG35EV1BS Cooling capacity Minimum Capacity kW Standard kW 2.5 3 5 Maximum kW 3.0 3.8 Heating capacity Minimum kW 1.3 1.4 kW 3.4 4.2 Standard Maximum kW 45 5.0 EER / COP Cooling / Heating 4.03 / 4.15 3.30 / 3.72 Annual energy consumption kWh 310 Energy Label cooling / heating A/A 275x840x150 Dimensions (Height x Width x Depth) mm Weight 9.0 7.7 / 6.1 / 4.7 / 3.8 8.1 / 6.5 / 4.9 / 4.1 High Medium Low Stent Operation m³/min Air Flow Rate Cooling 9.6 / 8.2 / 6.7 / 5.9 High Medium Low Stent Operation m³/min 9.0 / 7.9 / 6.7 / 5.4 Heating Sound Power Cooling High dBA 56.0 57.0 Heating High dRA 56.0 57.0 Sound Pressure 38 0 / 32 0 / 25 0 / 22 0 39.0 / 33.0 / 26.0 / 23.0 Cooling Hich Medium Low Silent Operation | dBA Heating High Medium Low Silent Operation dBA 38.0 / 33.0 / 28.0 / 25.0 39.0 / 34.0 / 29.0 / 29.0 Refrigerant R-410A 1~/220-240V/50Hz Power Supply

Outdoor Unit				RXG25E2V1B	RXG35E2V1B			
Dimensions				550x765x285				
Weight	1. 3		kg	3	12			
Operation Range	Cooling	Min~Max	°CDB	10.0-	~46.0			
	Heating	Min~Max	°CWB	-15.0~20.0	-15~20			
Sound Power Cooling dBA			dBA	61.0	62.0			
Sound Pressure (Standa	ırd)	Cooling	dBA	46.0	47.0			
		Heating	dBA	47.0	48.0			
Refrigerant			Туре	R-410A				
Power Supply				1~/230V/50Hz				
Piping connections	Liquid (OD)/G	as/Drain	mm	6.35 / 9.52 / 18				
Piping Length (Maximu	m)		m	20				
Max. internunit level di	fference		m	15.0				





### FTKS-F / RKS-F

### Wall Mounted Unit







FTKS60.71F













































•	Flat fro	ont p	anel: its	stylish	n app	earance	blenc	ls easily
	within	,		décor	and	is more	easy t	o clean.

- Lightweight and compact
- Home leave operation saves energy during
- Movement sensor saves power consumption in unoccupied rooms
- Dual air discharge flow for better air distribution
- Titanium apatite photocatalytic air purification filter
- Indoor / outdoor unit silent operation

#### **COOLING ONLY INVERTER** Indoor Units FTKS60FV1B FTKS71FV1B Cooling capacity Minimum Capacity 1.7 2.3 Standard kW 6.0 Maximum kW 6.7 8.5 EER 3.02 3.02 Annual energy consumption kWh 995 1175 Energy Label cooling Dimensions (Height x Width x Depth) 290x1050x238 290x1050x238 Weight 16.2 / 13.6 / 11.4 / 10.2 17.4 / 14.6 / 11.6 / 10.6 Air Flow Rate Cooling High Medium Low Silent Operation m³/min Sound Power Cooling Medium dBA 61 62 Sound Pressure Cooling High Medium Low Siert Operation dBA 45 / 41 / 36 / 33 46 / 42 / 37 / 34 Refrigerant R-410A R-410A 1- / 220-240V / 50Hz 1- / 220-240V / 50Hz Power Supply

Outdoor Unit				RKS60FV1B	RKS71FV1B		
Dimensions	(Height x Wio	dth x Depth)	mm	735x825x300	770x900x320		
Weight			kg	47	71		
Operation Range	Cooling	Min~Max	°CDB	-10~46	-10-46		
Sound Power Cooling		Cooling	dBA	63	66		
Sound Pressure (Stand	lard)	Cooling	dBA	49 / 46	52		
Sound Level (Night qu	iet)	Sound Pressure	dBA	-	49		
Refrigerant		Туре		Type R-410A		R-410A	R-410A
Power Supply				1-/220-240V/50Hz	1-/220-240V/50Hz		
Piping connections Liquid (OD)/Gas/Drain mm		mm	6.35 / 12.7 / 18	6.35 / 15.9 / 18			
Piping Length (Maximum) m			m	30 30			



### FTN-F / RN-E

### Wall Mounted Unit







ARC433A72

FTN50,60F

RN50,601

-





























•	Flat front panel: its stylish appearance blends easily
	within any interior décor and is more easy to clean,

- Lightweight and compact
- Titanium apatite photocatalytic air purification filter
- Powerful mode can be selected for rapid cooling
- Auto-swing function ensures efficient air and temperature distribution,

#### **NON-INVERTER COOLING ONLY** Indoor Units FTN60FV1B FTN50FV1B Cooling capacity Standard Nominal Capacity 5.0 6.0 Minimum kW Maximum kW Nominal 3.23 Annual energy consumption kWh 775 995 Energy Label Cooling Α В Dimensions (Height x Width x Depth) 290x1050x238 290x1050x238 Weight 12 12 Air Flow Rate Cooling High/Medium/Low m³/min 14.7 / 12.4 / 10.3 16.2 / 13.6 / 11.4 Cooling Sound Power Medium dBA 59 61 Sound Pressure Cooling High/Low dBA 43 / 34 45 / 36 Refrigerant Power Supply R-410A R-410A 1~/220-240V/50Hz 1~/220-240V/50Hz

Outdoor Unit				RN50E3V1B	RN60E3V1B				
Dimensions	(Height x Wid	th x Depth)	mm	735x825x300	735x825x300				
Weight			kg	47	47				
Operation Range	Cooling	Min~Max	°CDB	47	49				
Sound Power	Sound Power Cooling		dBA	61	63				
Sound Pressure	ound Pressure Cooling		dBA	-10.0~46.0	-10.0~46.0				
Refrigerant			Туре	R-410A	R-410A				
Power Supply				1~/220-240V/50Hz	1~/220-240V/50Hz				
Piping connections	nnections Liquid (OD)/Gas/Drain n		onnections Liquid (OD)/Gas/Drain mm		tions Liquid (OD)/Gas/Drain mm		mm	6.35 / 12.7 / 18	6.35 / 12.7 / 18
Piping Length (Maximum) m			m	30 30					
Max. internunit level d	ifference		m	20.0 20.0					



# FAQ-B / RR-B

### Wall Mounted Unit



- Fits neatly on a wall
- Ideal for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- Auto-swing function ensures efficient air distribution via louvers that close automatically when the unit is switched off
- Automatic movable louver can be fixed at any desired angle
- Both horizontal flaps and front panel can easily be removed and washed
- All maintenance operations can be carried out from the front of the unit





















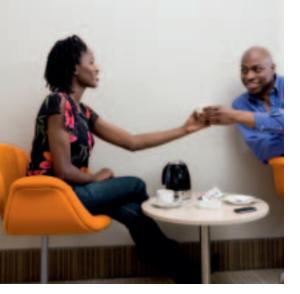




COOLING	G ONLY			NON-INVERTER						
Indoor Units				F	FAQ71BVV1B			FAQ100BVV1B		
Capacity	Cooling capa	city Standard	kW	7.10		7.10	10.00		10.00	
EER	Nominal			2.68		2.81	2.81		2.84	
Annual energy consur	Annual energy consumption kWh			1325		1265	1780		1760	
Energy Label	cooling			D		С	С		С	
Dimensions	(Height x Width x Depth) mm			290x1050x230				360x1570x200		
Weight			kg	13.0				26.0		
Air Flow Rate	Cooling	High/Low	m³/min	19.0 / 15.0				23.0 / 19.0		
Sound Power	Cooling	High/Low	dBA		59.0 / 53.0			61.0 / 57.0		
	Heating	High/Low	dBA		59.0 / 53.0			61.0 / 57.0		
Sound Pressure	Cooling	High/Low	dBA	43.0 / 37.0				45.0 / 41.0		
Refrigerant Type			R-410A							
Power Supply					1~/220-240V/50Hz					

Outdoor Unit				RR71B8V3B	RR71B8W1B	RR100B8V3B	RR100B8W1B
Dimensions	(Height x Width x Depth) mm			770x9	00x320	1170x9	900x320
Weight kg			kg	83	81	102	99
Operation Range	Cooling	Min~Max	°CDB	-15.0~46.0			
Sound Power Cooling dBA			dBA	6.	3.0	66.0	
Sound Pressure (Standa	ard)	Cooling	dBA	50.0 53.0			3.0
Refrigerant			Туре	R-410A			
Power Supply				1~/230V/50Hz	3N~/400V/50Hz	1~/230V/50Hz	3N~/400V/50Hz
Piping connections	ng connections Liquid (OD)/Gas/Drain mm			9.52 / 15.9 / 26			
Piping Length (Maximum) m			m	70			
Max. internunit level di	fference		m	0.5			







# FBQ-B / RKS-G

### Concealed Ceiling Unit







BRC1D52

FBQ35B





























#### • Lightweight and compact

- Slim design for flexible installation Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible

  The position of individual air discharge grilles
- can be altered, enabling efficient temperature distribution, even in irregularly shaped rooms.
- Optimum air distribution
- Quiet operation
- Maximum external static pressure (ESP) is 88Pa

COOLING	G ONLY			INVERTER		
Indoor Units				FBQ35B8V1		
Capacity	Cooling capacit	y Minimum	kW			
		Standard	kW	3.4		
		Maximum	kW			
EER	Nominal			2.91		
Annual energy consun	nption		kWh	585		
Energy Label	cooling			С		
Dimensions	(Height x Width	x Depth)	mm	300x700x800		
Weight			kg	30		
Air Flow Rate	Cooling	High/Low	m³/min	11.5/9		
Sound Power	Cooling	High	dBA	52		
Sound Pressure	Cooling	High/Low	dBA	33 / 29		
Refrigerant	•		Туре	R-410A		
Power Supply				1~/230V/50Hz		
Decoration Panel	Model			BYBS45D		
	Colour			White		
	HxWxD		mm	55x800x500		
	Weight	Weight		3.5		

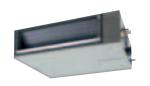
Outdoor Unit				RKS35G2V1B	
Dimensions	(Height x Width x Depth) m		mm	550x765x285	
Weight			kg	34	
Operation Range	Cooling	Min~Max	°CDB	-10~46	
Sound Power	Sound Power Cooling di		dBA	62	
Sound Pressure (Low)		Cooling	dBA	44	
Sound Pressure (High)		Cooling	dBA	48	
Refrigerant			Туре	R-410A	
Power Supply				1~/220-240V/50Hz	
Piping connections Liquid (OD)/Gas/Drain mm		mm	6.35/9.52/18		
Piping Length (Maximun	1)		m	20	



# FBQ-B / RN-E

### Concealed Ceiling Unit







FBQ60B























- Lightweight and compact
- Slim design for flexible installation
- Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- The position of individual air discharge grilles can be altered, enabling efficient temperature distribution, even in irregularly shaped rooms.
- Optimum air distribution
- Quiet operation
- Maximum external static pressure (ESP) is 88Pa

#### **COOLING ONLY NON-INVERTER** Indoor Units FBQ50B8V1 FBQ60B8V1 Cooling capacity Standard Nominal Capacity kW EER Nominal 2.60 2.60 Annual energy consumption kWh 960 1095 Energy Label cooling Dimensions (Height x Width x Depth) 300x700x800 300x1000x800 mm Weight 31 kg Air Flow Rate High/Low m³/min Cooling 19 / 14 Sound Power High dBA 53 60 Cooling Sound Pressure Cooling dBA 33 / 29 34 / 30 High/Low Refrigerant Type 1~/230V/50Hz Power Supply 1~/230V/50Hz Decoration Panel Model BYBS45D BYBS71D Colour White White 55x800x500 55x1100x500 HxWxD Weight

Outdoor Unit				RN50E3V1B	RN60E3V1B
Dimensions	(Height x Wio	dth x Depth)	mm	735x825x300	735x825x300
Weight	Veight kg			47	47
Operation Range	Cooling	Min~Max	°CDB	-10.0~46.0	-10.0~46.0
Sound Power		Cooling	dBA	61.0	63.0
Sound Pressure		Cooling	dBA	47.0	49.0
Refrigerant			Туре	R-410A	R-410A
Power Supply				1~/220-240V/50Hz	1~/220-240V/50Hz
Piping connections	nections Liquid (OD)/Gas/Drain mm		mm	6.35 / 12.7 / 18	6.35 / 12.7 / 18
Piping Length (Maximum) m			m	30	30
Max. internunit level of	lifference		m	20	20



# FBQ-B / RR-B

### Concealed Ceiling Unit







BRC1D52

FBO71B





















#### • Lightweight and compact

- Slim design for flexible installation
- Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- The position of individual air discharge grilles can be altered, enabling efficient temperature distribution, even in irregularly shaped rooms.
- Optimum air distribution
- Quiet operation
- Maximum external static pressure (ESP) is 88Pa

#### **COOLING ONLY NON-INVERTER** Indoor Units FBQ71B8V3B FBQ100B8V3B FBQ125B8V3B Cooling capacity Standard kW Capacity 7.10 7.10 10.00 10.00 12.20 EER Nominal 2.54 2.65 2.64 2.78 2.61 Annual energy consumption kWh 2335 Energy Label cooling D D D D (Height x Width x Depth) 300x1400x800 Dimensions mm 300x1000x800 51.0 52.0 Weight 410 27.00 / 20.00 35.00 / 24.00 Air Flow Rate High/Low 19.00 / 14.00 Coolina m³/min Sound Power dBA 63.0 Cooling High 60.0 62.0 Sound Pressure Cooling High/Low dBA 34.0 / 30.0 36.0 / 31.0 38.0 / 32.0 R-410A Refrigerant Туре Power Supply 1~/230V/50Hz BYBS125DJW1 BYBS71DJW1 Decoration Pane Model Colour White 55x1500x500 HxWxD 55x1100x500 Weight

Outdoor Unit	,			RR71B8V3B	RR71B8W1B	RR100B8V3B	RR100B8W1B	RR125B8W1B
Dimensions	(Height x Wio	(Height x Width x Depth) mm		770x900x320			1170x900x320	
Weight kg			83	81	102	99	106	
Operation Range	Cooling	Min~Max	°CDB	-15.0~46.0				
Sound Power	Sound Power Cooling		dBA	63.0		6	66.0 67.0	
Sound Pressure (Standa	ard)	Cooling	dBA	50.0 53.0				
Refrigerant			Туре	R-410A				
Power Supply				1~/230V/50Hz 3N~/400V/50Hz 1~/230V/50Hz 3N~/400V/50Hz			00V/50Hz	
Piping connections	ping connections Liquid (OD)/Gas/Drain mm		9.52 / 15.9 / 26					
Piping Length (Maximum) m			70					
Max. internunit level di	fference		m	0.5				



# FBQ-B/ REQ-B\*

### Concealed Ceiling Unit







BRC1D52

FBQ100,125B





















#### • Lightweight and compact

- Slim design for flexible installation Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible

  The position of individual air discharge grilles
- can be altered, enabling efficient temperature distribution, even in irregularly shaped rooms.
- Optimum air distribution
- Quiet operation
- Maximum external static pressure (ESP) is 88Pa

<b>HEAT PU</b>	IMP			NON-INVERTER			
Indoor Units				FBQ71B8V3B	FBQ100B8V3B	FBQ125B8V3B	
Capacity	Cooling capa	Cooling capacity Standard		7.1   7.1	10   10	12.20	
	Heating cap	acity Standard	kW	8   8	11.2   11.2	14.5	
EER / COP	Cooling / He	ating	•	2.54 / 3.21   2.65 / 3.21	2.64 / 2.86   2.78 / 2.89	2.61 / 3.21	
Annual energy consu	mption		kWh	1395   1340	1895   1800	2335	
Energy Label	cooling / hea	ating		E/C   D/C	D/D   D/D	D/C	
Dimensions	(Height x Wi	(Height x Width x Depth) mm		300x1000x800	300x1400x800	<u> </u>	
Weight			kg	41.0	51.0	52.0	
Air Flow Rate	Cooling	g High/Low m³/min		19.00 / 14.00	27.00 / 20.00	35.00 / 24.00	
	Heating	High/Low	m³/min	19.00 / 14.00	27.00 / 20.00	35.00 / 24.00	
Sound Power	Cooling	High	dBA	60.0	62.0	63.0	
Sound Pressure	Cooling	High/Low	dBA	34.0 / 30.0	36.0 / 31.0	38.0 / 32.0	
	Heating	High/Low	dBA	34.0 / 30.0	36.0 / 31.0	38.0 / 32.0	
Refrigerant			Туре		R-410A		
Power Supply					1~/230V/50Hz		
Decoration Panel	Model			BYBS71DJW1	BYBS125DJW1		
	Colour				White		
	HxWxD	•	mm	55x1100x500	55x1500x500		
	Weight	Weight		4.5	6.5	·	

Outdoor Unit				DE074B0V2B	REO71B8W1B	REO100B8V3B	DEC/100D0W/1D	REO125B8W1B	
Outdoor Unit				REQ71B8V3B	REQ/1B8W1B	KEQ100B8V3B	REQ100B8W1B	REQ125B8W1B	
Dimensions	(Height x Wi	(Height x Width x Depth) mm		770x900x320			1170x900x320		
Weight			kg		83	102	100	108	
Operation Range	Cooling	Min~Max	°CDB		10.0~46.0				
	Heating	Min~Max	°CWB			-10~15			
Sound Power		Cooling	dBA	65.0 70.0					
Sound Pressure (Stand	lard)	Cooling	dBA	53.0 57.0					
Refrigerant			Type	R-410A					
Power Supply			•	1~/230V/50Hz	3N~/400V/50Hz	1~/230V/50Hz	3N~/400V/50Hz		
Piping connections	iping connections Liquid (OD)/Gas/Drain mm		9.52 / 15.9 / 26						
Piping Length (Maximum) m			50						
Max. internunit level d	lifference		m	0.5					

<sup>\*</sup> Combination only available in Portugal, Greece, Cyprus and Malta



# FDQ-B / RR-B

### Concealed Ceiling Unit





FDQ125B





























### • Slim design for flexible installation

Ideal for use in larger areas Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible

- Maximum external static pressure (ESP) ranges from 150 till 250Pa
- Optimum air distribution

COOLING	ONLY			NON-INVERTER		
Indoor Units				FDQ125B8V3B9		
Capacity	Cooling capacity Standard kW		kW	12.50		
EER	Nominal			2.61		
Annual energy consump	otion		kWh	2395		
Energy Label	cooling			D		
Dimensions	(Height x Wio	dth x Depth)	mm	350x1400x662		
Weight			kg	59.0		
Air Flow Rate	Cooling	Medium	m³/min	43.0		
Sound Power	Cooling	Medium	dBA	75.0		
Sound Pressure	Cooling High dBA		dBA	44.0		
Refrigerant	Refrigerant Type			R-410A		
Power Supply				1~/230V/50Hz		

Outdoor Unit				RR125B8W1B		
Dimensions	(Height x Width x Depth)		mm	1170x900x320		
Weight			kg	106		
Operation Range	Cooling	Min~Max	°CDB	-15.0~46.0		
Sound Power	Sound Power Cooling		dBA	67.0		
Sound Pressure (Standa	rd)	Cooling	dBA	53.0		
Refrigerant			Type	R-410A		
Power Supply				3N~/400V/50Hz		
Piping connections	Piping connections Liquid (OD)/Gas/Drain		mm	9.52 / 15.9 / 26		
Piping Length (Maximum) m			m	70		
Max. internunit level dif	ference		m	0.5		



# FDEQ-B / REQ-B\*

### Concealed Ceiling Unit



- Lightweight and compact
- Both discharge and suction ducts can be easily connected via flanges on the unit
- The air filter is easily accessible from underneath, even after the installation of the ducts. The filter can therefore be easily washed or vacuumed
- Extremely quiet in operation.
- Ideal for shops, restaurants or offices requiring maximum floor space for furniture, decorations
- Maximum external static pressure (ESP) is 100Pa

FDEQ125B





















<b>HEAT PU</b>	IMP			NON-INVERTER				
Indoor Units				FDEQ71B8V3B	FDEQ100B8V3B	FDEQ125B8V3B		
Capacity	Cooling capa	acity Standard	kW	7.1   7.1	9.8   9.8	12.50		
	Heating capa	acity Standard	kW	8   8	11.2   11.2	14.60		
EER / COP	Cooling / He	ating		2.54 / 3.21   2.65 / 3.21	2.46 / 2.81   2.49 / 2.83	2.68 / 3.23		
Annual energy consu	mption		kWh	1395   1340	1990   1970	2335		
Energy Label	cooling / heating			E/C   D/C	E/D   E/D	D/C		
Dimensions	(Height x Wi	dth x Depth)	mm	279x98	279x1387x750			
Weight			kg	38	48.6			
Air Flow Rate	Cooling	High/Low	m³/min	19.0 / 14.0	27.0 / 20.0	35.0 / 24.0		
	Heating	High/Low	m³/min	19.0 / 14.0	27.0 / 20.0	35.0 / 24.0		
Sound Power	Cooling	High	dBA	63.0	65.0	66.0		
Sound Pressure	Cooling	High/Low	dBA	37.0 / 33.0	39.0 / 34.0	41.0 / 35.0		
	Heating	High/Low	dBA	37.0 / 33.0	39.0 / 34.0	41.0 / 35.0		
Refrigerant Type				R-410A				
Power Supply				1~/230V/50Hz				

Outdoor Unit				REQ71B8V3B	REQ71B8W1B	REQ100B8V3B	REQ100B8W1B	REQ125B8W1B
Dimensions	(Height x Wid	(Height x Width x Depth) mm		770x9	770x900x320		1170x900x320	
Weight			kg	8	3	102	100	108
Operation Range	Cooling	Min~Max	°CDB	10.0~46.0				
	Heating	Min~Max	°CWB			-10~15		
Sound Power		Cooling	dBA	65.0 70.0				
Sound Pressure (Standa	rd)	Cooling	dBA	53.0 57.0				
Refrigerant			Туре	R-410A				
Power Supply				1~/230V/50Hz	1~/230V/50Hz 3N~/400V/50Hz 1~/230V/50Hz 3N~/400V/50Hz			00V/50Hz
Piping connections	Liquid (OD)/G	as/Drain	mm	9.52 / 15.9 / 26				
Piping Length (Maximum) m			50					
Max. internunit level dif	ference		m	0.5				

<sup>\*</sup> Combination only available in Portugal, Greece, Cyprus and Malta



## FDYP-B / RP-B

### Concealed Ceiling Unit



- Slim design for flexible installation

- Maximum external static pressure (ESP) ranges from 150 till 250Pa
- Optimum air distribution

Ideal for use in larger areas Blends unobtrusively with any interior décor

COOLIN	G ONLY			NON-INVERTER		
Indoor Units				FDYP200B8V19	FDYP250B8V19	
Capacity	Cooling capacity Standard kW		kW	20.00	25.00	
EER	Nominal			2.30	2.33	
СОР	Nominal			-	-	
EER / COP	Cooling / He	ating		-	-	
Annual energy consu	Annual energy consumption kWh			4.355	5.370	
Dimensions	(Height x Wi	dth x Depth)	mm	450x1400x900		
Weight	•		kg	89.0	94.0	
Air Flow Rate	Cooling	Medium	m³/min	69.0	89.0	
	Heating	Medium	m³/min	69.0	89.0	
Sound Power	Cooling	High	dBA	81.0	82.0	
	Heating	High	dBA	81.0	82.0	
Sound Pressure	Cooling	High	dBA	45.0	47.0	
	Heating	High	dBA	45.0	47.0	
Refrigerant	Refrigerant Type			R-407C		
Power Supply				230V/50Hz		

Outdoor Unit				RP250B7W1	RP200B7W1	
Dimensions	(Height x Wid	lth x Depth)	mm	1220x1290x700	1440x1290x700	
Weight kg			kg	194	206	
Operation Range	Cooling	Min~Max	°CDB	-5~46		
Sound Power	Sound Power Cooling dBA			77.0		
Sound Pressure (Stand	lard)	Cooling	dBA	56.0		
Refrigerant			Туре	R-407C		
Power Supply				400V/50Hz		
Piping connections Liquid (OD)/Gas/Drain mm			mm	12.7 / 28.6 / 26		
Piping Length (Maxim	um)		m	50		







# FCQ-C / RKS-G

### Round Flow Cassette



BRC1D52



BRC7E63





• Modern style decoration panel in white (RAL9010)

- 360° air discharge ensures uniform air flow and temperature distribution
- Air discharge from the corners avoids dead zones that may be subject to temperature differences
- Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- 23 different air flow patterns possible
- Reduced installation height: 214mm for class 35
- Fresh air intake: up to 20 %
- Easy visible drain check thanks to clear drain socket





























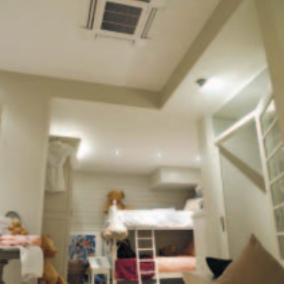






#### **COOLING ONLY INVERTER** FCQ35C7VEB Indoor Units Cooling capacity Minimum 1.4 3.4 3.7 Nominal 3.58 Annual energy consumption kWh 475 Energy Label cooling Α (Height x Width x Depth) 204x840x840 Dimensions mm Weight 19 Air Flow Rate High/Low 10.5 / 8.5 Coolina m³/min Sound Power Cooling High dBA 49 Sound Pressure Cooling High/Low dBA 31 / 27 Refrigerant R-410A 1~/220-240V/50Hz/60Hz Power Supply Decoration Pane Model BYCQ140CW1 Colour HxWxD 50x950x950 Weight

Outdoor Unit				RKS35G2V1B	
Dimensions	(Height x Wid	dth x Depth)	mm	550x765x285	
Weight kg		kg	34		
Operation Range	Cooling	Min~Max	°CDB	-10~46	
Sound Power Cooling		dBA	62		
Sound Pressure (Low)		Cooling	dBA	44	
Sound Pressure (High)		Cooling	dBA	48	
Refrigerant			Туре	R-410A	
Power Supply				1~/220-240V/50Hz	
Piping connections Liquid (OD)/Gas/Drain mm		mm	6.35 / 9.52 / 18		
Piping Length (Maximu	ım)		m	20	



# FFQ-B / RN-E

4-way Blow Ceiling Mounted *Cassette* (600mm x 600mm)







FFO50.60B



BRC1D52

BRC7E531

















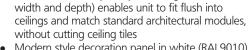












New and extremely compact casing (575mm in

- Modern style decoration panel in white (RAL9010)
- Slim design for flexible installation
- Ideal for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- Extremely quiet in operation
- Possibility to shut 1 or 2 flaps for easy installation
- Auto-swing function ensures efficient air and temperature distribution and prevents ceiling
- Excellent low draught characteristics
- Easy installation and maintenance
- The switch box can be reached by simply removing the suction grille; therefore maintenance can be done very easily.

#### **COOLING ONLY NON-INVERTER** Indoor Units FFQ50B8V1B FFQ60B8V1B Cooling capacity Standard Nominal Capacity kW Minimum kW Maximum Nominal 2.61 2.80 Annual energy consumption kWh 900 1035 Energy Label cooling D D Dimensions (Height x Width x Depth) 286x575x575 286x575x575 Weight 17.5 17.5 Air Flow Rate Cooling High/Low m³/min 12.0 / 8.0 15.0 / 10.0 Sound Power Cooling dBA 53.0 Sound Pressure Cooling High/Low dBA 36.0 / 27.0 41.0 / 32.0 Refrigerant R-410A R-410A Power Supply 1~/230V/50Hz 1~/230V/50Hz Colour Pure White (RAL 9010) Pure White (RAL 9010) HxWxD 55x700x700 55x700x700 Weight

Outdoor Unit				RN50E3V1B	RN60E3V1B	
Dimensions	(Height x Wi	dth x Depth)	mm	735x825x300	735x825x300	
Weight kg			kg	47	47	
Operation Range	Cooling	Min~Max	°CDB	-10.0~46.0	-10.0~46.0	
Sound Power	Cooling	Cooling H		61.0	63.0	
Sound Pressure	Cooling	Н	dBA	47.0	49.0	
Refrigerant			Туре	R-410A	R-410A	
Power Supply				1~/220-240V/50Hz	1~/220-240V/50Hz	
Piping connections	Liquid (OD)/0	Liquid (OD)/Gas/Drain mm		6.35 / 12.7 / 18	6.35 / 12.7 / 18	
Piping Length (Maximum) m		m	30	30		
Max. internunit level di	ifference		m	20	20	





# FCQ-C / RKS-G

### Round Flow Cassette



BRC1D52



BRC7E63



FCO35C



• Modern style decoration panel in white (RAL9010)

- 360° air discharge ensures uniform air flow and temperature distribution
- Air discharge from the corners avoids dead zones that may be subject to temperature differences
- Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- 23 different air flow patterns possible
- Reduced installation height: 214mm for class 35-50
- Fresh air intake: up to 20 %
- Easy visible drain check thanks to clear drain socket



































#### **COOLING ONLY INVERTER** FCQ35C7VEB Indoor Units Cooling capacity Minimum 1.4 3.4 3.7 Nominal 3.58 Annual energy consumption kWh 475 Energy Label cooling Α (Height x Width x Depth) 204x840x840 Dimensions mm Weight 19 Air Flow Rate High/Low 10.5 / 8.5 Coolina m³/min Sound Power Cooling High dBA 49 Sound Pressure Cooling High/Low dBA 31/27 Refrigerant R-410A 1~/220-240V/50Hz/60Hz Power Supply Decoration Pane Model BYCQ140CW1 Colour HxWxD 50x950x950 Weight

Outdoor Unit				RKS35G2V1B	
Dimensions	(Height x Wio	dth x Depth)	mm	550x765x285	
Weight kg		kg	34		
Operation Range	Cooling	Min~Max	°CDB	-10~46	
Sound Power Cooling		dBA	62		
Sound Pressure (Low)		Cooling	dBA	44	
Sound Pressure (High)		Cooling	dBA	48	
Refrigerant			Туре	R-410A	
Power Supply				1~/220-240V/50Hz	
Piping connections Liquid (OD)/Gas/Drain mm		mm	6.35 / 9.52 / 18		
Piping Length (Maximu	um)		m	20	



# FCQ-C / RN-E

### Round Flow Cassette



BRC1D52







































_	Modern	ctvla	decoration	nanal in	white	(RALQ010)	
•	iviodem	style	decoration	panei in	wnite	(KAL9UTU)	

- 360° air discharge ensures uniform air flow and temperature distribution
- Air discharge from the corners avoids dead zones that may be subject to temperature differences
- Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- 23 different air flow patterns possible
- Fresh air intake: up to 20 %
- Reduced installation height: 214mm for class 50-60
- Easy visible drain check thanks to clear drain socket

#### **NON-INVERTER COOLING ONLY** Indoor Units FCQ50C7VEB FCQ60C7VEB Cooling capacity Standard kW Nominal Capacity Nominal 3.48 kWh 705 Annual energy consumption 820 Energy Label cooling (Height x Width x Depth) 204x840x840 204x840x840 Dimensions mm Weight Air Flow Rate Cooling High/Low m³/min 12.5 / 8.5 13 5 / 8 5 Sound Power Cooling High dBA 51 Sound Pressure Cooling High/Low dBA 31 / 27 33 / 28 Refrigerant R-410A R-410A Power Supply 1~/220-240V/50/60Hz 1~/220-240V/50/60Hz BYCQ140CW1 BYCQ140CW1 Pure White (RAL 9010) Pure White (RAL 9010) HxWxD 50x950x950 50x950x950

Outdoor Unit				RN50E3V1B	RN60E3V1B		
Dimensions	(Height x Width x Depth)		ns (Height x Width x Depth)		mm	735x825x300	735x825x300
Weight kg			kg	47	47		
Sound pressure level	Cooling	Н	dBA	47	49		
Sound power level	Cooling	Cooling H		61	63		
Operation Range	Cooling	oling Min~Max		-10.0~46.0	-10.0~46.0		
Refrigerant			Туре	R-410A	R-410A		
Power Supply				1~/220-240V/50Hz	1~/220-240V/50Hz		
Piping connections	tions Liquid (OD)/Gas/Drain mm		mm	6.35 / 12.7 / 18	6.35 / 12.7 / 18		
Piping Length (Maximum) m		m	30	30			
Max. internunit level diff	ference		m	20	20		



# FCQ-C / RR-B

### Round Flow Cassette



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

Weight

- Reduced installation height: 214mm for class 71
- Fresh air intake: up to 20 %
- Easy visible drain check thanks to clear drain socket

#### **COOLING ONLY NON-INVERTER** Indoor Units FCQ71C7VEB FCQ100C7VEB FCQ125C7VEB Cooling capacity Standard kW Capacity 7.10 7.10 10.00 10.00 12.50 EER Nominal 2.67 2.81 2.68 Annual energy consumption kWh 2330 1330 Energy Label cooling D D D D 246x840x840 (Height x Width x Depth) Dimensions mm 204x840x840 Weight 21 15.5 / 9.0 23.5 / 16.0 27.5 / 19.0 Air Flow Rate High/Low Coolina m³/min Sound Power Cooling High dBA Sound Pressure Cooling High/Low dBA 33 / 28 37 / 32 41 / 35 R-410A Refrigerant Туре Power Supply BYCQ140CW1 Decoration Pane Model Pure White (RAL 9010) Colour HxWxD 50x950x950

Outdoor Unit				RR71B8V3B	RR71B8W1B	RR100B8V3B	RR100B8W1B	RR125B8W1B
Dimensions	(Height x Wio	(Height x Width x Depth)		770x900x320			1170x900x320	
Weight kg			83	81	102	99	106	
Operation Range	Cooling	Min~Max	°CDB			-15.0~46.0		
Sound Power Cooling dB.		dBA	63.0		66.0		67.0	
Sound Pressure (Stand	ard)	Cooling	dBA	50.0 53.0				
Refrigerant			Туре	R-410A				
Power Supply				1~/230V/50Hz	3N~/400V/50Hz	1~/230V/50Hz	3N~/4	00V/50Hz
Piping connections	Liquid (OD)/0	Gas/Drain	mm	9.52 / 15.9 / 26				
Piping Length (Maximum) m			70					
Max. internunit level d	ifference		m	0.5				



• Modern style decoration panel in white (RAL9010) 360° air discharge ensures uniform air flow and

Air discharge from the corners avoids dead zones that may be subject to temperature differences

Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling

Reduced installation height: 214mm for class 71 Easy visible drain check thanks to clear drain socket

23 different air flow patterns possible

temperature distribution

Fresh air intake: up to 20 %

# FCQ-C / REQ-B\*

### Round Flow Cassette



BRC1D52







FCQ100,125C





































<b>HEAT PU</b>	MP				N	<b>ON-INVERTE</b>	R	
Indoor Units				FCQ71C7VEB		FCQ10	FCQ100C7VEB	
Nominal Capacity	Cooling capa	Cooling capacity Standard		7.1	7.1	10.0	10.0	12.5
	Heating capa	city Standard	kW	8.0	8.0	11.2	11.2	14.6
EER / COP	Cooling / He	ating		2.61 / 2.81	2.67 / 2.86	2.61 / 2.99	2.81 / 3.06	2.68 / 2.89
Annual energy consum	nption		kWh	1360	1330	1915	1780	2330
Energy Label	cooling / hea	ting		D/D		D/D	C/D	D/D
Dimensions	(Height x Wio	dth x Depth)	mm	204x8	340x840	246x8	40x840	246x840x840
Weight			kg	21		23		23
Air Flow Rate	Cooling	High/Low	m³/min	15.5	5 / 9.0	23.5	/ 16.0	27.5 / 19.0
	Heating	High/Low	m³/min	16.0	) / 9.5	23.5	/ 16.0	27.5 / 19.0
Sound Power	Cooling	High	dBA		51		54	58
Sound Pressure	Cooling	High/Low	dBA	33	/ 28	37	/ 32	41 / 35
	Heating	High/Low	dBA	34	/ 28	37	/ 32	41 / 35
Refrigerant			Туре	R-4	410A	R	110A	R-410A
Power Supply				1~/220-24	10V/50/60Hz	1~/220-24	10V/50/60Hz	1~/220-240V/50/60Hz
Decoration Panel	Decoration Panel Model			BYCQ140CW1		BYCQ140CW1		BYCQ140CW1
	Colour			Pure White (RAL 9010)		Pure White (RAL 9010)		Pure White (RAL 9010)
	HxWxD		mm	50x950x950		50x950x950		50x950x950

Outdoor Unit				REQ71B8V3B	REQ71B8W1B	REQ100B8V3B	REQ100B8W1B	REQ125B8W1B	
Dimensions	(Height x Wid	dth x Depth)	mm	770x900x320			1170x900x320	•	
Weight			kg	3	33	102	100	108	
Sound pressure level	Cooling		dBA	53	53	57	57	57	
Sound power level	Cooling		dBA	65	65	70	70	70	
Operation Range	Cooling	Min~Max	°CDB			10.0~46.0			
	Heating	Min~Max	°CWB			-10~15			
Refrigerant			Туре	R-410A					
Power Supply				1~/230V/50Hz	3N~/400V/50Hz	1~/230V/50Hz	3N~/40	3N~/400V/50Hz	
Piping connections	Liquid (OD)/0	as/Drain	mm			9.52 / 15.9 / 26			
Piping Length (Maximum) m			50						
Max. internunit level dif	ference		m	0.5					

<sup>\*</sup> Combination only available in Portugal, Greece, Cyprus and Malta



# FUQ-B / RR-B

4-Way Blow Ceiling Suspended Cassette



- Can be installed in both new and existing
- Ideal for shops, restaurants or offices requiring maximum floor space for furniture, decorations
- Air can be discharged in any of 4 directions
- Air flow distribution for ceiling heights up to 3.5m without loss of capacity.
- No ceiling staining Possibility to shut 1 or 2 flaps for easy installation in corners
- Air filter, drain pan and heat exchanger fin are mildew proof and anti-bacterial treated.
- Drain-up pump with 500mm lift fitted as
- Easy to install

s standard	_

COOLING	G ONLY			NON-INVERTER				
Indoor Units				FUQ71BVV1B	FUQ100BVV1B	FUQ125BVV1B		
Capacity	Cooling capa	city Standard	kW	7.10   7.10	10.00   10.00	12.20		
EER	Nominal			2.63   2.68	2.61   2.65	2.67		
Annual energy consu	mption		kWh	1350   1325	1915   1890	2285		
Energy Label	cooling			D	D	D		
Dimensions	(Height x Wi	dth x Depth)	mm	165x895x895	230x895x895			
Weight	·		kg	25.0	25.0 31.0			
Air Flow Rate	Cooling	High/Low	m³/min	19.0 / 14.0	29.0 / 21.0	32.0 / 23.0		
Sound Power	Cooling	High/Low	dBA	56.0 / 51.0	59.0 / 54.0	60.0 / 55.0		
	Heating	High/Low	dBA	56.0 / 51.0	59.0 / 54.0	60.0 / 55.0		
Sound Pressure	ound Pressure Cooling High/Low dBA		40.0 / 35.0	43.0 / 38.0	44.0 / 39.0			
Refrigerant Type			Туре	R-410A				
Power Supply				1~/220-240V/50Hz				

Outdoor Unit	,			RR71B8V3B	RR71B8W1B	RR100B8V3B	RR100B8W1B	RR125B8W1B
Dimensions	(Height x Width x Depth)		mm	770x900x320			1170x900x320	
Weight kg			83	81	102	99	106	
Operation Range	Cooling	Min~Max	°CDB			-15.0~46.0		
Sound Power Cooling dBA			dBA	63.0		66.0		67.0
Sound Pressure (Standa	ard)	Cooling	dBA	50.0 53.0				
Refrigerant			Туре	R-410A				
Power Supply				1~/230V/50Hz	3N~/400V/50Hz	1~/230V/50Hz	3N~/4	00V/50Hz
Piping connections	Liquid (OD)/0	as/Drain	mm	9.52 / 15.9 / 26				
Piping Length (Maximum) m			70					
Max. internunit level di	fference		m	0.5				





# FHQ-B / RN-E

### Ceiling Suspended Unit



- Ideal solution for shops, restaurants or offices without false ceilings
- Compact design
- Leaves maximum floor and wall space for furniture, decorations and fittings
- Easy installation and maintenance
- Auto-swing function ensures efficient air and temperature distribution.
- Air flow distribution for ceiling heights up to 3.8m without loss of capacity.











COOLING ONLY Indoor Units				NON-INVERTER		
				FHQ50BVV1B	FHQ60BVV1B	
Nominal Capacity	Cooling capacity	Standard	kW	5.0	5.7	
		Minimum	kW	-	=	
		Maximum	kW	-	-	
EER	Nominal	-		2.73	2.73	
Annual energy consumption kWh			kWh	915	1075	
Energy Label	cooling			D	D	
Dimensions	(Height x Width x Depth)		mm	195x960x680	195x1160x680	
Weight kg			kg	25.0	27.0	
Air Flow Rate	Cooling	High/Low	m³/min	13.0 / 10.0	17.0 / 13.0	
Sound Power	Cooling	High/Low	dBA	54.0 / 49.0	55.0 / 49.0	
	Heating	High/Low	dBA	54.0 / 49.0	55.0 / 49.0	
Sound Pressure	Cooling	High/Low	dBA	38.0 / 33.0	39.0 / 33.0	
Refrigerant Type			Туре	R-410A	R-410A	
Power Supply				1~/220-240V/50Hz	1~/220-240V/50Hz	

Outdoor Unit				RN50E3V1B	RN60E3V1B
Dimensions	(Height x Width x Depth)		mm	735x825x300	735x825x300
Weight kg			kg	47	47
Operation Range	Cooling	Min~Max	°CDB	-10.0~46.0	-10.0~46.0
Sound Power Cooling		dBA	61.0	63.0	
Sound Pressure		Cooling	dBA	47.0	49.0
Refrigerant Type			Туре	R-410A	R-410A
Power Supply				1~/220-240V/50Hz	1~/220-240V/50Hz
Piping connections	Liquid (OD)/Gas/Drain		mm	6.35 / 12.7 / 18	6.35 / 12.7 / 18
Piping Length (Maximum) m				30	30
Max. internunit level difference m				20	20



# FHQ-B / RR-B

# Ceiling Suspended Unit



- Ideal solution for shops, restaurants or offices without false ceilings
- Compact design
- Leaves maximum floor and wall space for furniture, decorations and fittings
- Easy installation and maintenance
- Auto-swing function ensures efficient air and temperature distribution.
- Air flow distribution for ceiling heights up to 3.8m without loss of capacity.



























COOLING	G ONLY			NON-INVERTER					
Indoor Units				FHQ71BVV1B	FHQ100BVV1B	FHQ125BVV1B			
Capacity	Cooling capa	city Standard	kW	7.10   7.10	9.80   9.80	12.20			
EER	Nominal			2.63   2.68	2.61   2.66	2.71			
Annual energy consu	Annual energy consumption kWh		kWh	1350   1325	1875   1840	2255			
Energy Label	cooling			D	D	D			
Dimensions	(Height x Width x Depth) mm		mm	195x1160x680	195x1400x680	195x1590x680			
Weight	·		kg	27.0	32.0	35.0			
Air Flow Rate	Cooling	High/Low	m³/min	17.0 / 14.0	24.0 / 20.0	30.0 / 25.0			
Sound Power	Cooling	High/Low	dBA	55.0 / 51.0	58.0 / 53.0	60.0 / 55.0			
	Heating	High/Low	dBA	55.0 / 51.0	58.0 / 53.0	60.0 / 55.0			
Sound Pressure	Cooling	High/Low	dBA	39.0 / 35.0	42.0 / 37.0	44.0 / 39.0			
Refrigerant Type			Туре	R-410A					
Power Supply					1~/220-240V/50Hz				

Outdoor Unit	,			RR71B8V3B	RR71B8W1B	RR100B8V3B	RR100B8W1B	RR125B8W1B	
Dimensions	nensions (Height x Width x Depth) r			770x9	00x320	1170x900x320			
Weight kg			kg	83	81	102	99	106	
Operation Range	Cooling	Min~Max	°CDB			-15.0~46.0			
Sound Power	Sound Power Cooling			6	3.0	66.0		67.0	
Sound Pressure (Standa	ard)	Cooling	dBA	5	0.0				
Refrigerant			Туре	R-410A					
Power Supply				1~/230V/50Hz	3N~/400V/50Hz	1~/230V/50Hz	3N~/4	00V/50Hz	
Piping connections Liquid (OD)/Gas/Drain mm			9.52 / 15.9 / 26						
Piping Length (Maximum) m			70						
Max. internunit level di	fference		m	0.5					



# FHQ-B / REQ-B\*

# Ceiling Suspended Unit





- REQ71
- •



























 Ideal solution for shops, restaurants or offices without false ceilings

- Compact design
- Leaves maximum floor and wall space for furniture, decorations and fittings
- Easy installation and maintenance
- Auto-swing function ensures efficient air and temperature distribution.
- Air flow distribution for ceiling heights up to 3.8m without loss of capacity.

HEAT PU	JMP			NON-INVERTER					
Indoor Units				FHQ71BVV1B	FHQ100BVV1B	FHQ125BVV1B			
Capacity	Cooling capa	Cooling capacity Standard		7.1   7.1	9.8   9.8	12.2			
	Heating capa	acity Standard	kW	8   8	11.2   11.2	14.5			
EER / COP	Cooling / He	ating		2.63 / 2.81   2.68 / 2.86	2.61 / 2.71   2.66 / 2.79	2.71 / 2.81			
Annual energy consumption kWh			kWh	1350   1325	1875   1840	2255			
Energy Label	cooling / heating			D/D   D/D	D/E   D/E	D/D			
Dimensions	(Height x Width x Depth) mm		mm	195x1160x680	195x1400x680	195x1590x680			
Weight			kg	27.0	32.0	35.0			
Air Flow Rate	Cooling	High/Low	m³/min	17.0 / 14.0	24.0 / 20.0	30.0 / 25.0			
	Heating	High/Low	m³/min	17.0 / 14.0	24.0 / 20.0	30.0 / 25.0			
Sound Power	Cooling	High/Low	dBA	55.0 / 51.0	58.0 / 53.0	60.0 / 55.0			
	Heating	High/Low	dBA	55.0 / 51.0	58.0 / 53.0	60.0 / 55.0			
Sound Pressure	Cooling	High/Low	dBA	39.0 / 35.0	42.0 / 37.0	44.0 / 39.0			
	Heating	High/Low	dBA	39.0 / 35.0	42.0 / 37.0	44.0 / 39.0			
Refrigerant Type			Туре	R-410A					
Power Supply				1~/220-240V/50Hz					

Outdoor Unit				REQ71B8V3B	REQ71B8W1B	REQ100B8V3B	REQ100B8W1B	REQ125B8W1B	
Dimensions	(Height x Width x Depth) mm			770x900x320			1170x900x320		
Weight kg			kg		33	102	100	108	
Operation Range	Cooling	Min~Max	°CDB			10.0~46.0			
	Heating	Min~Max	°CWB	-10~15					
Sound Power Cooling dBA				65.0 70.0					
Sound Pressure (Standard	)	Cooling	dBA	53.0 57.0					
Refrigerant			Туре	R-410A					
Power Supply			•	1~/230V/50Hz	3N~/400V/50Hz	1~/230V/50Hz	3N~/400V/50Hz		
Piping connections Liquid (OD)/Gas/Drain mm				9.52 / 15.9 / 26					
Piping Length (Maximum) m				50					
Max. internunit level diffe	rence		m 0.5						

<sup>\*</sup> Combination only available in Portugal, Greece, Cyprus and Malta



# **UATP-A**

Rooftop



UATP-A

- 'Plug and Play' installation: the single unit configuration requires no additional piping work as both the indoor and outdoor sides are preconnected.
- Refrigerant is factory pre-charged to ensure clean and efficient operation.
- The air volume and static pressure required can be adjusted according to the requirement because of the use of a belt driven fan.
- The flat top design of the unit allows for maximum utilization of warehouse and container space. High efficiency and reliable scroll compressor.
- Convertible: fan can be mounted in two directions (Class 240-280-320-450-560).
- Coil with anti-corrosion treatment.

COOLING	ONLY	1		NON-INVERTER										
Outdoor Units				UATP180AMY1	UATP240AMY1	UATP280AMY1	UATP320AMY1	UATP450AMY1	UATP560AMY1	UATP700AMY1	UATP850AMY1	UATPC10AMY1	UATPC12AMY1	
Capacity	Cooling	Minimum	kW	17.291	21.101	27.842	32.238	41.030	55.684	67.406	82.939	97.007	121.624	
		Nominal	kW	5.89	8.70	11.60	12.18	17.20	25.10	28.70	40.16	41.87	48.80	
EER	Cooling			2.94	2.43	2.40	2.65	2.39	2.22	2.35	2.07	2.32	2.49	
Air Flow Rate evaporator	Cooling		m³/min	51	80	100	102	160	190	227	263	312	354	
External Static Pressure	External Static Pressure Pa			98				196			2	294		
Condensation Drain Size	Diameter		mm	25.4										
Casing	Colour			Light Grey										
	Material				Electro galvanised mild steel									
Dimensions	HxWxD		mm	1000x1100x1530	1	000x1300x153	0	1200x1990x1670		1735x22	250x2800	1974x22	52x3180	
Weight	Unit		kg	295	370	400	425	665	765	1200	1350	1510	1600	
Air Flow Rate condensor	Cooling		m³/min	127	10	50	227	3.	20		5	66		
Operation Range	Cooling	Min-Max	°CDB					20°C	- 46°C					
Sound Level	Sound Power		dBA	63	65	66	68	70	70	74	74	80	80	
Refrigerant	Refrigerant Type				R-407C									
Power Supply								3~/50Hz/	380-415V					



# Twin / Triple / Double Twin Applications & Multi Model Applications

1. Twin, Triple, Double Twin	
RR-B	40
RP-B	42
2. Multi model application	
RMXS-E	44
MKS-E/G/F	48



It is possible to connect 2,3 or 4 indoor units to a single outdoor unit. The indoor units may be of different types (e.g. 4-way blow ceiling mounted cassette, wall mounted, ...) and even different capacities (e.g. 35 and 71 class).

All indoor units are operated together within the same mode (cooling or heating) from one remote control. This allows equal air distribution, even in larger, irregularly shaped rooms.

The total capacities (outdoor base) for simultaneous operation are the same as for the pair applications.

### **Connectable indoor units:**

Non-inverter controlled:

RR-B: FFQ-B, FBQ-B, FCQ-C, FHQ-B, FUQ-B, FAQ-B

RP-B: FHYBP-B, FDYP-B

POSSIBLE COMBINA	TIONS							
		TWIN			TRI	PLE		DOUBLE TWIN
RR71	35+35 (KHRQ22M20TA)							
RR100	50+50 (KHRQ22M20TA)	50+60 (KHRQ22M20TA)	35+71 (KHRQ22M20TA)	35+35+35 (KHRQ127H)				
RR125	60+60 (KHRQ22M20TA)	50+71 (KHRQ22M20TA)		50+50+50 (KHRQ127H)				
RP200	100+100	71-125		71+71+71 (KHRQ127H)	60+60+60 (KHRQ127H)	45+71+71 (KHRQ127H)	45+45+100 (KHRQ127H)	45+45+45+45 (2 x KHRQ22M20TA +
RF200	(KHRQ22M64T)	(KHRQ22M64T)		35+71+100 (KHRQ127H)	35+35+125 (KHRQ127H)	45+60+100 (KHRQ127H)	60+60+71 (KHRQ127H)	KHRQ22M64T)
RP250	125+125 (KHRQ22M64T)			45+100+100 (KHRQ127H)	60+60+125 (KHRQ127H)	45+71+125 (KHRQ127H)	71+71+100 (KHRQ127H)	60+60+60+60 (2 x KHRQ22M20TA + KHRQ22M64T)



# FAQ,FBQ,FCQ, FFQ,FHQ + RR



COOLING ONLY	G ONLY
--------------	--------

COCLIII	0 0.11			
Indoor Units				FAQ71BVV1B
Dimensions	imensions (Height x Width x Depth) mm		mm	290x1050x230
Weight			kg	13.0
Air Flow Rate	Cooling	High/Low	m³/min	19.0 / 15.0
Sound Power	Cooling	High/Low	dBA	59.0 / 53.0
Sound Pressure	Cooling	High/Low	dBA	43.0 / 37.0
Refrigerant			Туре	R-410A
Power Supply				1~/220-240V/50Hz



# **COOLING ONLY**

Indoor Units				FBQ60B8V1	FBQ35B8V1	FBQ50B8V1	FBQ71B8V3B	
Dimensions	(Height x Wi	dth x Depth)	mm	300x1000x800	300x7	00x800	300x1000x800	
Weight			kg	41	30	31	41.0	
Air Flow Rate	Cooling	High/Low	m³/min	19 / 14	11.5 / 9	14 / 10	19.00 / 14.00	
Sound Power	Cooling	High	dBA	60	52	53	60.0	
Sound Pressure	Cooling	High/Low	dBA	34 / 30	34 / 30 33 / 29			
Refrigerant			Туре		R-410A			
Power Supply				1~/230V/50Hz				



Indoor Units				FCQ35C7VEB	FCQ50C7VEB	FCQ60C7VEB	FCQ71C7VEB
Dimensions	(Height x Wi	(Height x Width x Depth) mm		214x840x840	214x840x840	214x840x840	214x840x840
Weight			kg	19	19	19	21
Air Flow Rate	Cooling	High/Low	m³/min	10.0 / 8.5	12.5 / 8.5	13.5 / 8.5	15.5 / 9.0
Sound Power level	Cooling	High	dBA	49	49	51	51
Sound Pressure level	Cooling	High/Low	dBA	31 / 27	32 / 27	33 / 28	33 / 28
Refrigerant			Type	R-410A	R-410A	R-410A	R-410A
Power Supply				1~/220-240V/50/60Hz	1~/220-240V/50/60Hz	1~/220-240V/50/60Hz	1~/220-240V/50/60Hz



**COOLING ONLY** 

Indoor Units				FFQ35B8V1B	FFQ50B8V1B	FFQ60B8V1B			
Dimensions	(Height x Wi	dth x Depth)	mm		286x575x575				
Weight			kg		17.5				
Air Flow Rate	Cooling	High/Low	m³/min	10.0 / 6.5	12.0 / 8.0	15.0 / 10.0			
Sound Power	Cooling	High	dBA	49.0	53.0	58.0			
Sound Pressure	Cooling	High/Low	dBA	32.0 / 25.0	36.0 / 27.0	41.0 / 32.0			
Refrigerant			Туре	-	R-410A				
Power Supply					1~/230V/50Hz				



**COOLING ONLY** 

COOLIIV	JOIL						
Indoor Units				FHQ35BVV1B	FHQ50BVV1B	FHQ60BVV1B	FHQ71BVV1B
Dimensions	(Height x Wio	lth x Depth)	mm	195x96	50x680	195x11	60x680
Weight			kg	24.0	25.0	21	7.0
Air Flow Rate	Cooling	High/Low	m³/min	13.0	10.0	17.0 / 13.0	17.0 / 14.0
Sound Power	Cooling	High/Low	dBA	53.0 / 48.0	54.0 / 49.0	55.0 / 49.0	55.0 / 51.0
Sound Pressure	Cooling	High/Low	dBA	37.0 / 32.0	38.0 / 33.0	39.0 / 33.0	39.0 / 35.0
Refrigerant			Туре	R-410A			
Power Supply					1~/220-	240V/50Hz	



**COOLING ONLY** 

COOLIN	COOLING ONLI					
Indoor Units				FUQ71BVV1B		
Dimensions	ns (Height x Width x Depth) mm		mm	165x895x895		
Weight			kg	25		
Air Flow Rate	Cooling	High/Low	m³/min	19/14		
Sound Power	Cooling	High/Low	dBA	40/35		
Sound Pressure	Cooling	High/Low	dBA	56/51		
Refrigerant	Refrigerant Type		Type	R-410A		
Power Supply				1~/220-240V/50Hz		



NON-INVERTE	R
-------------	---

Outdoor Unit				RR71B8V3B	RR71B8W1B	RR100B8V3B	RR100B8W1B	RR125B8W1B	
Dimensions	(Height x Width x Depth) mm			770x9	900x320		1170x900x320		
Weight kg			83	81	102	99	106		
Sound pressure level	Cooling	Н	dBA	50	50	53	53	53	
Sound power level	Cooling	Н	dBA	63	63	66	66	67	
Operation Range	Cooling	Min~Max	°CDB			-15.0~46.0			
Refrigerant			Type			R-410A			
Power Supply				1~/230V/50Hz	3N~/400V/50Hz	1~/230V/50Hz	3N~/40	00V/50Hz	
Piping connections	Liquid (OD)/	Gas/Drain	mm	9.52 / 15.9 / 26					
Piping Length (Maximu	ım)		m	70					
Max. internunit level difference m				0.5					



# FDYP,FHYBP + RP



# **COOLING ONLY**

Indoor Units				FDYP125B7V1		
Dimensions	(Height x Width x Depth) mm		mm	350x1400x662		
Weight	,		kg	59.0		
Air Flow Rate	Cooling	Medium	m³/min	43.00		
Sound Power	Cooling	High	dBA	75.0		
Sound Pressure	Cooling	High	dBA	44.0		
Refrigerant			Type	R-407C		
Power Supply				1~/230V/50Hz		



# **COOLING ONLY**

Indoor Units				FHYBP71B7V1	FHYBP100B7V1	FHYBP125B7V1	
Dimensions	(Height x Width x Depth) mm		300x1000x800	300x14	00x800		
Weight			kg	41.0	51.0	52.0	
Air Flow Rate	Cooling	High/Low	m³/min	19.00 / 14.00	27.00 / 20.00	35.00 / 24.00	
Sound Power	Cooling	High	dBA	60.0	62.0	63.0	
Sound Pressure	Cooling	High/Low	dBA	34.0 / 30.0	36.0 / 31.0	38.0 / 32.0	
Refrigerant	•		Type	R-407C			
Power Supply					1~/230V/50Hz		



# **NON-INVERTER**

Outdoor Unit				RP200B7W1	RP250B7W1		
Dimensions	(Height x Width x Depth) mm		mm	1220x1290x700	1440x1290x700		
Weight kg			kg	194	206		
Operation Range	Cooling	Cooling Min~Max °CE		-5-	-46		
Sound pressure level	Cooling	Cooling		56	56		
Sound power level	Cooling		dBA	77	77		
Refrigerant			Туре	R-407C			
Power Supply			•	3N~/400V/50Hz			
Piping connections	Liquid (OD)/Gas/Drain		mm	12.7 / 28.6 / 26	15.9 / 28.6 / 26		
Piping Length (Maximum) m			m	50			
Max. internunit level difference m			m	-			





# **RMXS-E**

# Super Multi Plus



# CONNECTABLE INDOOR UNITS

	20 class	25 class	35 class	42 class	50 class	60 class	71 class
Stylish wall mounted unit	-	FTXG25E	FTXG35E	-	CTXG50E	-	-
Wall mounted unit	FTXS20G	FTXS25G	FTXS35G	FTXS42G	FTXS50G	FTXS60F	FTXS71F
Floor standinig unit	-	FVXS25F	FVXS35F	-	FVXS50F	-	-
Flexi type unit	-	FLXS25B	FLXS35B	-	FLXS50B	FLXS60B	-
Slim concealed ceiling unit	-	FDXS25E	FDXS35E	-	FDXS50C	FDXS60C	-
Concealed ceiling unit	-	FDBQ25B	FBQ35B	-	FBQ50B	FBQ60B	-
4-way blow ceiling mounted cassette (600x600)	-	FFQ25B	FFQ35B	-	FFQ50B	FFQ60B	-
Round flow cassette	-	-	FCQ35C	-	FCQ50C	FCQ60C	-
4-way blow ceiling suspended cassette	-	=	FHQ35B	-	FHQ50B	FHQ60B	=

HEAT PU	MP							
Indoor Units				FTXG25EV1BW	FTXG25EV1BS	FTXG35EV1BW	FTXG35EV1BS	
Dimensions (Height x Width x Depth) mm			mm	275x840x150				
Weight			kg		9.0			
Air Flow Rate	Cooling	High Medium Low Silent Operation	m³/min	7.7 / 6.1 / 4.7 / 3.8		8.1 / 6.5 / 4.9 / 4.1		
	Heating	High Medium Low Silent Operation	m³/min	9.0 / 7.9 / 6.7 / 5.4		9.6 / 8.2 / 6.7 / 5.9		
Sound Power	Cooling	High	dBA	56.0		57.0		
	Heating	High	dBA	56.0		57.0		
Sound Pressure	Cooling	High Medium Low Silent Operation	dBA	38.0 / 32.0	/ 25.0 / 22.0	39.0 / 33.0 / 26.0 / 23.0		
	Heating	High Medium Low Silent Operation	dBA	38.0 / 33.0 / 28.0 / 25.0		39.0 / 34.0 / 29.0 / 29.0		
Refrigerant			Туре	R-410A				
Power Supply				1~/220-240V/50Hz				

HEAT PU	IMP						
Indoor Units				CTXG50EV1BW	CTXG50EV1BS		
Dimensions	(Height x Wid	dth x Depth)	mm	275x840x150			
Weight kg			kg	9.0			
Air Flow Rate Cooling		High/MediumLow/Silent Operation	m³/min	11.3 / 9.1 / 7.1 / 6.7			
	Heating	High/MediumLow/Silent Operation	m³/min	12.6 / 10.6 / 8.7 / 7.7			
Sound Power	Cooling	High	dBA	64	4.0		
	Heating	High	dBA	64	64.0		
Sound Pressure	Cooling	High/MediumLow/Silent Operation	dBA	47.0 / 41.0	/ 35.0 / 32.0		
	Heating	High Medium Low Silent Operation	dBA	47.0 / 41.0	/ 35.0 / 32.0		
Refrigerant Type			Туре	R-410A			
Power Supply			•	1/220-240\//50Hz			

Indoor Units				FTXS20G2V1B	FTXS25G2V1B	FTXS35G2V1B	FTXS42G2V1B	FTXS50G2V1B
Dimensions	(Height x Wi	dth x Depth)	mm			295x800x215		
Weight kg					9		10	
Air Flow Rate	Cooling	High Medium Low Silent Operation	m³/min	9.4 / 7.4 / 5.5 / 4.0	9.1 / 7.1 / 5.2 / 3.7	10.4 / 7.7 / 4.8 / 3.5	9.1 / 7.7 / 6.3 / 5.4	10.2 / 8.6 / 7.0 / 6.0
	Heating	High Medium Low Silent Operation	m³/min	9.9 / 8.2 / 6.5 / 5.5	9.8 / 7.9 / 6.2 / 5.2	10.6 / 8.5 / 6.4 / 5.4	11.2 / 9.4 / 7.7 / 6.8	11.0 / 9.3 / 7.6 / 6.7
ound Power	Cooling	High	dBA	5	54	5	8	59
	Heating	High	dBA	54	55	5	8	60
ound Pressure	Cooling	High Medium Low Silent Operation	dBA	38 / 32	/ 25 / 22	42 / 34 / 26 / 23	42 / 38 / 33 / 30	43 / 39 / 34 / 31
	Heating	High Medium Low Silent Operation	dBA	38 / 33 / 28 / 25	39 / 34 / 28 / 25	42 / 36 / 29 / 26	42 / 38 / 33 / 30	44 / 39 / 34 / 31
Refrigerant Type				R-410A				
Power Supply				1~/220-230-240V/50Hz				



# **HEAT PUMP**

Indoor Units				FTXS60FV1B	FTXS71FV1B		
Dimensions	(Height x Wi	dth x Depth)	mm	290x1050x238			
Weight kg			kg	12			
Air Flow Rate	Cooling	High/MediumLow/Silent Operation	m³/min	16.2 / 13.6 / 11.4 / 10.2	17.4 / 14.6 / 11.6 / 10.6		
	Heating	High/MediumLow/Silent Operation	m³/min	17.4 / 15.1 / 12.7 / 11.4	19.7 / 16.9 / 14.3 / 12.7		
Sound Power	Cooling	Medium	dBA	61	62		
	Heating	Medium	dBA	60	62		
Sound Pressure	Cooling	High Medium Low Silent Operation	dBA	45 / 41 / 36 / 33	46 / 42 / 37 / 34		
	Heating	High Medium Low Silent Operation	dBA	44 / 40 / 35 / 32	46 / 42 / 37 / 34		
Refrigerant Type			Туре	R-410A			
Power Supply				1∼/220-240V/50Hz			



### HEAT PUMP

IILAI I O							
Indoor Units				FLXS25BAVMB	FLXS35BAVMB	FLXS50BAVMB	FLXS60BAVMB
Dimensions	(Height x Wi	dth x Depth)	mm		490x1	050x200	
Weight			kg	16	5.0	17	.0
Air Flow Rate	Cooling	High/Medium/Low/Silent Operation	m³/min	7.60 / 6.80 / 6.00 / 5.2	8.60 / 7.60 / 6.60 / 5.6	11.40 / 10.00 / 8.50 / 7.6	12.00 / 10.70 / 9.30 / 8.3
	Heating	High/Medium/Low/Silent Operation	m³/min	9.20 / 8.30 / 7.40 / 6.6	9.80 / 8.90 / 8.00 / 7.2	12.1 / 9.8 / 7.5 / 6.8	12.80 / 10.60 / 8.40 / 7.5
Sound Power	Cooling	High	dBA	53.0	54.0	63.0	64.0
	Heating	High	dBA		-	62.0	63.0
ound Pressure	Cooling	High Medium Low Silent Operation	dBA	37.0 / 34.0 / 31.0 / 28.0	38.0 / 35.0 / 32.0 / 29.0	47.0 / 43.0 / 39.0 / 36.0	48.0 / 45.0 / 41.0 / 39.0
	Heating	High/Medium/Low/Silent Operation	dBA	37.0 / 34.0 / 31.0 / 29.0	39.0 / 36.0 / 33.0 / 30.0	46.0 / 41.0 / 35.0 / 33.0	47.0 / 42.0 / 37.0 / 34.0
Refrigerant Type			Туре	R-410A			
Power Supply					1~/220-240/22	20-230V/50/60Hz	



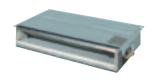
### **HEAT PUMP**

Indoor Units				FVXS25FV1B	FVXS35FV1B	FVXS50FV1B	
Dimensions	(Height x Wi	dth x Depth)	mm		600x700x210		
Weight			kg		14		
Air Flow Rate	Cooling	High Medium Low Silent Operation	m³/min	8.2 / 6.5 / 4.8 / 4.1	8.5 / 6.7 / 4.9 / 4.5	10.7 / 9.2 / 7.8 / 6.6	
	Heating	High Medium Low Silent Operation	m³/min	8.8 / 6.9 / 5.0 / 4.4	9.4 / 7.3 / 5.2 / 4.7	11.8 / 10.1 / 8.5 / 7.1	
Sound Power	Cooling	High	dBA	54	55	56	
	Heating	High	dBA	54	55	57	
Sound Pressure	Cooling	High Medium Low Silent Operation	dBA	38 / 32 / 26 / 23	39 / 33 / 27 / 24	44 / 40 / 36 / 32	
	Heating	High Medium Low Silent Operation	dBA	38 / 32 / 26 / 23	39 / 33 / 27 / 24	45 / 40 / 36 / 32	
Refrigerant Type				R-410A			
Power Supply					1~/220-240V/50Hz		



# **HEAT PUMP**

Indoor Units	Indoor Units			FDXS25EAVMB	FDXS35EAVMB		
Dimensions	(Height x Wid	th x Depth)	mm	200x70	00x620		
Weight kg			kg	21.0			
Air Flow Rate	Cooling	High/Medium/Low/Silent Operation	m³/min	8.7 / 8.0 /	/ 7.3 / 6.2		
	Heating	High/Medium/Low/Silent Operation	m³/min	8.7 / 8.0 / 7.3 / 6.2			
Sound Power	Cooling	High	dBA	53	3.0		
	Heating	High	dBA	53	3.0		
Sound Pressure	Cooling	High/MediumLow/Silent Operation	dBA	35.0 / 33.0 /	/ 31.0 / 29.0		
	Heating	High/MediumLow/Silent Operation	dBA	35.0 / 33.0 / 31.0 / 29.0			
Refrigerant			Туре	R-4	10A		
Power Supply				1~/220-240/220	0-230V/50/60Hz		



# **HEAT PUMP**

Indoor Units				FDXS50CVMB	FDXS60CVMB
Dimensions	(Height x Wi	dth x Depth)	mm	200x900x620	200x1100x620
Weight			kg	27.0	30.0
Air Flow Rate	Cooling	High Medium Low Silent Operation	m³/min	12.0 / 11.0 / 10.0 / 8.4	16.0 / 14.8 / 13.5 / 11.2
	Heating	High Medium Low Silent Operation	m³/min	12.0 / 11.0 / 10.0 / 8.4	16.0 / 14.8 / 13.5 / 11.2
Sound Power	Cooling	High	dBA	55.0	56.0
	Heating	High	dBA	55.0	56.0
Sound Pressure	Cooling	High Medium Low/Silent Operation	dBA	37.0 / 35.0 / 33.0 / 31.0	38.0 / 36.0 / 34.0 / 32.0
	Heating	High/Medium/Low/Silent Operation	dBA	37.0 / 35.0 / 33.0 / 31.0	38.0 / 36.0 / 34.0 / 32.0
Refrigerant			Туре	R-4	10A
Power Supply				1~/220-240/22	0-230V/50/60Hz



# **HEAT PUMP**

Indoor Units	Indoor Units			FDBQ25B8V1
Dimensions	(Height x Wi	dth x Depth)	mm	230x652x502
Weight	Weight kg		kg	17.0
Air Flow Rate	Cooling	High/Low	m³/min	6.50 / 5.20
	Heating	High/Low	m³/min	6.95 / 5.20
Sound Power	Cooling	High/Low	dBA	55.0 / 49.0
	Heating	High/Low	dBA	55.0 / 49.0
Sound Pressure	Cooling	High/Low	dBA	35.0 / 28.0
	Heating	High/Low	dBA	35.0 / 29.0
Refrigerant			Туре	R-410A
Power Supply				1~/230V/50Hz



### **HEAT PUMP**

Indoor Units				FBQ35B8V1	FBQ50B8V1	FBQ60B8V1
Dimensions	(Height x Wi	dth x Depth)	mm	300x7	00x800	300x1000x800
Weight			kg	30	31	41
Air Flow Rate	Cooling	High/Low	m³/min	11.5 / 9	14 / 10	19 / 14
	Heating	High/Low	m³/min	11.5 / 9	14 / 10	19 / 14
Sound Power	Cooling	High	dBA	52	53	60
	Heating	High	dBA	52	53	60
Sound Pressure	Cooling	High/Low	dBA	33	/ 29	34 / 30
	Heating	High/Low	dBA	33 / 29		34 / 30
Refrigerant Type		R-410A				
Power Supply			,	1~/230V/50Hz		



# **HEAT PUMP**

Indoor Units				FFQ25B8V1B	FFQ35B8V1B	FFQ50B8V1B	FFQ60B8V1B
Dimensions	(Height x Wi	dth x Depth)	mm		286x5	75x575	
Weight			kg		17	7.5	
Air Flow Rate	Cooling	High/Low	m³/min	9.0 / 6.5	10.0 / 6.5	12.0 / 8.0	15.0 / 10.0
	Heating	High/Low	m³/min	9.0 / 6.5	10.0 / 6.5	12.0 / 8.0	15.0 / 10.0
Sound Power	Cooling	High	dBA	46.5	49.0	53.0	58.0
Sound Pressure	Cooling	High/Low	dBA	29.5 / 24.5	32.0 / 25.0	36.0 / 27.0	41.0 / 32.0
	Heating	High/Low	dBA	29.5 / 24.5	32.0 / 25.0	36.0 / 27.0	41.0 / 32.0
Refrigerant Type			Туре	R-410A			
Power Supply					1~/230	0V/50Hz	



HEAT	PH	MР
		IVII

			FCQ35C7VEB	FCQ50C7VEB	FCQ60C7VEB
(Height x Wi	dth x Depth)	mm	204x840x840		
		kg		19	
Cooling	High/Low	m³/min	10.5 / 8.5	12.5 / 8.5	13.5 / 8.5
Heating	High/Low	m³/min	12.5 / 10.0	12.5 / 8.5	13.5 / 8.5
Cooling	High	dBA	49		51
Cooling	High/Low	dBA	31 /	33 / 28	
Heating	High/Low	dBA	31 /	33 / 28	
Refrigerant Type			R-410A		
			1~/220-240V/50/60Hz		
	Cooling Heating Cooling Cooling	Heating High/Low Cooling High Cooling High/Low	kg Cooling High/Low m³/min Heating High/Low m³/min Cooling High dBA Cooling High/Low dBA Heating High/Low dBA	(Height x Width x Depth)   mm   kg	(Height x Width x Depth)   mm   204x840x840



### **HFAT PUMP**

IILAIIC							
Indoor Units				FHQ35BVV1B	FHQ50BVV1B	FHQ60BVV1B	
Dimensions	(Height x Wid	dth x Depth)	mm	195x96	50x680	195x1160x680	
Weight kg			kg	24.0	25.0	27.0	
Air Flow Rate	Cooling	High/Low	m³/min	13.0	10.0	17.0 / 13.0	
	Heating High/Low		m³/min	13.0 / 10.0		16.0 / 13.0	
Sound Power	Cooling	High/Low	dBA	53.0 / 48.0 54.0 / 49.0		55.0 / 49.0	
	Heating	High/Low	dBA	53.0 / 48.0	54.0 / 49.0	55.0 / 49.0	
Sound Pressure	Cooling	High/Low	dBA	37.0 / 32.0	38.0 / 33.0	39.0 / 33.0	
	Heating	High/Low	dBA	37.0 / 32.0	38.0 / 33.0	39.0 / 33.0	
Refrigerant			Туре		R-410A		
Power Supply				1~/220-240V/50Hz			



#### **HEAT PUMP INVERTER** Outdoor Unit RMXS140E8V1B RMXS112E8V1B RMXS160E8V1B (Height x Width x Depth) Dimensions 1345x900x320 mm Weight kg °CDB 125 Operation Range Min~Max Cooling -5~46 Min~Max °CWB -15~20 Heating Sound Power 68 52 Cooling dBA 67 70 54 Sound Pressure Cooling dBA 51 Heating 55 dBA 53 54 Sound Level (Night quiet) Sound Pressure dBA 47/44/41 47/44/41 R-410A Refrigerant Туре Power Supply 1~/230V/50Hz Liquid (OD)/Gas/Drain mm m Piping connections 9.52 / 19.1 / 26x3 Max. internunit level difference 15

BRANCH PROVIDER			BPMKS967B2	BPMKS967B3	
Connectable indoor units			1~2	1~3	
Max. indoor unit con	nectable capacity		14.2	20.8	
Max. connectable co	mbination		71+71 60+71+71		
Dimensions (HeightxWidthxDepth) mm			180x294x350		
Weight kg		kg	7	8	



# MKS-E/G/F

# Multi Model Application Inverter Controlled



# CONNECTABLE INDOOR UNITS

	2MKS40G	2MKS50G	3MKS50E	4MKS58E	4MKS75F	5MKS90E
Wall mounted unit	FTXS20,25,35G	FTXS20,25,35,42,50G	FTXS20,25,35,42G	FTXS20,25,35,42,50G	FTXS20,25,35,42,50G	FTXS20,25,35,42,50G
	-	-	-	-	FTKS60F	FTKS60,71F
Slim concealed ceiling unit	FDKS25,35E	FDKS25,35E	FDKS25,35E	FDKS25,35E	FDKS25,35E	FDKS25,35E
	-	FDKS50C	-	FDKS50C	FDKS50,60C	FDKS50,60C
Floor standing unit	FVXS25,35F	FVXS25,35,50F	FVXS25,35,50F	FVXS25,35,50F	FVXS25,35,50F	FVXS25,35,50F
Flexi type unit	FLKS25,35B	FLKS25,35,50B	FLKS25,35B	FLKS25,35,50B	FLKS25,35,50B	FLKS25,35,50B
Round flow cassette	-	-	-	FCQ35,50C	FCQ35,50,60C	FCQ35,50,60C
4-way blow ceiling mounted cassette (600x600)	-	FFQ25,35,50B	-	FFQ25,35,50B	FFQ25,35,50,60B	FFQ25,35,50,60B
Concealed ceiling unit	-	-	-	FDBQ25B	FDBQ25B	FDBQ25B
	-	-	FBQ35,50B	FBQ35,50,60B	FBQ35,50,60B	FBQ35,50,60B
4-way blow ceiling suspended cassette	-	-	FHQ35,50B	FHQ35,50,60B	FHQ35,50,60B	FHQ35,50,60B



## **COOLING ONLY**

Indoor Units				FTXS20G2V1B	FTXS25G2V1B	FTXS35G2V1B	FTXS42G2V1B	FTXS50G2V1B
Dimensions	(Height x Wi	(Height x Width x Depth)			295x800x215			
Weight			kg		9 10			
Air Flow Rate	Cooling	High Medium Low Silent Operation	m³/min	9.4 / 7.4 / 5.5 / 4.0	9.1 / 7.1 / 5.2 / 3.7	10.4 / 7.7 / 4.8 / 3.5	9.1 / 7.7 / 6.3 / 5.4	10.2 / 8.6 / 7.0 / 6.0
	Heating	High Medium Low Silent Operation	m³/min	9.9 / 8.2 / 6.5 / 5.5	9.8 / 7.9 / 6.2 / 5.2	10.6 / 8.5 / 6.4 / 5.4	11.2 / 9.4 / 7.7 / 6.8	11.0 / 9.3 / 7.6 / 6.7
Sound Power	Cooling	High	dBA		54	5	i8	59
	Heating	High	dBA	54	55	5	8	60
Sound Pressure	Cooling	High Medium Low Silent Operation	dBA	38 / 32	/ 25 / 22	42 / 34 / 26 / 23	42 / 38 / 33 / 30	43 / 39 / 34 / 31
	Heating	High Medium Low Silent Operation	dBA	38 / 33 / 28 / 25	39 / 34 / 28 / 25	42 / 36 / 29 / 26	42 / 38 / 33 / 30	44 / 39 / 34 / 31
Refrigerant Type			R-410A					
Power Supply						1~/220-230-240V/50Hz		



# **COOLING ONLY**

Indoor Units				FTKS50FV1B	FTKS71FV1B	
Dimensions	Dimensions (Height x Width x Depth)			290x1050x238		
Weight			kg	1	2	
Air Flow Rate	Cooling	High/Medium/Low/Silent Operation	m³/min	16.2 / 13.6 / 11.4 / 10.2	17.4 / 14.6 / 11.6 / 10.6	
Sound Power	Cooling	Medium	dBA	61	62	
Sound Pressure	Cooling	High/Medium/Low/Silent Operation	dBA	45 / 41 / 36 / 33	46 / 42 / 37 / 34	
Refrigerant		•	Туре	R-4	10A	
Power Supply				1~/220-2	40V/50Hz	



Indoor Units				FLKS25BAVMB	FLKS35BAVMB	FLKS50BAVMB	FLKS60BAVMB	
Dimensions (Height x Width x Depth) mm			mm	490x1050x200				
Weight kg			kg	16	i.0	17	7.0	
Air Flow Rate	Cooling	High Medium Low Silent Operation	m³/min	7.60 / 6.80 / 6.00 / 5.2	8.60 / 7.60 / 6.6 / 5.6	11.40 / 10.00 / 8.50 / 7.5	12.00 / 10.70 / 9.30 / 8.3	
Sound Power	Cooling	High	dBA	53.0	54.0	63.0	64.0	
Sound Pressure	Cooling	High Medium Low Silent Operation	dBA	37.0 / 34.0 / 31.0 / 28.0	38.0 / 35.0 / 32.0 / 29.0	47.0 / 43.0 / 39.0 / 36.0	48.0 / 45.0 / 41.0 / 39.0	
Refrigerant Type			Туре	R-410A				
Power Supply				1~/220-240/220-230V/50/60Hz				



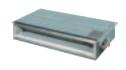
**COOLING ONLY** 

COOLING OILE							
Indoor Units				FVXS25FV1B	FVXS35FV1B	FVXS50FV1B	
Dimensions	(Height x Width x Depth)		mm	600x700x210		•	
Weight kg			kg	14			
Air Flow Rate	Cooling	High Medium Low/Silent Operation	m³/min	8.2 / 6.5 / 4.8 / 4.1	8.5 / 6.7 / 4.9 / 4.5	10.7 / 9.2 / 7.8 / 6.6	
	Heating	High Medium Low Silent Operation	m³/min	8.8 / 6.9 / 5.0 / 4.4	9.4 / 7.3 / 5.2 / 4.7	11.8 / 10.1 / 8.5 / 7.1	
Sound Power	Cooling	High	dBA	54	55	56	
	Heating	High	dBA	54	55	57	
Sound Pressure	Cooling	High Medium Low/Silent Operation	dBA	38 / 32 / 26 / 23	39 / 33 / 27 / 24	44 / 40 / 36 / 32	
	Heating	High Medium Low Silent Operation	dBA	38 / 32 / 26 / 23	39 / 33 / 27 / 24	45 / 40 / 36 / 32	
Refrigerant Type			Туре	R-410A			
Power Supply				1~/220-240V/50Hz			



**COOLING ONLY** 

Indoor Units				FDKS25EAVMB	FDKS35EAVMB	
Dimensions	Dimensions (Height x Width x Depth) mm		mm	200x700x620		
Weight			kg	21.0		
Air Flow Rate	Cooling	High Medium Low Silent Operation	m³/min	8.7 / 8.0 / 7.3 / 6.2		
Sound Power	Cooling	High	dBA	53	3.0	
Sound Pressure	Cooling	High Medium Low Silent Operation	dBA	35.0 / 33.0	/ 31.0 / 29.0	
Refrigerant Type			Туре	R-410A		
Power Supply				1~/220-240/220-230V/50/60Hz		



**COOLING ONLY** 

Indoor Units				FDKS50CVMB	FDKS60CVMB	
Dimensions	(Height x Width x Depth) r		mm	200x900x620	200x1100x620	
Weight			kg	27.0	30.0	
Air Flow Rate	Cooling	High/Medium/Low/Silent Operation	m³/min	12.0 / 11.0 / 10.0 / 8.4	16.0 / 14.8 / 13.5 / 11.2	
Sound Power	Cooling	High	dBA	55.0	56.0	
Sound Pressure	Cooling	High/Medium/Low/Silent Operation	dBA	37.0 / 35.0 / 33.0 / 31.0	38.0 / 36.0 / 34.0 / 32.0	
Refrigerant			Туре	R-4	10A	
Power Supply				1~/220-240/220-230V/50/60Hz		



Indoor Units				FDBQ25B8V1	
Dimensions	(Height x Wio	(Height x Width x Depth) mm		230x652x502	
Weight			kg	17.0	
Air Flow Rate	Air Flow Rate Cooling High/Low		m³/min	6.50 / 5.20	
Heating		High/Low	m³/min	6.95 / 5.20	
Sound Power	Sound Power Cooling Hig		dBA	55.0 / 49.0	
	Heating	High/Low	dBA	55.0 / 49.0	
Sound Pressure	Cooling	High/Low	dBA	35.0 / 28.0	
	Heating	High/Low	dBA	35.0 / 29.0	
Refrigerant	Refrigerant Type		Type	R-410A	
Power Supply				1~/230V/50Hz	



**COOLING ONLY** 

Indoor Units				FBQ35B8V1	FBQ50B8V1	FBQ60B8V1
Dimensions	(Height x Width x Depth) mm		mm	300x70	00x800	300x1000x800
Weight			kg	30	31	41
Air Flow Rate	Cooling	High/Low	m³/min	11.5 / 9	14 / 10	19 / 14
	Heating	High/Low	m³/min	11.5 / 9	14 / 10	19 / 14
Sound Power	Cooling	High	dBA	52	53	60
	Heating	High	dBA	52	53	60
ound Pressure	Cooling	High/Low	dBA	33 / 29		34 / 30
	Heating	High/Low	dBA	33 / 29		34 / 30
Refrigerant Type			Туре	R-410A		
Power Supply				1~/230V/50Hz		



COOLING ONLY

COOLIIV	ONLI							
Indoor Units				FFQ25B8V1B	FFQ35B8V1B	FFQ50B8V1B	FFQ60B8V1B	
Dimensions	sions (Height x Width x Depth) mm			286x575x575				
Weight			kg		1	7.5		
Air Flow Rate	Cooling	High/Low	m³/min	9.0 / 6.5	10.0 / 6.5	12.0 / 8.0	15.0 / 10.0	
	Heating	High/Low	m³/min	9.0 / 6.5	10.0 / 6.5	12.0 / 8.0	15.0 / 10.0	
Sound Power	Cooling	High	dBA	46.5	49.0	53.0	58.0	
Sound Pressure	Cooling	High/Low	dBA	29.5 / 24.5	32.0 / 25.0	36.0 / 27.0	41.0 / 32.0	
	Heating	High/Low	dBA	29.5 / 24.5	32.0 / 25.0	36.0 / 27.0	41.0 / 32.0	
Refrigerant Type			Туре		R-	410A		
Power Supply					1~/23	0V/50Hz		



**COOLING ONLY** 

	FCO35C7VEB	F60 F0 CTI /FD	
	i eqsse; teb	FCQ50C7VEB	FCQ60C7VEB
mm	204x840x840		
kg	19		
m³/min	10.5 / 8.5	12.5 / 8.5	13.5 / 8.5
m³/min	12.5 / 10.0	12.5 / 8.5	13.5 / 8.5
dBA	49		51
dBA	31 / 27		33 / 28
dBA	31 / 27		33 / 28
Туре	R-410A		
	1~/220-240V/50/60Hz		
	kg m³/min m³/min dBA dBA dBA	kg       m³/min     10.5 / 8.5       m³/min     12.5 / 10.0       dBA     49       dBA     31 / 7       dBA     31 / 7	kg     19       m³/min     10.5 / 8.5     12.5 / 8.5       m³/min     12.5 / 10.0     12.5 / 8.5       dBA     49       dBA     31 / 27       dBA     31 / 27       Type     R-410A



Indoor Units				FHQ35BVV1B	FHQ50BVV1B	FHQ60BVV1B
Dimensions	(Height x Wi	(Height x Width x Depth) mm		195x960x680		195x1160x680
Weight			kg	24.0	25.0	27.0
Air Flow Rate	Cooling	High/Low	m³/min	13.0	/ 10.0	17.0 / 13.0
Heating High/Low n		m³/min	13.0 / 10.0		16.0 / 13.0	
Sound Power	Cooling	High/Low	dBA	53.0 / 48.0	54.0 / 49.0	55.0 / 49.0
	Heating	High/Low	dBA	53.0 / 48.0	54.0 / 49.0	55.0 / 49.0
Sound Pressure	Cooling	High/Low	dBA	37.0 / 32.0	38.0 / 33.0	39.0 / 33.0
	Heating	High/Low	dBA	37.0 / 32.0	38.0 / 33.0	39.0 / 33.0
Refrigerant Type			Туре	R-410A		
Power Supply				1~/220-240V/50Hz		



COOLING	ONLY			INVE	RTER	
Outdoor Unit				2MKS40G2V1B	2MKS50G2V1B	
Dimensions	(Height x Wi	dth x Depth)	mm	550x7	65x285	
Weight			kg	38	42	
Operation Range	Cooling	Min~Max	°CDB	10	~46	
Sound Power		Cooling	dBA	62	63	
Sound Pressure (Low)		Cooling	dBA	43	44	
Sound Pressure (High)		Cooling	dBA	47	48	
Refrigerant			Туре	R-410A		
Power Supply				1∼/220-240V/50Hz		
Piping connections Liquid (OD)/Gas/Drain mm		mm	6.35 / 9.5 / 18	6.35 / 9.5 / 18		
Piping Length (Maximum) m			m	30 (for total of each room) 20 (for 1 room)		
Max. internunit level d	lifference		m	7.5		



COOLING	ONLY			INVERTER					
Outdoor Unit				3MKS50E2V1B	4MKS58E2V1B	4MKS75F2V1B	5MKS90E7V3B		
Dimensions		HxWxD	mm	735x936x300	735x936x300	735x936x300	770x900x320		
Weight			kg	49	58	57	69		
Operation range	Cooling	Min~Max	°CDB	-10~46	-10~46	-10~46	-10~46		
Sound Power	Cooling		dB(A)	59	59	61	62		
Sound Pressure (low)	Cooling		dB(A)	-	-	=	-		
Sound Pressure (high)	Cooling		dB(A)	46	46	48	48		
Refrigerant			Type	R-410A					
Power Supply				1~/220-240V/50Hz	1~/220-240V/50Hz	1~/220-240V/50Hz	1~/220-240V/50Hz		
Piping Connection	Liquid (OD)/Gas/Drain mm		mm	6.35/12.7/18	6.35/12.7/18	6.35/15.9/18	6.35/15.9/18		
Piping Lenght (Maximum) m			m	50	50	60	75		
Max. internunit leve difference m			m	15	15	7.5	15		



Air conditioning and air movement of course, are not the same. Neither actually includes the other but both are necessary components of a comfortable and energy efficient indoor climate. Ventilation by itself cannot cope with the high heat gains generated by modern office complexes and indoor temperature and humidity levels can fluctuate wildly if ventilation alone is installed. On the other hand, air conditioning cannot supply the necessary fresh air needed for a balanced system. The ideal solution therefore, requires air conditioning and ventilation in combination.

Daikin manufactures and markets a range of handling systems, carefully designed for integration with its air conditioning systems in order to achieve the most economic, environmentally conscious and best possible indoor comfort conditions.

# Ventilation

### AIR HANDLING APPLICATIONS

ERX	54
VRV®+EXV-kit	56

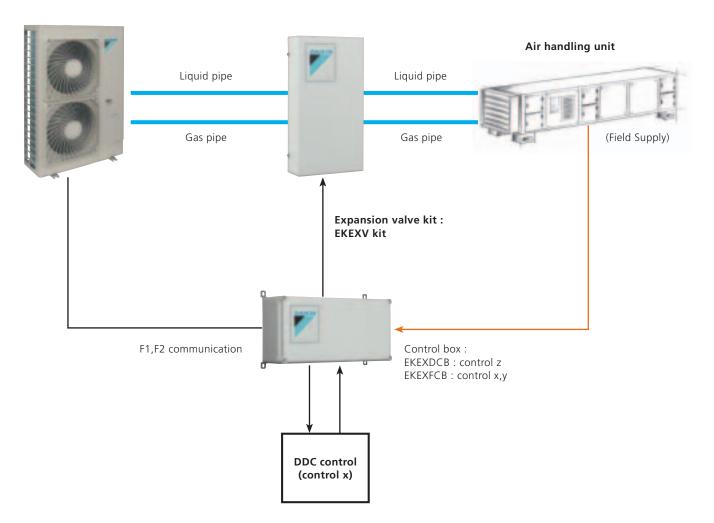




# Condensing Units for Air Handling Applications (pair)

A new range of R-410A inverter condensing units for pair application with air handling units.

- Inverter controlled units
- Large capacity range (from 71 to 140 class)
- Cooling only
- R-410A
- Flexible control possibilities:
  - Control x: control of air temperature (discharge temperature, suction temperature, room temperature) via external device (DDC controller)
  - <u>Control y:</u> control of evaporating temperature via Daikin control (no DDC controller needed)
    - Control z: control of air temperature (suction temperature, room temperature) via Daikin control (no DDC controller needed)
- Wide range of expansion valve kits available



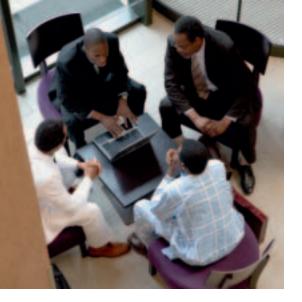
COOLING ONLY									
Outdoor unit				ERX100A9V1	ERX125A9V1	ERX140A9V1			
Dimensions		HxWxD	mm		1,345x900x320				
Weight	Weight kg				120				
Sound pressure level	cooling	nominal	dB(A)	50	51	53			
Sound power level	cooling	nominal	dB(A)	66	67	69			
Operation range	cooling	min-max	°CDB	-5 ~ 46					
Refrigerant type				R-410A					
Piping connections		liquid	mm	ø9.52					
	gas mm		mm	ø15.9 ø19.1					
drain mm			mm	ø26x3					
Piping length max m			m	50					
Power supply V3			V3	1 ~, 220-240V, 50Hz					

COOLING ONLY									
Outdoor unit				ERX125AW1	ERX200AW1	ERX250AW1			
Cooling capacity			kW	14.0	22.4	28.0			
Power input			kW	3.52	5.56	7.42			
EER				3.98	4.03	3.77			
Casing	Colour			Daikin White					
	Material			Painted galvanized steel plate					
Dimensions	Unit	HxWxD	mm	1680x635x765	1680x930x765	1680x930x765			
Weight	Unit		kg	157	185	238			
Operation Range	Cooling	Min ~ Max	°CDB	-5.0 ~ 43.0	-5.0 ~ 43.0	-5.0 ~ 43.0			
Sound level (nominal)	Sound power dB(A)		dB(A)	72	78	78			
	Sound pressure dB		dB(A)	54	57	58			
Refrigerant	Туре			R-410A	R-410A	R-410A			
Piping Connections	Liquid	Diameter (OD)	mm	9.52	9.52	9.52			
	Gas	Diameter (OD)	mm	15.9	19.1	22.2			
Power Supply	•	•	W1	3N~, 50Hz, 400V					

### COMBINATION TABLE

Outdoor unit		Contr	Control box Expansion valve kit								Options
		control z	control x or y	class 63	class 80	class 100	class 125	class 140	class 200	class 250	Central drain kit
		EKEXDCBA	EKEXFCBA	EKEXV63	EKEXV80	EKEXV100	EKEXV125	EKEXV140	EKEXV200	EKEXV250	KKPJ5F180
	ERX100A9V1	P	P	P	P	Р	P	-	-	-	Х
1ph	ERX125A9V1	Р	Р	Р	Р	Р	Р	Р	-	-	Х
	ERX140A9V1	P	Р	-	Р	Р	Р	Р	-	-	Х
	ERX125AW1	-	-	P	P	P	P	P	-	-	-
3ph	ERX200AW1	P	Р	-	-	P	P	P	P	P	-
	ERX250AW1	Р	Р	-	-	-	P	Р	P	Р	-

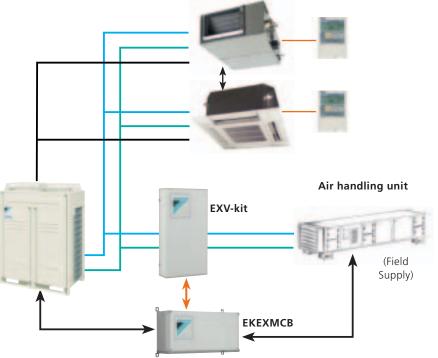
P: Pair: Combination depending on air handling units coils volume. x: Possibility to connect.



# VRV® Air Handling Applications

A R-410A inverter condensing units range for multi application with air handling units.

- Inverter controlled units
- Large capacity range (from 5 to 18HP)
- Cooling only
- R-410A
- Control z:
   control of air temperature (suction temperature, room temperature) via Daikin control (no DDC controller needed)
- Large range of expansion valve kits available
- BRC1D52 is used to set the set point temperature (connected to the EKEXMCB).



gas pipe
liquid pipe
F1,F2 communication

COOLING ONLY											
RXQ-P(A)			5	8	10	12	14	16	18		
Capacity range			HP	5	8	10	12	14	16	18	
Capacity	Cooling		kw	14.0	22.4	28.0	33.5	40.0	45.0	49.0	
Power input (Nominal)	Cooling		kw	3.52	5.56	7.42	9.62	12.4	14.2	16.2	
Dimensions	(Height x Width	x Depth)	mm	1,680x635x765		1,680x930x765	,		1,680x1,240x765	x1,240x765	
Weight	Weight kg			157	185	2:	38 315		323		
Sound Level	Sound Power Cooling		dBA	72	7	78		80		83	
	Sound Pressure	Cooling	dBA	54	57	58		60		63	
Air Flow Rate (nominal at 230V)	Cooling		m³/min	95	171	185	196	2	33	239	
Operation Range	Cooling	Min~Max	°CDB		•		-5.0~43.0	•			
Refrigerant				R-410A							
Power Supply				3N~/400V/50Hz							
Max n° of indoor units to be connected				8	13	16	19	23	26	29	
Piping connections	Liquid (OD)/Gas		mm	9.5 / 15.9	9.5 / 19.1	9.5 / 22.2	12.7 / 22.2	12.7	/ 28.6	15.9 / 28.6	

#### COMBINATION TABLE

		Control box				Expansion	n valve kit			
Outdoor unit		control z	class 50	class 63	class 80	class 100	class 125	class 140	class 200	class 250
		EKEXMCB	EKEXV50	EKEXV63	EKEXV80	EKEXV100	EKEXV125	EKEXV140	EKEXV200	EKEXV250
	RXQ5P	Х	Х	Х	Х	Х	Х	Х	Х	Х
	RXQ8P	Х	Х	Х	Х	Х	Х	Х	Х	Х
	RXQ10P	Х	Х	Х	Х	Х	Х	Х	Х	Х
3ph	RXQ12P	Х	Х	Х	Х	Х	Х	Х	Х	Х
	RXQ14PA	Х	Х	Х	Х	Х	Х	Х	Х	Х
	RXQ16PA	Х	Х	Х	Х	Х	Х	Х	Х	Х
	RXQ18PA	Х	Х	Х	Х	Х	Х	Х	Х	Х

# **POWER** Supply

T1 = 3~, 220V, 50HZ

V1 = 1~, 220-240V, 50HZ

 $VE = 1 \sim$ , 220-240V, 50HZ/60HZ

 $V3 = 1 \sim$ , 230V, 50HZ

VM = 1~, 220~240V/220~230V, 50HZ/60HZ

 $W1 = 3N^{2}, 400V, 50HZ$ 

Y1 = 3~, 400V, 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 <sup>©</sup>
level difference	0m

#### CHILLERS:

Air-cooled	cooling only	evaporator: 12°C/7°C	ambient: 35°CDB
	heat pump	evaporator: 12°C/7°C	ambient: 35°C
		condenser: 40°C/45°C	ambient: 7°CDB/6°CWB
Water-cooled	cooling only	evaporator: 12°C/7°C	
		condenser: 30°C/35°C	
	heating only	evaporator: 12°C/7°C	
		condenser: 40°C/45°C	
Remote condenser		evaporator: 12°C/7°C	
		condensing temperature: 45°C / liqui	id temperature: 40°C
Remote evaporator	cooling capacity/power input conditions	suction dew point: 5°C	ambient: 35°C
		superheat: 10°C	
Fan coil units	cooling	room temperature: 27°C/19°C	
		entering water temperature: 7°C/12°	°C
·	heating	room temperature: 20°C	
		water inlet temperature: 50°C (2-pip	e)/70°C (4-pipe)

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.

### 'We Care' Icons

A number of 'We Care' icons are highlighted in green throughout the catalogue to indicate product features that have an impact on reducing energy consumption:



#### Night set mode

Saves energy, by preventing overcooling or overheating during night time.



#### Fan only

The air conditioner can be used as fan, blowing air without cooling or heating.



#### Econo mode

This function decreases the power consumption so that other applicances that need large power consumption can be used. This function is also energy saving.



#### **Energy efficiency**

Daikin air conditioners are energy efficient and economical.



#### Movement sensor

The sensor detects whether someone is in the room. When the room is empty, the unit switches to economy mode after 20 minutes and restarts when a person enters the room.



#### Home leave operation

During absence, the indoor temperature can be maintained at a certain level.



#### Vertical auto swing

Possibility to select automatic vertical moving of the air discharge louvre, for uniform air flow and temperature distribution.



#### 24 Hour timer

Timer can be set to start cooling/heating anytime during a 24-hour period.



#### Horizontal auto swing

Possibility to select automatic horizontal moving of the air discharge louvre, for uniform air flow and temperature distribution.



#### Infrared remote control

Infrared remote control with LCD to start, stop and regulate the air conditioner from a distance.



#### Draught prevention

When starting to warm up or when the thermostat is off, the air discharge direction is set horizontally and the fan to low speed, to prevent draught. After warming up, air discharge and fan speed are set as desired.



#### Ceiling soiling prevention

A special function prevents air blowing out too long in horizontal position, to prevent ceiling stains.



#### Auto-restart

The unit restarts automatically at the original settings after power failure.



#### **Self-diagnosis**

Simplifies maintenance by indicating system faults or operating anomalies.



#### Auto cooling-heating changeover

Automatically selects cooling or heating mode to achieve the set temperature (heat pump types only).



#### Scroll compressor

Silent, reliable Daikin compressor used in medium sized outdoor units.



#### Dry programme

Allows humidity levels to be reduced without variations in room temperature.



#### Single screw compressor

Compact, high efficient, silent reliable Daikin compressor.

Maintenance free (inspection only after 40,000 hours of operation)



### Auto fan speed

Automatically selects the necessary fan speed to reach or maintain the set temperature.



#### Wired remote control

Wired remote control to start, stop and regulate the air conditioner from a distance.



#### Fan speed steps

Allows to select up to the given number of fan speed.



#### Powerful mode

If the temperature in the room is too high/low, it can be cooled down/heated quickly by selecting the 'powerful mode'. After the powerful mode is turned off, the unit returns to the preset mode.



#### Whisper quiet

Daikin indoor units are whisper quiet. Also the outdoor units are guaranteed not to disturb the quiet of the neighbourhood.



#### **Centralised control**

Centralised control to start, stop and regulate several air conditioners from one central point.



#### **Double thermostat function**

Controls the temperature via a sensor on the air conditioner or via a sensor on the remote control.



#### Comfortable sleeping mode

Increased comfort function that follows a specific temperature fluctuation rhythm.



#### Air filter

Removes airborne dust particles to ensure a steady supply of clean air.



#### Timer

Allows to preset the air conditioner to start/stop at a specified time.



#### Air purification filter

Removes airborne dust particles and prevents the propagation of bacteria and viruses to ensure a steady supply of clean air.



### Outdoor unit silent operation

Lowers the operation sound of the outdoor unit by 3dB(A) to ensure a quiet environment for the neighbourhood.



#### Photocatalytic deodorising filter

Removes airborne dust particles, decomposes odours and restrains the reproduction of bacteria, viruses, microbes, this to ensure a steady supply of clean air.



#### Indoor unit silent operation

Lowers the operation sound of the indoor unit by 3dB(A). This function is useful when studying or sleeping.



#### Drain pump kit

Facilitates condensation draining from the indoor unit.



# Night quiet mode (cooling only)

Lowers the operation sound of the outdoor unit automatically by 3dB(A) by removing a jumper wire on the outdoor unit. This function can be deactivated if the jumper wire is reinstalled on the outdoor unit.



### Twin/triple/double twin application

2, 3 or 4 indoor units can be connected to only 1 outdoor unit even if they have different capacities. All indoor units operate within the same mode (cooling or heating) from one remote control.



#### Comfort mode

The new flap changes the discharge angle horizontally for cooling operation and downward vertically for heating operation. This in order to prevent cold or warm air from blowing directly on the body.



#### Multi model application

Up to 5 indoor units (even different capacities) can be connected to a single outdoor unit. All indoor units can individually be operated within the same mode.



#### 3-D Air flow

This function combines Vertical and Horizontal auto-swing to circulate a stream of cool/warm air right to the corners of even large spaces.



### Super multi plus

Up to 9 indoor units (even different capacities and up to 71 class) can be connected to a single outdoor unit. All indoor units can individually be operated within the same mode.



Daikin's unique position as a manufacturer of air conditioning equipment, compressors

and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment.

This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



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



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 assist in maintaining and improving the quality of the environment.

The present catalogue is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin Europe N.V. has compiled the content of this catalogue to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this catalogue. All content is copyrighted by Daikin



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



Daikin Europe N.V. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory. Multi units are Eurovent certified for combinations up to 2 indoor units. Rooftops are not within the scope of the Eurovent Certification Programme. Daikin products are distributed by:

## DAIKIN FUROPE NV

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



**Mixed Sources** 

Product group from well-managed forests, controlled sources and recycled wood or fiber www.fsc.org Cert no. SGS-COC-003332 © 1996 Forest Stewardship Council

