

**DAIKIN**  
ENVi Series



Designed to surpass  
Technology to outclass



**R-410A**





reddot award 2014  
winner



**Stylish Cool**  
& Comfort

ENVi The Design

ENVi The Technology



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World-renowned 2014 Red Dot Award for Product Design in the air conditioning category

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# DISCOVER A NEW WORLD OF INTERIOR DESIGN/

It's All About  
Design

## Daikin ENVi Series ENVi The Design . ENVi The Technology



Daikin, not only is the leader of advance energy-saving technologies for air conditioning but also highly focuses on the product design that will cater to the changing lifestyle of consumers. Then the perfect combination of the best technologies and the best design becomes ENVi Series.

Daikin ENVi Series has developed from the concept of Design is everything, this is why Daikin ENVi Series is outstanding from other air conditioners no matter when it turns on or off, with the working sound level as quiet as a whisper only 19dB.

When combined with energy saving technology Inverter, and newly adopted R32 refrigerant which can reduce the global warming better, it makes the Daikin ENVi Series innovative solutions worthy for your home.



## Stylish Appearance and Operation

Daikin ENVi has won the world-renowned 2014 Red Dot Award for Product Design in the air conditioning category, confirming its status as an icon of contemporary climate control.

The annual reddot awards are judged by an international jury of design experts, who judge products on a number of criteria, including:

- aesthetics,
- innovation,
- functionality
- their environmental credentials
- quality, ergonomics and durability.

Designed in Europe, to satisfy a uniquely European aesthetic, the awarded Daikin ENVi has an aerodynamic and incredibly thin profile that makes a modern design statement on any wall.

With a curved front panel design that is compatible with any style of interior decor. The new way of starting function enables you to install your aircon from the ceiling as low as 30 mm.



reddot award 2014  
winner

# A VARIETY OF SMART FEATURES

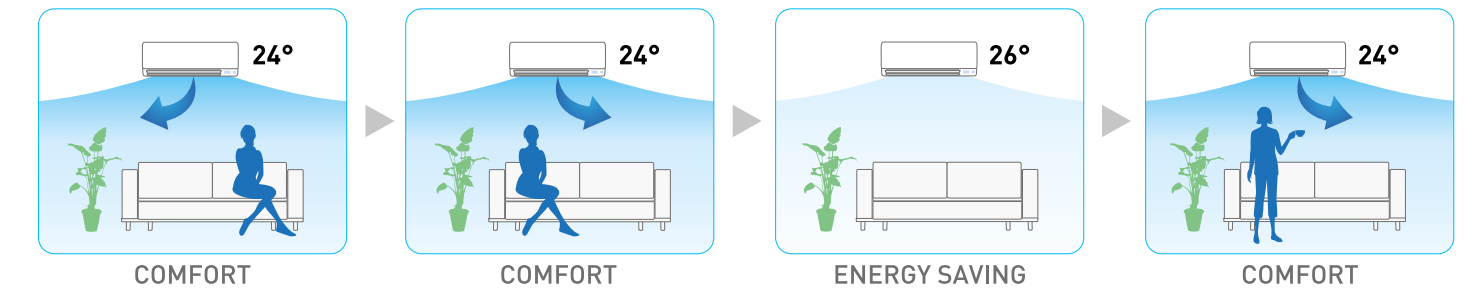


## Intelligent Sensor

## DAIKIN ENVi SERIES IS A HIGHLY INTELLIGENT SYSTEM WITH INNOVATIVE FEATURES

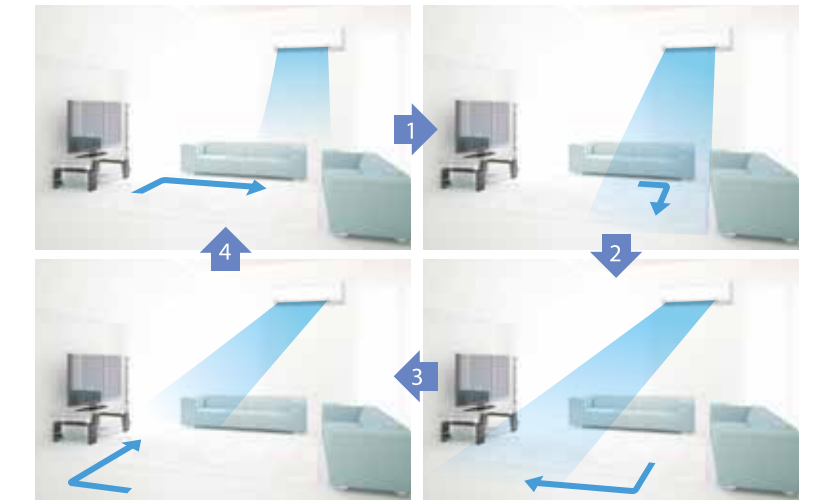
### 2-Area intelligent eye

The two-area intelligent eye sensor controls comfort in two ways. If the room is empty for 20 minutes, it changes the set point to start saving energy. As soon as someone enters the room, it immediately returns to the original setting. The intelligent eye also directs air flow away from people in the room to avoid cold draughts.



### 3D air flow (up & down, left & right)

To ensure a harmonised temperature throughout the room, the Daikin ENVi Series 3D air flow system combines vertical and horizontal auto-swing creating an even distribution of air throughout the room to the corners of even large spaces.



The flaps and louvers swing in turn, expanding the comfort zone.



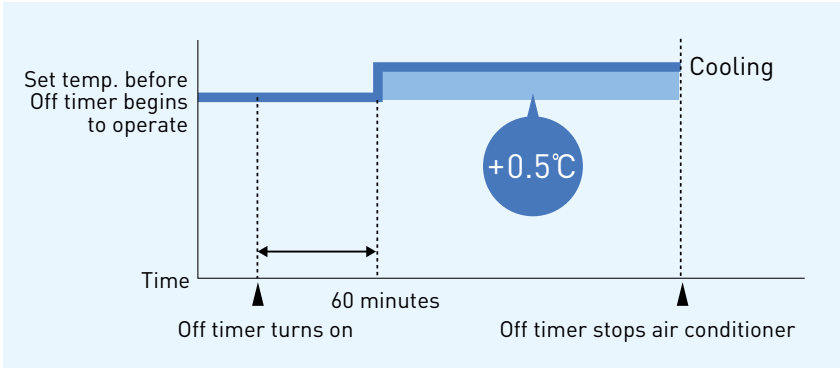
# Superior Comfort in Your Home

## Comfort mode

Draught-free operation improves comfort. When cooling, the flap positions itself horizontally to prevent cold airflow from being blown directly onto the body.

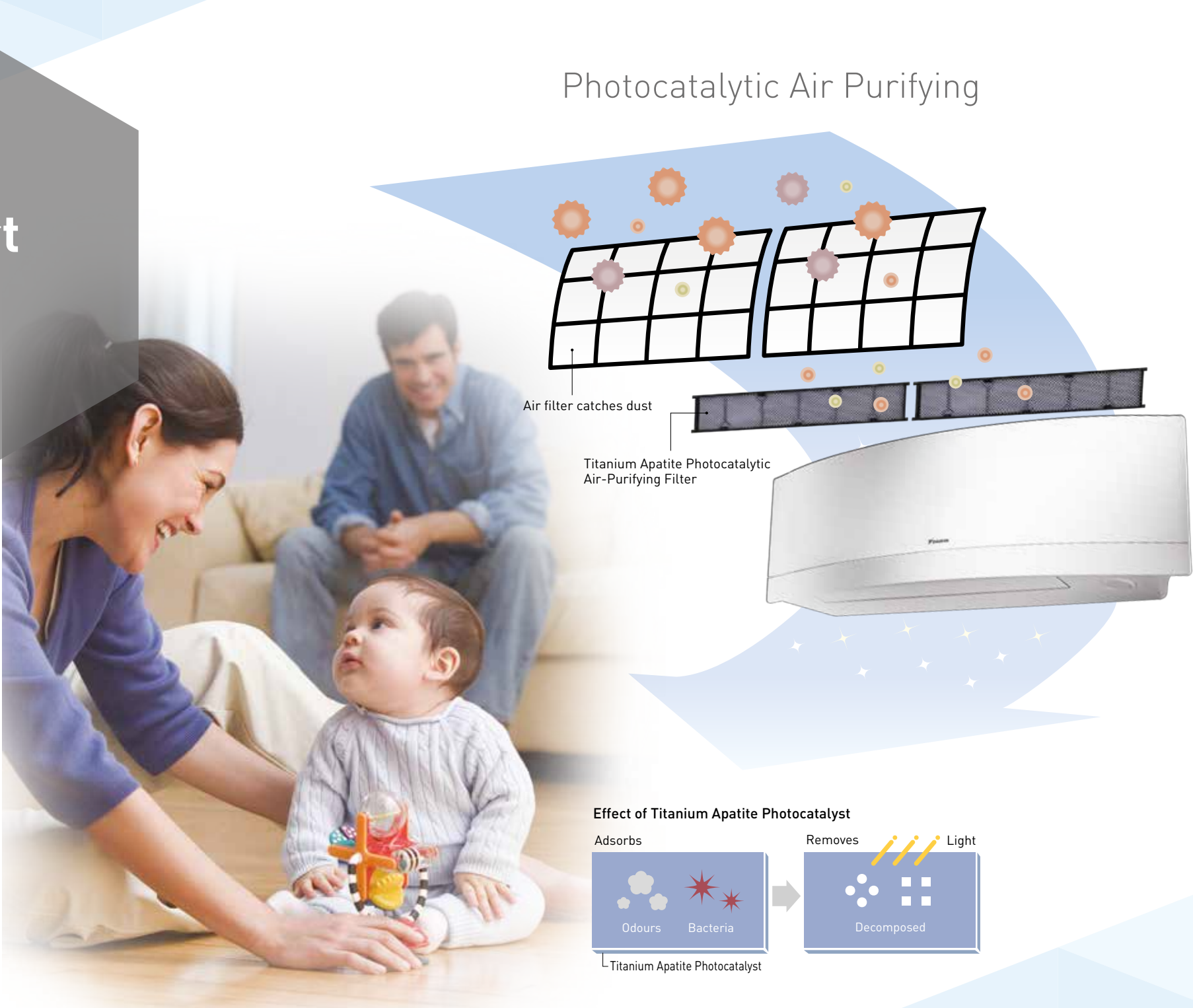
## Night set mode

Rapid changes in room temperature can disturb your sleep. To avoid this, Daikin ENVi Series prevents overheating or overcooling during the night. If the timer is switched on, the unit will automatically set the temperature to 0.5°C warmer when cooling and to 2°C cooler when warming.



Cooling operation: Room temperature is raised by 0.5°C after 60 minutes.

Comfort  
YEAR ROUND



## Clean air

A sophisticated titanium apatite photo-catalytic air purification filter traps even microscopic airborne dust particles, absorbs organic contaminants such as bacteria and viruses and even breaks down odours.

## Titanium Apatite Photocatalytic Air-Purifying Filter

Photocatalytic air purifying is a deodorising and antibacterial technology. Daikin was the first to apply this advance to the air-purifying filters used in air conditioners<sup>1</sup>. Daikin's success has led manufacturers in various industries to adopt the technology for antibacterial products.

Titanium apatite is an advanced photocatalytic material with great adsorption power. While a filter's micron-level fibres trap dust, titanium apatite effectively adsorbs and decomposes bacteria.

The photocatalyst is activated simply by exposure to light. This filter delivers consistent performance for approximately three years if it is washed with water once every six months.

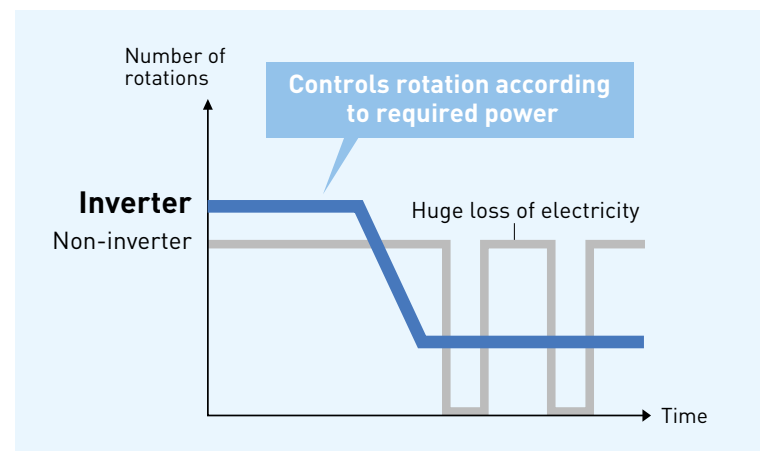
Note: 1. This practical application of titanium apatite was a world first. It was announced in September 2003 at the 3rd International Workshop on the Utilization and Commercialization of Photocatalytic Systems, Coatings for Clean Surfaces, Water and Air Purification.

## Inverter Technology

Inverter system can make you feel cool faster with more energy saving (compared to Non Inverter system). Moreover, it also helps maintain a constant temperature in the room where you need it, making you feel comfortable all the time especially while you are sleeping.

### More Energy-Saving than Non-Inverter

Inverters are devices which are able to vary their capacity by adjusting operating frequency. Inverter air conditioners do this by altering the power supply frequency of their compressors. In contrast, non-inverter air conditioners have a fixed capacity and can only control the indoor temperature by starting or stopping their compressors.



Inverter systems can cut energy consumption compared to non-inverter models. This helps to reduce household power bills and also lowers CO<sub>2</sub> emissions caused by electricity generation.

### Powerful

Inverter air conditioners operate at maximum capacity as soon as they start up. This burst of increased power allows them to reach the set temperature more quickly.

### Energy-Saving

As the set temperature is reached, inverter operation adjusts to low capacity to maintain the room temperature. This precise control makes inverter models more energy-efficient than non-inverters, which must repeatedly start or stop their compressors.

### Comfortable

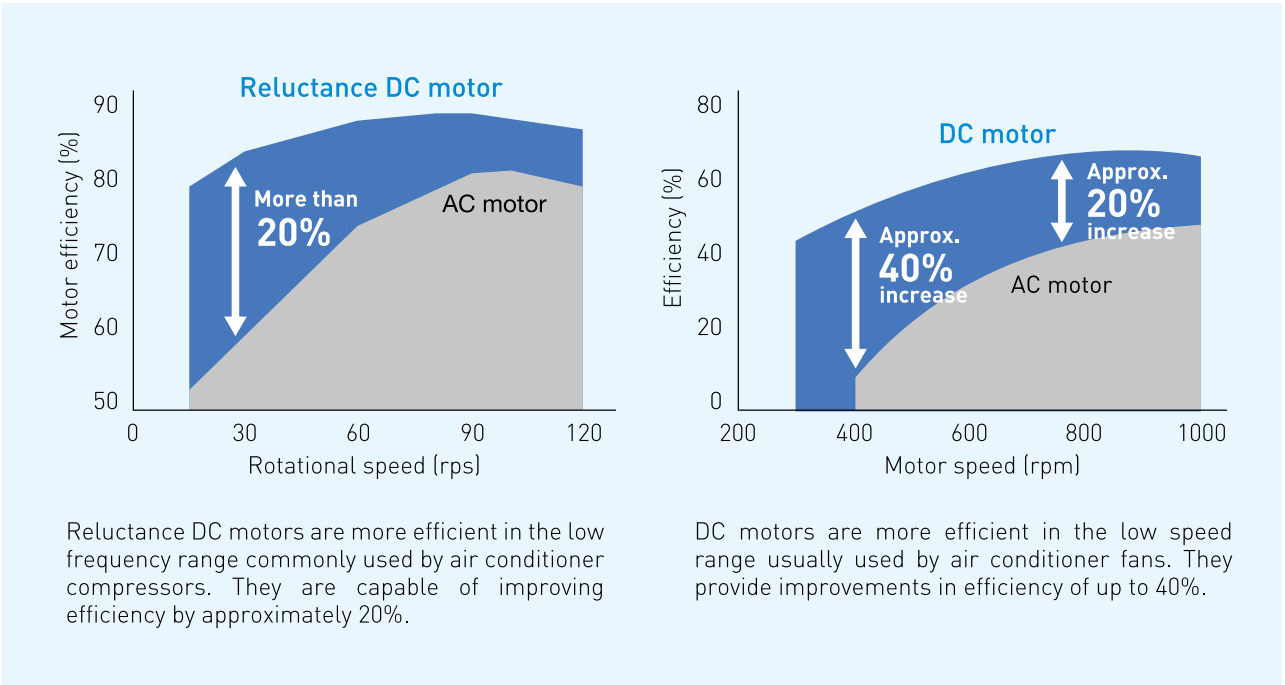
Inverter systems finely adjust their capacity according to the air conditioning load, minimising the difference between the set temperature and room temperature. This ensures higher comfort levels than with non-inverter systems.

**Excellent  
Energy  
Efficiency**



## DC Inverter Control

DC Inverter is Daikin's term for an inverter air conditioner equipped with a DC motor. These motors use magnets to generate rotation, making them more efficient than AC motors. Daikin has fitted its advanced DC motors for compressors and fan motors with powerful neodymium magnet to achieve even greater efficiency. It calls these devices Reluctance DC motors.



## Swing Compressor

With its smooth rotation, the swing compressor significantly decreases friction and vibration. It also eliminates the leakage of refrigerant gas during compression. These advantages provide quiet and efficient operation.



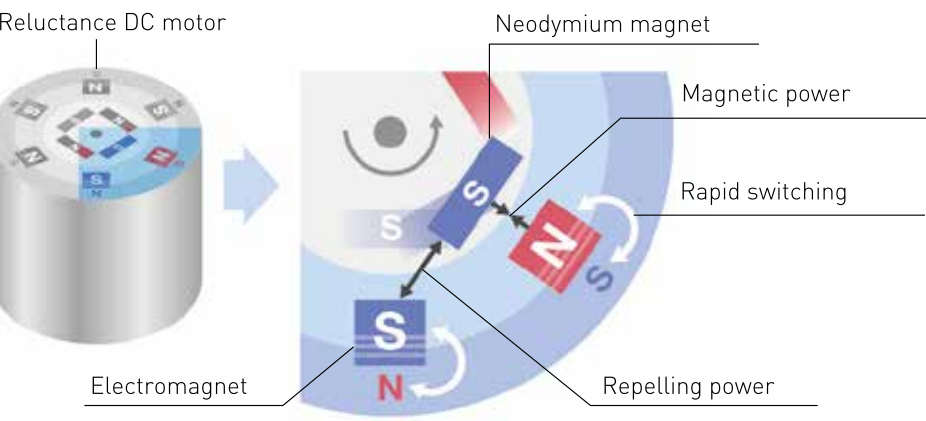
## High COP

FTKJ25NVM / RKJ25NVMG	FTKJ35NVM / RKJ35NVMG	FTKJ42NVM / RKJ42NVMG
COP	COP	COP
4.81	4.09	4.2

ENVi series realizes superior design and high efficiency, at the same time uses the new refrigerant R32 and Daikin's energy saving technology.

## Reluctance DC Motor for Compressors

The compressor is one of an air conditioner's core components and its performance is directly linked to the motor. Daikin was the first to successfully use a Reluctance DC motor with a scroll compressor in commercial-use air conditioners. It has now adapted this high-efficiency motor for the swing compressors in its residential-use systems.



Embedding high-strength neodymium magnets in the shaft turns the entire centre of the motor into a powerful magnet. By rapidly switching the poles of this electromagnet, the Reluctance DC motor is able to produce even greater speed and power.





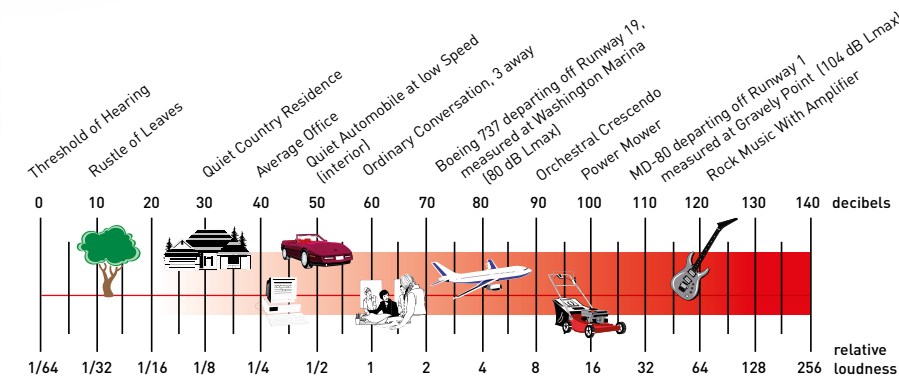
## Providing You A Good Night's Sleep



Experience a new dimension of relaxation, you can have a sound sleep more than ever, Daikin ENVi Series works at the sound level as only 19 decibels which is just like a whisper. You will not even notice any noise from the air conditioner and get full relaxation.

## Absolutely Quietest

### TYPICAL SOUND LEVELS



The decibel (dB) is a unit for describing sound pressure levels. A-weighted sound measurements (dBA) are filtered to reduce the effect of very low and very high frequencies, better representing human hearing. With A-wighting, sound monitoring equipment approximates the human ear's sensitivities to the different sounds of frequencies.

## EASY CONTROL FROM EVERYWHERE

The easy-to-use remote unit gives you absolute control of the room temperature from wherever you are. Sit back, check the large display and put all of Daikin ENVi Series's built-in intelligence to work through user-friendly buttons.

## SMART WLAN CONTROL/ SMART ENERGY SAVING



The plug-and-play extra WLAN device allows you to set and even schedule the temperature from anywhere, using Apple or Android systems. So you can manage the unit when away from home, offering optimal climate control while saving energy.

## Smartphone Control

## DISCOVER A NEW WORLD /



### Required for Operation



\* Android is a trademark of Google Inc.  
\*\* iPhone is a trademark of Apple Inc.

- A Daikin mobile controller (optional adaptor) is required for each indoor unit.
- Users need to prepare items (1) to (3).















Daikin is the world's first to use R-32 refrigerant for Residential Aicon which will not destroy the ozone layer and also reduce the global warming by up to 3x from the current refrigerant (compare with the R410A), more energy-saving with the efficiency and better features in cooling conduction that uses 30% less refrigerant. You can be a part in helping to save this planet by choosing Daikin ENVi Series which uses R32 refrigerant and helps in saving money for your family as well.

Environment  
Saving (R32)




## Function List of ENVi Series


Indoor Unit		Models	FTKJ25/35/42
Functions			
Comfortable Airflow	DC Inverter Control		●
	 Power-Airflow Dual Flaps		●
	 Wide-Angle Louvers		●
	 Vertical Auto-Swing (up and down)		●
	 Horizontal Auto-Swing (left and right)		●
Comfort Control	 3D Airflow		●
	 Comfort Airflow Mode		●
	 Indoor Unit Quiet Operation		●
	 Two-Area Intelligent Eye		●
Comfort Convenience	 Programme Dry Function		●
	 Auto Fan Speed		●
	 Standby Electricity Saving		●
Lifestyle Convenience	 Econo Mode		●
	 Inverter Powerful Operation		●
	 Wireless Remote Controller with Backlight		●
Cleanliness	 Indoor Unit On/Off Switch		●
	 Titanium Apatite Photocatalytic Air-Purifying Filter		●
	 Wipe-Clean Flat Panel		●
Timers	 24 Hour On/Off Timer		●
	 Weekly Timer		●
	 Night Set Mode		●
Worry Free	 Auto-Restart after Power Failure		●
	 Self-Diagnosis with Digital Display		●


Outdoor Unit	Models	Single-Split Type (R-32)		Multi-Split Type (R-410A)			
		RKJ25/35NVMG	RKJ42NVMG	3MKS50FSG	3MKS71FSG	4MKS80FSG	5MKS100LSG
Functions							
		●	●	●	●	●	●
Comfort Control	 Outdoor Unit Quiet Operation	●	●	●	●	●	●
	 Night Quiet Mode	●	●	●	●	●	●
Worry Free	 Priority-Room Setting	●	●	●	●	●	●
	 Anti-Corrosion Treatment of Outdoor Heat Exchanger Fins	●	●	●	●	●	●

## Wireless Remote Controller


On and Off switch 1


 Selects fan speed. Auto Fan Speed and Indoor Unit Quiet Operation 2


 Inverter Powerful Operation 3

 Selects operation mode: Cooling, Dry and Fan Only. 4


Sets brightness of the multi monitor and timer indicators on the indoor unit. 5

A view from the bottom of the indoor unit 

 Comfort Airflow Mode and Two-Area Intelligent Eye 6


 Deactivates, reactivates or deletes Weekly Timer settings. 7


Goes back. 8


 24 Hour Off Timer and Night Set Mode 9

Cancels timers. 10

11 Sets room temperature.

12 Econo Mode and Outdoor Unit Quiet Operation 


13 Sets vertical airflow direction. Vertical Auto-Swing and 3D Airflow 

14 Sets horizontal airflow direction. Horizontal Auto-Swing and 3D Airflow 

15 Copies settings.


16 Starts and completes settings.

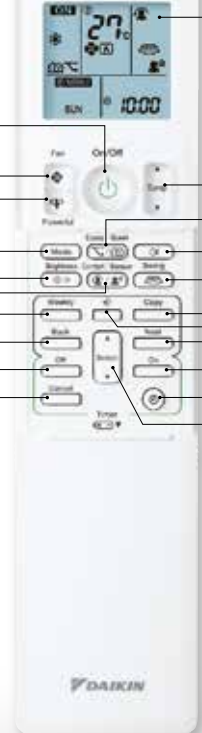
17 Goes next.

18 24 Hour On Timer 

19 Sets clock.

20 Selects timer, mode, setting significant number, day, time and temperature.

The backlit LCD allows easy operation in the dark. 





# ENVi Series

Cooling Only










FTKJ25/ 35/ 42 (Silver)



FTKJ25/ 35/ 42 (white)

Indoor Unit			FTKJ25NVM	FTKJ35NVM	FTKJ42NVM
Front Panel Colour			Silver/White		
Cooling Capacity		kW	2.5	3.5	4.2
		Btu/h	8,500	11,900	14,300
Airflow Rate	H	m3/min (cfm)	8.9 (313)	10.9 (385)	
Fan Speed		5 Steps, Quiet, Automatic			
Sound Levels	H/SL	dB(A)	38/19	45/20	46/32
Dimensions	H x W x D	mm	303 x 998 x 212		
Weight (Mass)		kg	12		
Piping Connection	Liquid	mm	Ø 6.4		
	Gas		Ø 9.5		Ø 12.7
	Drain		Ø 18.0		

			Single-Split Type (R-32)			Multi-Split Type (R-410A)			
Outdoor			RKJ25NVMG	RKJ35NVMG	RKJ42NVMG	3MKS50FSG	3MKS71FSG	4MKS80FSG	5MKS100LSG
Cooling Capacity (Min-Max)	kW		2.5	3.5	4.2	4.8 (1.95 - 7.07)	6.9 (3.01 - 8.19)	7.3 (3.3 - 10.50)	10 (2.85 - 12.00)
	Btu/h		8,500	11,900	14,300	16,300	23,500	24,900	33,700
Casing Colour			Ivory White						
Power Supply			1 phase, 230 V, 50 Hz						
Compressor Type			Hermetically Sealed Swing Type						
Sound Levels	H/SL	dB(A)	46/43	46/43	48/44	46/43	48/45		49/46
Dimensions	(HxWxD)	mm	550 x 765 x 285		735 x 825 x 300	735 x 936 x 300		770 x 900 x 320	990 x 940 x 320
Weight (Mass)		kg	34		43	49	58	69	83
Max. Interunit Piping Length		m	20		30	50	60	70	80
Max. Interunit Height Difference		m	15		20	15			
COP (Rated)		W/W	4.81	4.09	4.2	4.34	3.82	3.81	3.83
Energy Ticks									

## Measurement conditions

- Capacity is based on : indoor temp. 27 °CDB, 19 °CWB; outdoor temp 35 °CDB; piping length 7.5m.
- Sound pressure levels are measured in an anechoic chamber based on temperature condition 1 above. These values are normally somewhat higher during actual operation as a result of ambient conditions.
- The above values are based on operation with a 220 V, 50 Hz power supply

The specifications, designs and other content included in this brochure are current as of March 2016 and are subject to change without notice.

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