

Air Conditioners

# Technical Data

**SkyAir®**

Ceiling Suspended Cassette



[www.daikin.eu](http://www.daikin.eu)

FHQG-C

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FHQG-C

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# 1 Features

- Seasonal efficiency, optimized for all seasons.
- Can be installed in both new and existing buildings
- Ideal solution for shops, restaurants or offices without false ceilings
- The unit can easily be mounted in corners and narrow spaces, as it only needs 30mm lateral service space



2 steps

## 2 Specifications

2-1 Technical Specifications					FHQG71CVEB		FHQG100CVEB		FHQG125CVEB		FHQG140CVEB	
Casing	Colour				Fresh white (6.5Y 9.5/0.5)							
Dimensions	Unit	Height		mm	235							
		Width		mm	1,270		1,590					
		Depth		mm	690							
Weight	Unit		kg		32		38					
Heat exchanger	Rows		Quantity			3						
	Fin pitch			mm		1.5						
	Face area			m²		0.303		0.398				
	Stages		Quantity			14						
	Fin		Type			Cross fin coil (multi louver fins and N-hix tubes)						
Fan	Type				Sirocco fan							
	Air flow rate	Cooling	High	m³/ min	20.5		28		31		34	
			Low	m³/ min	14		20		23		24	
		Heating	High	m³/ min	20.5		28		31		34	
			Low	m³/ min	14		20		23		24	
Fan motor	Model				3D15L1AA1		4D15L1AC1					
Sound power level	Cooling	Nom.		dBA	55		60		62		64	
Sound pressure level	Cooling	Nom.		dBA	38		42		44		46	
	Heating	Nom.		dBA	34				37		38	
Piping connections	Liquid	Type			Flare connection							
		OD		mm	9.52							
	Gas	Type			Flare connection							
		OD		mm	15.9							
	Drain					VP20 (I.D. 20/O.D. 26)						
Air filter					Resin net with mold resistance							

2-2 Electrical Specifications					FHQG71CVEB	FHQG100CVEB	FHQG125CVEB	FHQG140CVEB
Power supply	Phase				1			
	Frequency			Hz	50			
	Voltage			V	220-240			
Current - 50Hz	Nominal running current			A	-			
Current - 60Hz	Nominal running current			A	-			

### 3 Safety device settings

#### 3 - 1 Safety Device Settings

##### FHQG-CVEB

##### SAFETY DEVICE LIST

Safety devices		71	100	125	140
FHQG-CVEB	Fuse	250V 3,15A	250V 3,15A	250V 3,15A	250V 3,15A
	Fan motor thermal fuse	°C	—	—	—
	Fan motor thermal protector	°C	—	—	—

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## 4 Options

### 4 - 1 Options

#### FHQG-CVEB

##### OPTIONS

ITEM	REMARK	FHQG-CVEB			
		71	100	125	140
Long-life filter		KAFP501A80 (AS3604386)	KAFP501A160 (AS3604386)		
Fresh air intake kit #1		KDDQ50A140 (AS3604655)			
L-type piping kit (for upward direction)		KHFP5N160 (AS2304387)			

##### CONTROL SYSTEMS

ITEM	REMARK	FHQG-CVEB			
		71	100	125	140
Remote control	Wired	BRC1E51A7/BRC1D528			
	Wireless	BRC7G63			
Wiring adapter for electrical appendices #2		KRP1BA54			
Wiring adapter for electrical appendices #2		KRP4AA52			
Installation box for adapter PCB		KRP1D93A			
Remote sensor		KRCS01-4B			
Central remote control		DCS302CA51			
Unified on/off controller		DCS301BA51			
Schedule timer		DST301BA51			
Electrical box with earth terminal (2 blocks)		KJB212AA			
Electrical box with earth terminal (3 blocks)		KJB311AA			
Remote on/off		EKROR02			

#1 Fresh air intake volume is 10% or less of air flow rate.

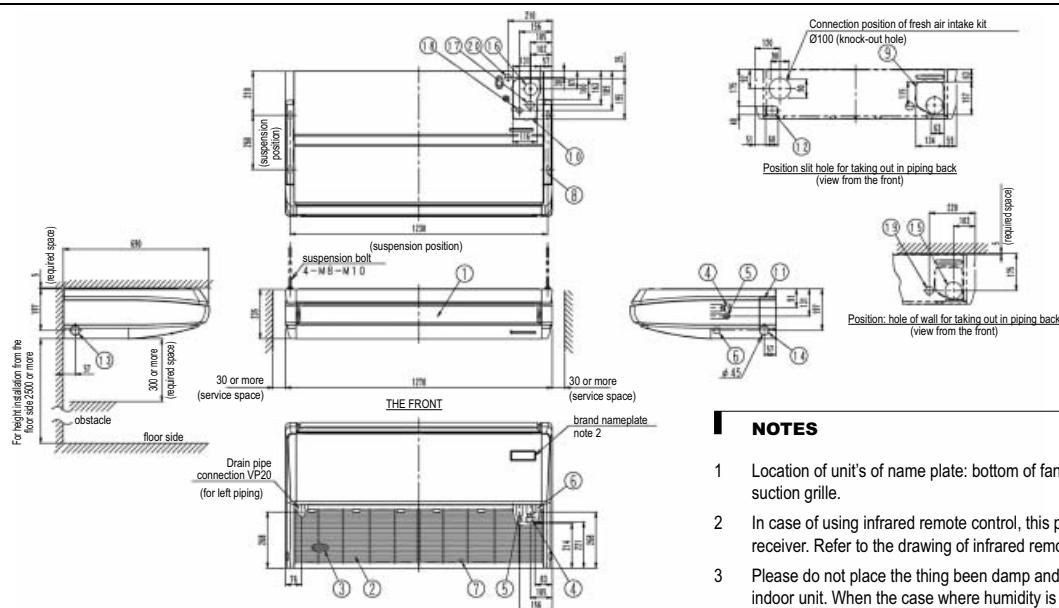
#2 Installation box for adapter PCB (KRP1H98) is necessary.

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## 5 Dimensional drawings

### 5 - 1 Dimensional Drawings

#### FHQG71



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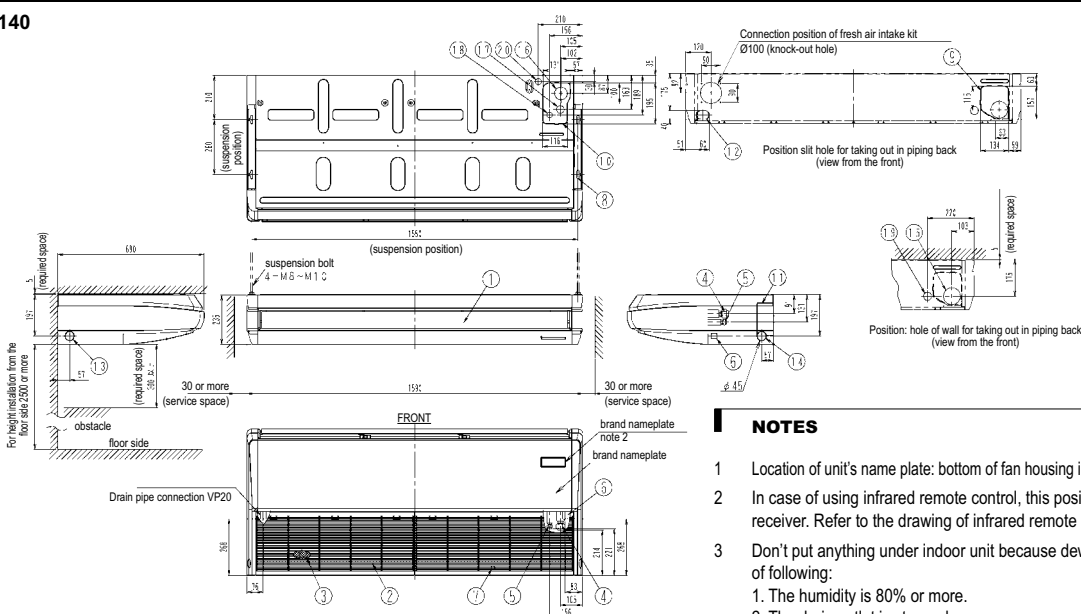
#### NOTES

- 1 Location of unit's name plate: bottom of fan housing inside the suction grille.
- 2 In case of using infrared remote control, this position will be a signal receiver. Refer to the drawing of infrared remote control in detail.
- 3 Please do not place the thing been damp and troubled under an indoor unit. When the case where humidity is 80% or more, the drain outlet are choked up and the air filter are dirty, dew may fall.

Nr	Name	Description
1	Air discharge grille	
2	Air suction grille	
3	Air filter	
4	Gas pipe connection	Ø15.9 flare
5	Liquid pipe connection	Ø9.5 flare
6	Drain pipe connection	VP20
7	Earth terminal (inside electric components box)	M4
8	Hanger bracket	
9	Backward piping and wiring connection opening lid	
10	Upward piping and wiring connection opening lid	

11	Right side pipe connection	slit hole
12	Left back drain pipe connection	slit hole
13	Left side drain pipe connection	slit hole
14	Right side drain pipe connection	slit hole
15	Hole of wall for taking out in piping back	Ø100
16	Upward drain pipe connection	Ø60
17	Upward gas pipe connection	Ø36
18	Upward liquid pipe connection	Ø26
19	Power source wiring and a unit wiring back connection	Ø29
20	Power source wiring and a unit wiring upper connection	Ø29

#### FHQG100-140



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#### NOTES

- 1 Location of unit's name plate: bottom of fan housing inside the suction grille.
- 2 In case of using infrared remote control, this position will be a signal receiver. Refer to the drawing of infrared remote control in detail.
- 3 Don't put anything under indoor unit because dew may fall by reason of following:
  1. The humidity is 80% or more.
  2. The drain outlet is stopped up.
  3. The air filter is dirty.

Nr	Name	Description
1	Air discharge grille	
2	Air suction grille	
3	Air filter	
4	Gas pipe connection	Ø15.9 flare
5	Liquid pipe connection	Ø9.5 flare
6	Drain pipe connection	VP20
7	Earth terminal (inside electric components box)	M4
8	Hanger bracket	
9	Backward piping and wiring connection opening lid	
10	Upward piping and wiring connection opening lid	

11	Right side pipe connection	slit hole
12	Left back drain pipe connection	slit hole
13	Left side drain pipe connection	slit hole
14	Right side drain pipe connection	slit hole
15	Hole of wall for taking out in piping back	Ø100
16	Upward drain pipe connection	Ø60
17	Upward gas pipe connection	Ø36
18	Upward liquid pipe connection	Ø26
19	Power source wiring and a unit wiring back connection	Ø29
20	Power source wiring and a unit wiring upper connection	Ø29

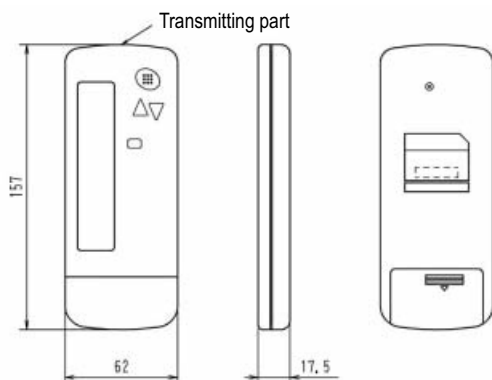


## 5 Dimensional drawings

### 5 - 1 Dimensional Drawings

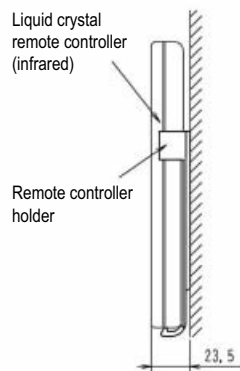
#### FHQG-CVEB

- Remote controller dimensions

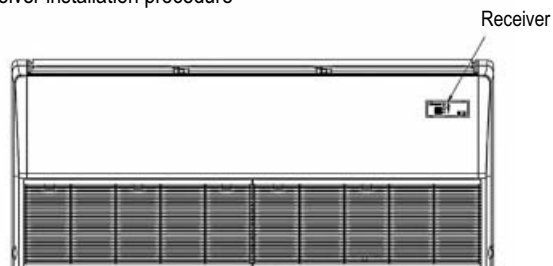


- Remote controller holder installation procedure

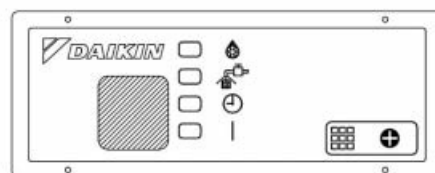
<Installation to wall surface>



- Receiver installation procedure



- Receiver detail

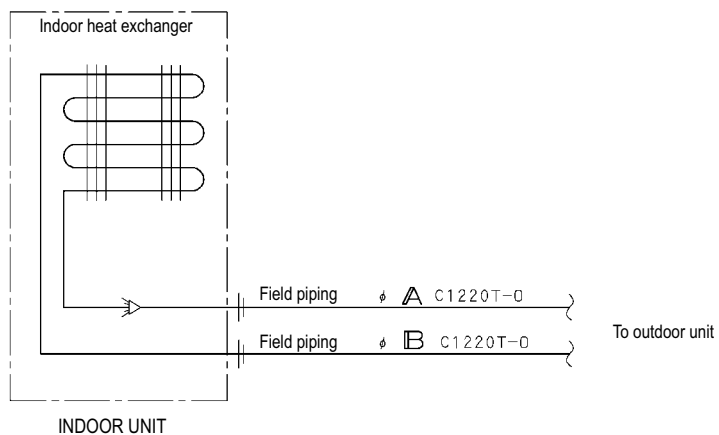


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## 6 Piping diagrams

### 6 - 1 Piping Diagrams

FHQG-CVEB



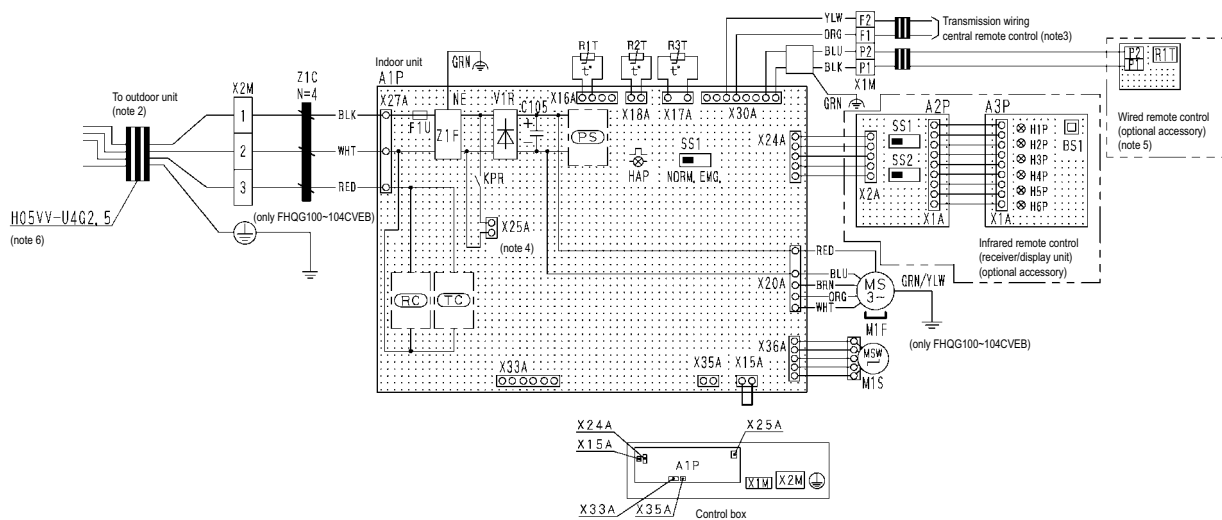
MODEL	A	B
FHQG71, 100, 125, 140CVEB	9.5	15.9

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## 7 Wiring diagrams

### 7 - 1 Wiring Diagrams - Single Phase

#### FHQG71-100-125-140CVEB



Indoor unit					
A1P	Printed circuit board	(PS)	Power supply circuit	H5P	Light emitting diode (element washing - red)
C105	Capacitor (M1F)	(RC)	Signal receiver circuit	H6P	Light emitting diode (ventilation clean - green)
F1U	Fuse (T, 3, 15A, 250V)	(TC)	Signal transmission circuit	SS1	Selector switch (main/sub)
HAP	Light emitting diode (service monitor green)	R1T	Thermistor (air)	SS2	Selector switch (wireless address set)
KPR	Magnetic relay (M1P)	Infrared remote control (Receiver/Display unit)		Connector for optional parts	
M1F	Motor (indoor fan)	A2P	Printed circuit board	X15A	Connector (float switch)
M1S	Motor (swing flap)	A3P	Printed circuit board	X24A	Connector (Infrared remote control)
R1T	Thermistor (air)	BS1	Push button (ON/OFF)	X25A	Connector (drain pump)
R2T-R3T	Thermistor (coil)	H1P	Light emitting diode (ON - red)	X33A	Connector (adapter for wiring)
SS1	Selector switch (emergency)	H2P	Light emitting diode (timer - green)	X35A	Connector (group control adapter)
V1R	Diode bridge	H3P	Light emitting diode (filter sign - red)	RED: red	PNK: pink BLK: black ORG: orange
X1M	Terminal block	H4P	Light emitting diode (defrost - orange)	WHT: white	GRN: green YLW: yellow BLU: blue
X2M	Terminal block			GRY: grey	BRN: brown
Z1F	Noise filter				
Z1C	Ferrite core (noise filter)				

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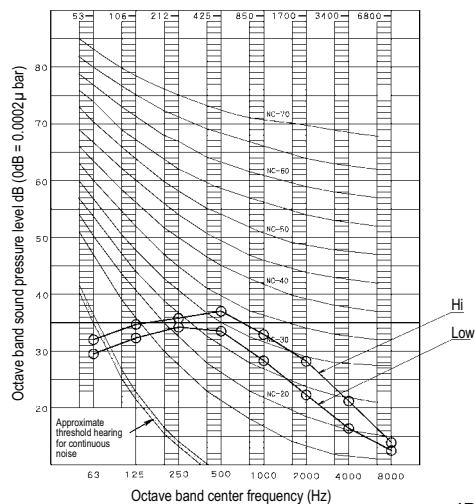
#### NOTES

- □ □ □ : Terminal □ □ □ : connector □ □ □ : Field wiring
- Model outdoor unit shown in this diagram shows the outline of product. For the detail, see wiring diagram attached to outdoor unit.
- In case using central remote control, connect it to the unit in accordance with the attached installation manual.
- X15A, X25A are connected when the drain up kit is being used, in accordance with the attached installation manual.
- In case of main/sub changeover. See the installation manual attached to remote control.
- Shows only in case of protected pipes. Use HD7RN-F in case of no protection.

## 8 Sound data

### 8 - 1 Sound Pressure Spectrum

FHQG71CVEB

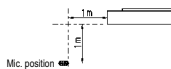


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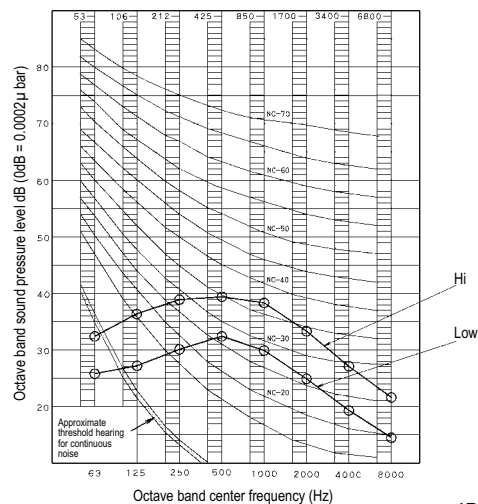
#### NOTES

- Over All (dB): (B,G,N is already rectified)
- Operating conditions:  
Power source: 220~240V 50Hz / 220V 60Hz  
Cooling Return air temperature: 27°C DB, 19°C WB  
Outdoor temperature: 35°C DB, 24°C WB  
Heating Return air temperature: 20°C DB, 15°C WB  
Outdoor temperature: 7°C DB, 6°C WB
- Measuring place: Anechoic chamber
- Operation noise differs with operation and ambient conditions
- Location of microphone.

Scale	Hi	Low
A	38	34
C	44	40



FHQG100CVEB



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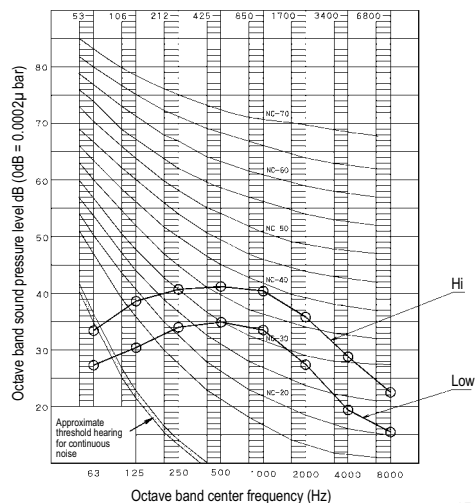
#### NOTES

- Over All (dB): (B,G,N is already rectified)
- Operating conditions:  
Power source: 220~240V 50Hz / 220V 60Hz  
Cooling Return air temperature: 27°C DB, 19°C WB  
Outdoor temperature: 35°C DB, 24°C WB  
Heating Return air temperature: 20°C DB, 15°C WB  
Outdoor temperature: 7°C DB, 6°C WB
- Measuring place: Anechoic chamber
- Operation noise differs with operation and ambient conditions
- Location of microphone.

Scale	Hi	Low
A	42	34
C	45	37



FHQG125CVEB

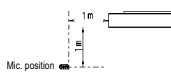


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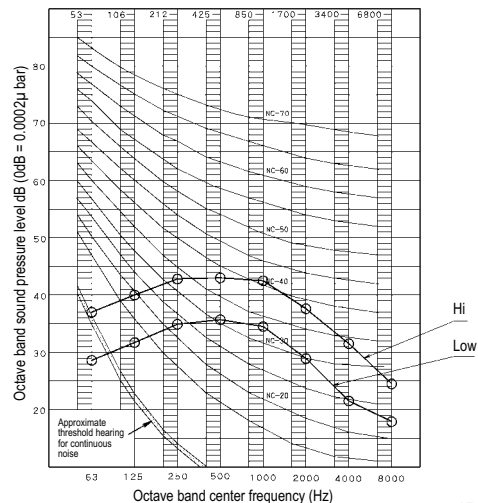
#### NOTES

- Over All (dB): (B,G,N is already rectified)
- Operating conditions:  
Power source: 220~240V 50Hz / 220V 60Hz  
Cooling Return air temperature: 27°C DB, 19°C WB  
Outdoor temperature: 35°C DB, 24°C WB  
Heating Return air temperature: 20°C DB, 15°C WB  
Outdoor temperature: 7°C DB, 6°C WB
- Measuring place: Anechoic chamber
- Operation noise differs with operation and ambient conditions
- Location of microphone.

Scale	Hi	Low
A	44	37
C	47	40



FHQG140CVEB

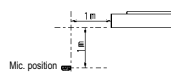


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#### NOTES

- Over All (dB): (B,G,N is already rectified)
- Operating conditions:  
Power source: 220~240V 50Hz / 220V 60Hz  
Cooling Return air temperature: 27°C DB, 19°C WB  
Outdoor temperature: 35°C DB, 24°C WB  
Heating Return air temperature: 20°C DB, 15°C WB  
Outdoor temperature: 7°C DB, 6°C WB
- Measuring place: Anechoic chamber
- Operation noise differs with operation and ambient conditions
- Location of microphone.

Scale	Hi	Low
A	46	38
C	49	41





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.



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