

Daikin air conditioners  
for shops, restaurant and offices

**ROUNDFLOW CEILING MOUNTED CASSETTE**

**R-410A**



www.daikin.eu

**FCQ-C**





### ***The new Daikin Sky Air Roundflow Cassette:***

*Daikin has renewed its Sky Air ceiling mounted cassette range with a new stylish, compact and unique roundflow cassette series. The introduction of this new range marks a major step forward by Daikin in offering the market cassette solutions with improved performance over a wider range of applications.*

*The Roundflow cassette offers several improvements in various areas such as customer comfort, ease of installation and energy efficiency. Its 360° radial airflow pattern creates improved and uniform air distribution and reduces room temperature differentials, whilst its greater horizontal airflow ensures less draughts and keeps energy consumption to a minimum.*

*The unit is available in two series and an extensive range of sizes:*

*The slim Thin Body FCQ-C series represents a very low installation height solution for customers requiring a compact unit for use in false ceilings, whilst the High COP FCQH-C series offers extremely high energy savings for customers requiring top class energy levels and low installation height. Both models incorporate a new and visually attractive decorative front panel in 'fresh white' (RAL 9010).*



## MAIN FEATURES

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### *COMFORT*

- Year round comfort results from 360° radial air discharge with:
  - uniform air flow distribution
  - uniform temperature distribution
- Less draughts and lower air velocities as a result of increased horizontal airflow
- A wide range of airflow patterns are available
- Fresh air intake increased to 20% (with the optional fresh air intake kit)
- Improved dehumidification
- Quiet in operation

### *ENERGY EFFICIENT*

- Energy saving
- Inverter technology

### *EASY INSTALLATION AND USAGE*

- Very low minimum installation height of 214 mm
- Light weight
- Standard connection to D3-net without the need of an adapter PCB
- Easy condensate drain check
- Available in an extensive range of sizes

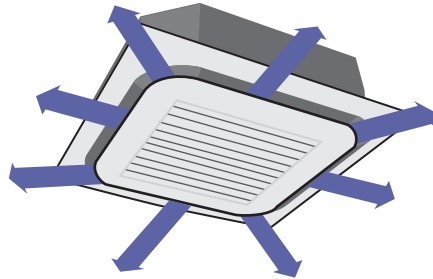
### *DESIGN*

- New attractively finished decoration panel in 'fresh white' RAL9010 color
- New grille fixture that is less visible and has a better outlook

## COMFORT

The Roundflow cassette creates a high level of comfort as a result of:

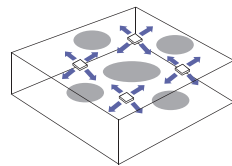
### • *UNIFORM AIRFLOW*



- **360°** radial air distribution
- Greater **horizontal airflow** reducing draughts
- **Lower air velocities** result in less direct exposure to cool air draughts in occupied areas.

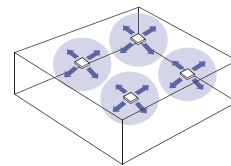
### • *UNIFORM TEMPERATURE*

- **Air discharge from the corners avoids dead zones** that could be subject to temperature variations:



**Standard 4-way blow cassette**

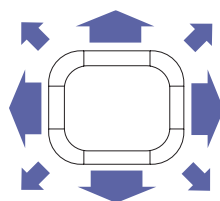
○ : 4-way blow has some dead spots in the operation



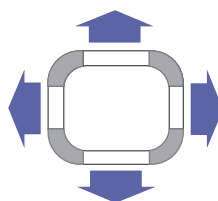
**Roundflow cassette**

360° radial round flow enables uniform air flow distribution

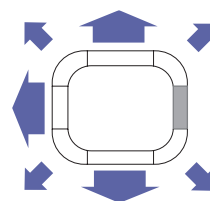
- Reduced temperature differentials create a more **uniform temperature** in all areas of the room
- Wide selection of **23 different airflow patterns** enables unit installation in corners or small rooms, whilst air discharge outlets can be closed off without detriment to comfort levels:
  - in 4-way flow the air volume is slightly decreased when the corners are closed off
  - in 3-way and 2-way flow the air is deflected slightly downwards



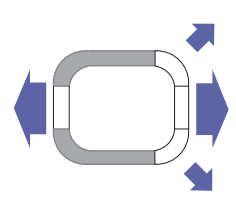
**360° Round Flow**



**4-Way Flow**



**3-Way Flow**



**2-Way Flow**

- Comfortable horizontal air discharge **reduces draughts and ceiling soiling**
- Daikin's special **dry program** reduces room humidity without variations in room temperature
- The Roundflow cassette is very **quiet in operation** with noise levels as low as 27dB (A), comparable to rustling leaves.
- Maximum **fresh air intake up to 20%** with the fresh air intake kit (only 50 mm thick).
- The indoor unit contains an **air filter** which removes microscopic particles and dust.





## FLEXIBLE INSTALLATION AND EASY TO USE

- The slim Thin Body FCQ-C series represents a **very low installation height** solution for customers requiring a compact unit for use with false ceilings.

FCQ 35-50-60-71C

204 mm



FCQ100-125-140C

246 mm



FCQ35-50-60-71C



- Easy Installation and maintenance due to the **overall light weight** of the unit. Minimum weight of 19 kg.
- Flaps can be shut off** with closure kits enabling the unit to be installed in the middle or corner of the room or in a small room.

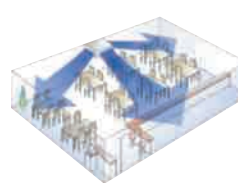
Roundflow



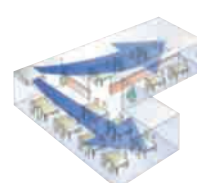
4-Way blow



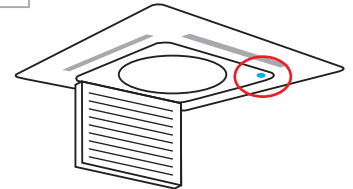
3-Way blow



2-Way blow



- The **outdoor unit** can be installed on a roof or terrace or placed against an outside wall.
- Special **anti-corrosion treatment** of the outdoor unit's heat exchanger fin, gives greater resistance against acid rain and salt corrosion. Additional resistance is provided by a rust proof steel sheet on the underside of the unit.



- Easy visible condensate drain check via the **clear drain socket** and **easily accessible drain plug position**. Checks can be carried out without removing the panel.
- **Standard connection to D3-net** without the need of an adapter PCB.
- Daikin **remote controls** provide easy finger tip control.
- The **wired remote control** is fitted with a schedule timer, enabling air conditioning to be programmed on a daily or weekly basis.
- The optional **remote ON/OFF** enables the air conditioning to be started/stopped from a mobile phone via a telephone remote control (field supply). The optional **forced OFF** enables the unit to be switched off automatically – when a window is opened for example, the unit switches off.

## STYLISH DESIGN

The cassette's smooth and graceful modern lines, new and visually attractive **front decorative panel finished as standard in 'fresh white' (RAL9010) and less visible grille** add an air of studied elegance to its installations and enable it to blend with both traditional and contemporary white ceilings as well as virtually any form of room décor and furnishings.



## ENERGY EFFICIENT

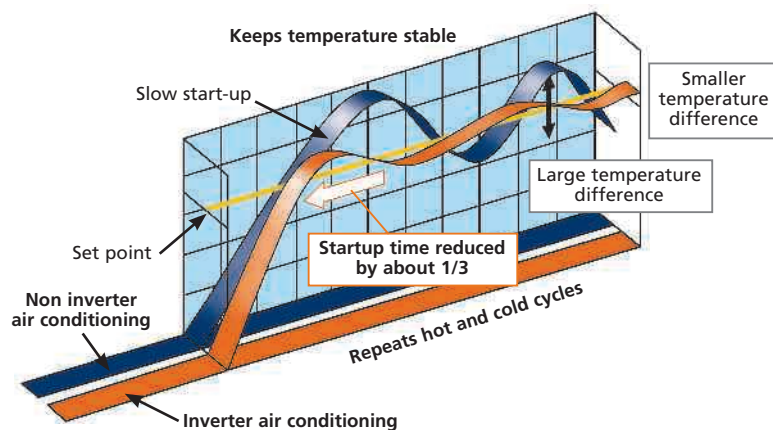
Reducing airflow and temperature differentials via 360° air discharge, minimizes unit operating cycles and contributes to the **energy saving** capability of the unit.

- **Class A Energy Efficiency rating**

- **Inverter technology:**

1. Improved energy efficiency:

The use of integrated inverter control ensures maximum energy efficiency by matching heating or cooling load to demand, whereas a standard non inverter unit supplies maximum load purely on an on/off basis.



2. Improved comfort:

The rapid start up time provided by the inverter increases comfort by reducing the lead time in obtaining the required indoor temperature. Once the required temperature is reached, the inverter unit continuously scans the room for small changes and adjusts the room temperature in seconds in order to maintain room comfort.

- The '**home leave**' function button should be set when the occupant leaves the room for a lengthy period of time, such as a holiday. When the function is activated, the room temperature is automatically set to a minimum of 10°C, at which point all connected indoor units will switch to heating mode. The function ceases to operate when the room temperature reaches 15°C and should also be switched off when the occupant returns home.

## APPLICATION OPTIONS

- This model can be used both in **cooling only or heating**.
- It is possible to use the indoor unit in **pair** (connecting one indoor to one outdoor), **twin**, **triple**, **double twin** (connecting up to 4 indoors in the same room to a single outdoor) and **multi** applications (connecting up to 9 units in several rooms to 1 outdoor unit).

# Capacity and power input

COOLING ONLY - INVERTER CONTROLLED (air cooled)				FCQ35C	FCQ50C	FCQ60C				
				RKS35F	RKS50F	RKS60F				
Cooling capacity	min ~ nom ~ max	kW		1.4 ~ 3.4 ~ 3.7	0.9 ~ 5.0 ~ 5.6	0.9 ~ 5.7 ~ 6.0				
Nominal input	nominal	kW		0.95	1.41	1.64				
EER				3.58	3.55	3.48				
Energy label				A	A	A				
Annual energy consumption	cooling	kWh		475	705	820				
COOLING ONLY - NON INVERTER (air cooled)				FCQ50C	FCQ60C	FCQ71C	FCQ71C	FCQ100C	FCQ100C	FCQ125C
				RN50E	RN60E	RR71BV3	RR71BW1	RR100BV3	RR100BW1	RR125BW1
Cooling capacity	nominal	kW		5.0	5.7	7.1	7.1	10.0	10.0	12.5
Nominal input	nominal	kW		1.41	1.64	2.72	2.66	3.83	3.56	4.66
EER				3.55	3.48	2.61	2.67	2.61	2.81	2.68
Energy label				A	A	D	D	D	C	D
Annual energy consumption	cooling	kWh		705	800	1,360	1,330	1,915	1,780	2,330
HEAT PUMP - INVERTER CONTROLLED (air cooled)				FCQ35C	FCQ50C	FCQ60C	FCQ71C	FCQ100C	FCQ125C	FCQ140C
				RXS35F	RXS50F	RXS60F	RZQS71BV3	RZQS100BV3	RZQS125CV1	RZQS140CV1
Cooling capacity	min ~ nom ~ max	kW		1.4 ~ 3.4 ~ 3.7	0.9 ~ 5.0 ~ 5.6	0.9 ~ 5.7 ~ 6.0	7.1 (nom)	10.0 (nom)	12.5 (nom)	14.0 (nom)
Heating capacity	min ~ nom ~ max	kW		1.4 ~ 4.2 ~ 5.0	0.9 ~ 6.0 ~ 7.0	0.9 ~ 7.0 ~ 8.0	8.0 (nom)	11.2 (nom)	14.0 (nom)	16.0 (nom)
Nominal input	cooling	nominal	kW	0.95	1.41	1.64	2.46	3.83	4.14	5.36
	heating	nominal	kW	1.23	1.62	1.99	2.61	3.47	4.52	5.69
EER				3.58	3.55	3.48	2.89	2.61	3.02	2.61
COP				3.41	3.70	3.52	3.07	3.23	3.10	2.81
Energy label	cooling			A	A	A	C	D	B	D
	heating			B	A	B	D	C	D	D
Annual energy consumption	cooling	kWh		475	705	820	1,230	1,915	2,070	2,680
HEAT PUMP - INVERTER CONTROLLED (air cooled)				FCQ71C	FCQ100C	FCQ100C	FCQ125C	FCQ125C	FCQ140C	FCQ140C
				RZQ71BV3	RZQ100CV1	RZQ100BW1	RZQ125CV1	RZQ125BW1	RZQ140CV1	RZQ140BW1
Cooling capacity	nominal	kW		7.1	10.0	10.0	12.5	12.5	14.0	14.0
Heating capacity	nominal	kW		8.0	11.2	11.2	14.0	14.0	16.0	16.0
Nominal input	cooling	nominal	kW	2.16	2.77	2.64	3.88	3.88	5.36	5.36
	heating	nominal	kW	2.56	3.02	3.14	3.95	4.36	4.98	5.69
EER				3.29	3.61	3.79	3.22	3.22	2.61	2.61
COP				3.13	3.71	3.57	3.54	3.21	3.21	2.81
Energy label	cooling			A	A	A	A	A	D	D
	heating			D	A	B	B	C	C	D
Annual energy consumption	cooling	kWh		1080	1,385	1,320	1,940	1,940	2,680	2,680
HEAT PUMP - NON INVERTER (air cooled)				FCQ71C	FCQ71C	FCQ100C	FCQ100C	FCQ125C		
				RQ71BV3	RQ71BW1	RQ100BV3	RQ100BW1	RQ125BW1		
Cooling capacity	nominal	kW		7.1	7.1	10.0	10.0	12.5		
Heating capacity	nominal	kW		8.0	8.0	11.2	11.2	14.6		
Nominal input	cooling	nominal	kW	2.72	2.66	3.83	3.56	4.66		
	heating	nominal	kW	2.85	2.80	3.75	3.66	5.06		
EER				2.61	2.67	2.61	2.81	2.68		
COP				2.81	2.86	2.99	3.06	2.89		
Energy label	cooling			D	D	D	C	D		
	heating			D	D	D	D	D		
Annual energy consumption	cooling	kWh		1,360	1,330	1,915	1,780	2,330		
HEAT PUMP - NON INVERTER (air cooled)				FCQ71C	FCQ71C	FCQ100C	FCQ100C	FCQ125C		
				REQ71BV3	REQ71BW1	REQ100BV3	REQ100BW1	REQ125BW1		
Cooling capacity	nominal	kW		7.1	7.1	10.0	10.0	12.5		
Heating capacity	nominal	kW		8.0	8.0	11.2	11.2	14.6		
Nominal input	cooling	nominal	kW	2.72	2.66	3.83	3.56	4.66		
	heating	nominal	kW	2.85	2.80	3.75	3.66	5.06		
EER				2.61	2.67	2.61	2.81	2.68		
COP				2.81	2.86	2.99	3.06	2.89		
Energy label	cooling			D	D	D	C	D		
	heating			D	D	D	D	D		
Annual energy consumption	cooling	kWh		1,360	1,330	1,915	1,780	2,330		

## Notes:

- 1) Energy label: scale from A (most efficient) to G (less efficient).
- 2) Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions)





# SPECIFICATIONS OUTDOOR UNITS

COOLING ONLY - INVERTER CONTROLLED				RKS35E	RKS50F	RKS60F				
Dimensions	HxWxD	mm		550x765x285	735x825x300					
Weight		kg		34	47	47				
Casing colour				Ivory White						
Sound pressure level	H/L	dB(A)		47/44	47/44	49/46				
Sound power level	H	dB(A)		62	61	63				
Compressor	type			Hermetically sealed swing type						
Refrigerant type				R-410A						
Additional refrigerant charge		kg/m		0,02 (for piping length exceeding 10m)						
Maximum piping length				30						
Maximum level difference				20						
Operation range	from ~ to	°CDB		-10 ~ 46						
COOLING ONLY - NON INVERTER				RN50E	RN60E	RR71BV3	RR71BW1	RR100BV3	RR100BW1	RR125BW1
Dimensions	HxWxD	mm		735x825x300		770x900x320		1,170x900x320		
Weight		kg		47	47	83	81	102	99	106
Casing colour				Ivory White		Daikin White				
Sound pressure level	H	dB(A)		47	49	50	50	53	53	53
Sound power level	H	dB(A)		61	63	63	63	66	66	67
Compressor	type			Hermetically sealed swing type		Hermetically sealed scroll type				
Refrigerant type				R-410A						
Additional refrigerant charge		kg/m		0,02 (for piping length exceeding 10m)		2,70		3,70		
Maximum piping length				30		70 (equivalent lenght 90)				
Maximum level difference				20		30				
Operation range	from ~ to	°CDB		-10 ~ 46		-15 ~ 46				
HEAT PUMP - INVERTER CONTROLLED				RXS35E	RXS50F	RXS60F	RZQS71BV3	RZQS100BV3	RZQS125CV1	RZQS140CV1
Dimensions	HxWxD	mm		550x765x285	735x825x300		770x900x320		1,170x900x320	
Weight		kg		34	48		68		103	
Casing colour				Ivory White						
Sound pressure level (night quiet mode)	cooling	H	dB(A)	47	47 (44)	49 (46)	49 (43)	51 (45)	51 (49)	52 (50)
	heating	H	dB(A)	48	48 (45)	49 (46)	51	55	53	54
Sound power level	cooling	H	dB(A)	62	61	63	65	67	67	68
	heating	H	dB(A)	63	62	63	-	-	-	-
Compressor	type			Hermetically sealed swing type					Hermetically sealed scroll type	
Refrigerant type				R-410A						
Refrigerant charge		kg/m		0.02 (for piping length exceeding 10m)			2.80		3.70	
Maximum piping length				30			30 (equiv. length 40)	50 (equiv. length 70)	50 (equivalent length 95)	
Maximum level difference				20			15	30	30	30
Operation range	cooling	from ~ to	°CDB	-10 ~ 46			-5 ~ 46			
	heating	from ~ to	°CWB	-15 ~ 18			-15 ~ 15.5			
HEAT PUMP - INVERTER CONTROLLED				RZQ71B8V3	RZQ100CV1	RZQ100BW1	RZQ125CV1	RZQ125BW1	RZQ140CV1	RZQ140BW1
Dimensions	HxWxD	mm		770x900x320	1,170x900x320	1,345x900x320	1,170x900x320	1,345x900x320	1,170x900x320	1,345x900x320
Weight		kg		68	103	106	103	106	103	106
Casing colour				Ivory White						
Sound pressure level (night quiet mode)	cooling	H	dB(A)	47 (43E)	49 (45)		50 (45)		50 (46)	50 (45)
	heating	H	dB(A)	49	51		52			
Sound power level	cooling	H	dB(A)	63	65		66		67	66
Compressor	type			Hermetically sealed swing type		Hermetically sealed scroll type				
Refrigerant type				R-410A						
Refrigerant charge		kg/m		2.8	3.7	4.3	3.7	4.3	3.7	4.3
Maximum piping length				50 (equiv. length 70)	75 (equiv. length 70)	75 (equivalent length 95)				
Maximum level difference				30						
Operation range	cooling	from ~ to	°CDB				-15 ~ 50			
	heating	from ~ to	°CWB				-20 ~ 15.5			
HEAT PUMP - NON INVERTER				RQ71BV3	RQ71BW1	RQ100BV3	RQ100BW1	RQ125BW1		
Dimensions	HxWxD	mm		770x900x320		1,170x900x320				
Weight		kg		84	83	103	101	108		
Casing colour				Daikin White						
Sound pressure level	cooling	H	dB(A)	50	50	53	53	53		
Sound power level	cooling	H	dB(A)	63	63	66	66	67		
Compressor	type			Hermetically sealed scroll type						
Refrigerant type				R-410A						
Refrigerant charge		kg/m		2.7		3.7				
Maximum piping length				70 (equivalent length 90)						
Maximum level difference				30						
Operation range	cooling	from ~ to	°CDB				-5 ~ 46			
	heating	from ~ to	°CWB				-10 ~ 15			

HEAT PUMP - NON INVERTER				REQ71BV3	REQ71BW1	REQ100BV3	REQ100BW1	REQ125BW1
Dimensions		HxWxD	mm	770x900x320		1,170x900x319		
Weight			kg	83	83	102	100	108
Casing colour				Daikin White				
Sound pressure level	cooling	H	dB(A)	53	53	57	57	57
Sound power level	cooling	H	dB(A)	65	65	70	70	70
Compressor				Hermetically sealed scroll type				
Refrigerant type				R-410A				
Refrigerant charge			kg/m	2.5		3.6		
Maximum piping length			m	50 (equivalent length 70)				
Maximum level difference			m	30				
Operation range	cooling	from ~ to	°CDB	10 ~ 46				
	heating	from ~ to	°CWB	-10 ~ 15				

## ACCESSORIES: CONTROL SYSTEMS

INDOOR UNITS		FCQ35C	FCQ50C	FCQ63C	FCQ71C	FCQ100C	FCQ125C	FCQ140C
Wired remote control					BRC1D52			
Infrared remote control	cooling only				BRC7F533F			
	heat pump				BRC7F532F			
Centralised remote control					DCS302C51			
Unified ON/OFF control					DCS301B51			
Schedule timer					DST301B51			
Wiring adapter for electrical appendices					KRP1B57 / KRP4A53			
Wiring adapter (hour meter)					EKRP1C11			
Installation box for adapter PCB					KRP1H98			
Remote ON/OFF					EKRO02			
Remote sensor					KRCS01-4			
Fixing box					KJB212A			

## ACCESSORIES: INDOOR UNITS

INDOOR UNITS				FCQ35C	FCQ50C	FCQ63C	FCQ71C	FCQ100C	FCQ125C	FCQ140C
Decoration panel									BYCQ140C	
Replacement long-life filter									KAFP551K160	
Fresh air intake kit (min. 20% fresh air)									KDDQ55C140	
Sealing member of air discharge outlet									KDBHQ55C140	

## ACCESSORIES: OUTDOOR UNITS

OUTDOOR UNITS		RKS/RXS35E	RN50E-RKS/	RN60E/RKS/RXS60F			
Air direction adjustment grille		KRW937A4	KPW945A4				
Central drain plug		KKP937A4	-	-			
OUTDOOR UNITS		RR/RQ71B	RR/RQ100B	RR/RQ125B	REQ71B	REQ100B	REQ125B
Central drain plug		KKPJ5F180					
Refrigerant branch piping	for twin	KHRQ22M20TA			-	-	-
	for triple	-	KHRQ127H		-	-	-
OUTDOOR UNITS		RZQ(S)71B	RZQ(S)100B/C	RZQ(S)125B/C	RZQ(S)140B/C	RZQ200C	RZQ250C
Central drain plug		KKPJ5F180				KWC26B280	
Refrigerant branch piping	for twin	KHRQ22M20TA (KHRQ58T) (1)				KHRQ22M20TA	
	for triple	-	KHRQ127H (KHRQ58H) (1)			KHRQ250H	
	for double twin	-	-	KHRQ22M20TA (KHRQ58H) (3x) (1)			KHRQ22M20TA (3x)
Demand adapter kit		KRP58M51				KRP58M51	

### Notes:

1) For RZQ100-140BW1 in combination with FCQ35-71C, use the refrigerant branch piping mentioned between brackets.

### Note:

- V1 = 1 ~, 230V/50Hz; VM = 1 ~, 220-240V/220-230V, 50Hz/60Hz; V3 = 1 ~, 230V, 50Hz
- Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB • outdoor temperature 35°CDB • refrigerant piping length 7.5m • level difference 0m.
- Nominal heating capacities are based on: indoor temperature 20°CDB • outdoor temperature 7°CDB/6°CWB • refrigerant piping length 7.5m • level difference 0m.
- Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- Units should be selected on nominal capacity. Max. capacity is limited to peak periods.
- The sound pressure level is measured via a microphone at a certain distance from the unit (for measuring conditions: please refer to the technical databooks).
- The sound power is an absolute value indicating the "power" which a sound source generates.



In all of us,  
a green heart



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues.

For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



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



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



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



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.

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