

Think GAIA  
For Life and the Earth

**SANYO**

## Room Air Conditioners 2007/08



SANYO Air Conditioners. The natural choice.



## **SANYO participates in the Eurovent certification programme**

Eurovent/Cecomaf is an independent organisation of major air conditioning manufacturers who have agreed, on a voluntary basis, to adhere to performance certification programmes.

The presence of the Eurovent logo confirms that a manufacturer's performance data has been verified by independent laboratories. It is also a guarantee that information such as capacity, current draw and noise levels meet consumer requirements.



**SANYO**

# Think GAIA - the environmental philosophy of SANYO



## Think GAIA For Life and the Earth

### Environmental sustainability and “Think GAIA”

In the latter part of the last century, mankind’s pursuit of convenience and material comfort left indelible stains such as global warming and environmental destruction. SANYO has always had a strong environmental focus, however in 2005 we took that a stage further and based our whole corporate philosophy on the concept of “Think GAIA”. Under this vision SANYO has committed to using its global resources and skills to develop solutions for a sustainable coexistence on earth.

### What is “Think GAIA”?

“GAIA”, originally the mythological goddess of the earth, is a concept rapidly gaining momentum today. Based around the belief that living organisms on the earth affect the nature of their environments, the concept of “GAIA” was first proposed by the English scientist James Lovelock. Lovelock proposed the idea of earth as a living, green organism where mankind and all living things live in harmony.

### The Natural Choice

We all like the idea of creating a clean, natural environment in our homes like that found in nature. The advanced features of SANYO’s air conditioners aim to make this a reality. If you are concerned about comfort, efficiency and the environment then SANYO Air Conditioners are the natural choice.

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# Class A Energy Efficiency

Energy		Air conditioning	Product Type
Manufacturer	SANYO		
External Unit	SAP -****		Reference
Internal Unit	SAP -****		
<b>More Efficient</b>	A		Energy Class There are seven classes, from "A" to "G"
A	B	C	
D	E	F	
G			
<b>Less Efficient</b>			
<b>Annual energy consumption in cooling mode KW/h/year</b> <small>(Annual consumption depends on climate and how the unit is used)</small>	***		Annual energy consumption The annual energy consumption is calculated by multiplying the consumption at full cooling capacity by an average of 500 hours of operation.
<b>Cooling output</b> <b>Energy efficiency ratio</b> <small>Full load (the higher the better)</small>	***		Energy efficiency ratio The higher the numerical value of this ratio, the more efficient is the air conditioning unit.
<b>Type</b>	Cooling Only —		Climate
	Cooling + Heating — ←		
	Air Cooled — ←		
	Water Cooled —		
<b>Heat Output</b>	KW	***	
<b>Heating Performance</b> <small>A: higher G: lower</small>		ABCDEFG	
<b>Noise</b> <small>(dB(A) re 1 pW)</small>		**	Product noise Inside
		**	Outside
Further information is contained in product brochures. Norm EN 814 Air-Conditioner Energy Label Directive 2002/31/EC			

## Complete range within class A

All of the air conditioners offered by SANYO in this catalogue are in class A for both cooling and heating functions. This is the highest class defined by European standards.

There are seven classes of energy efficiency, defined by the letters A-G. Products marked with class 'A' are the most energy efficient, while those marked with the letter 'G' are the least efficient.

## SANYO Air Conditioners provide comfort cooling and heating



## Reliability and comfort

Product quality not only implies high performance but, above all, high product reliability - our products are capable of guaranteeing durable function for a long period of time. However, when dealing with air conditioners, comfort is a priority and the multiple special functions that SANYO air conditioners are equipped with demonstrate an extraordinary attention to care for the environment in which we live. Furthermore, all Split type units include a heat pump function, guaranteeing the right internal temperature both in summer and in winter.

## Unique solutions

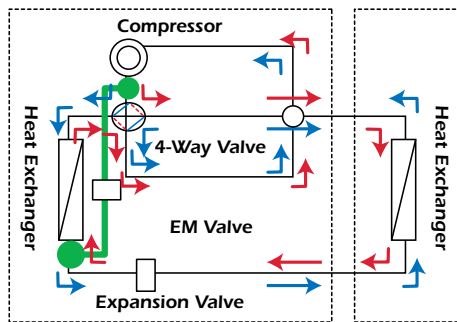
SANYO utilises innovative and exclusive solutions for its air conditioners. One such innovation is the defrosting system without cycle-inversion: the hot gas bypass maintains a comfortable internal temperature, even in very cold external conditions.

Furthermore, the temperature sensor integrated within the remote control continuously monitors the temperature at the desired location.

## Non-stop heating function

In traditional air conditioners, when the external temperature becomes extremely cold it is necessary to invert the refrigeration cycle in order to defrost the external heat exchanger and attain correct functional efficiency of the external unit. During this defrosting cycle, the air conditioner does not provide heat.

With SANYO's exclusive system, the inversion of the cycle is unnecessary, avoiding interruption of the heating function. A sophisticated bypass system, operated by means of an electrically actuated valve, delivers hot refrigerant from the compressor directly to the external heat exchanger. This means that the inversion of the refrigeration cycle is no longer necessary and the heating function is always efficient.



## Cleans air of bacteria, germs and allergens

Units equipped with photocatalytic sterilisation contain a special anti-bacterial function, which is equipped with a UV lamp. The lamp, coupled with a regenerative filter, enables the elimination of bacteria, germs and allergens in the air. The function can be activated by pushing the LED CLEAN key. This activates the UV antibacterial unit for approximately one hour, holding bacteria within the filter and eliminating all bacteria in the treated airflow.

## Quiet key

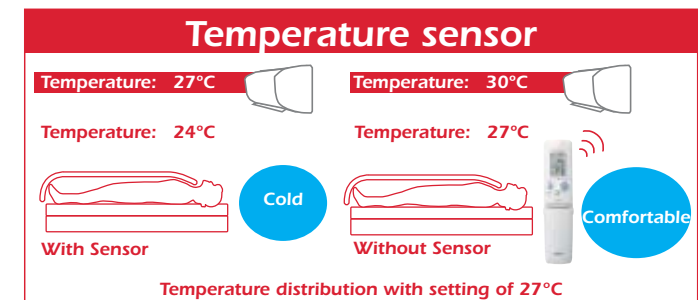
By pushing this key, you can enable the fan of the air conditioning unit to operate at an ultra-low speed. Consequently, the quantity of airflow is also reduced, providing the benefit of quiet operation. This function is particularly useful at night.



## Temperature sensor function

Modern architecture calls for installation of air conditioning systems in spaces that are not ideal for comfortable cooling and heating of the local environment. SANYO's infrared remote controls are equipped with an ambient temperature sensor. This sensor can be activated instead of the one mounted on the internal unit by pressing the Sensor key on the remote control. In this manner, the required temperature is guaranteed exactly where it is requested, regardless of the position of the unit within the room.

Temperature sensor



## The guarantee of a renowned brand

SANYO is a multinational group of 83 plants, 40 commercial divisions and 37 service organisations worldwide. SANYO's strategic business is focused in the sectors of digital appliances, energy and ecology. Aware of the problems caused by lack of respect for the ecosystem, SANYO has developed technologies that minimise environmental impact - and has set this objective as an absolute priority for the company.



**ROOM AIR CONDITIONERS**



# Mini Shiki Sai Kan



Following the success and popularity of the Shiki Sai Kan, SANYO have developed a smaller version. Not only stylish, it offers exceptional energy-saving performance.

See page 27 for product specifications



Simple elegant design with panels available in 5 different colours.



- Cooling and heating down to  $-15^{\circ}\text{C}$
- The LED photocatalytic sterilisation function ensures excellent performance to combat odours, germs and bacteria
- Automatic sweep control
- Apatite ceramic filter for additional filtration of odours, germs and bacteria
- Multi-functional remote control with built-in temperature sensor
- Clock with ON/OFF program timer
- Washable front panel
- Low noise levels: 22 dBA (Quiet mode)
- Night Set Back/Economy mode function ensures quiet and energy-saving cooling and heating

# Shiki Sai Kan

Available in 7 different colours



See page 28 for product specifications



Shiki Sai Kan

## Record-level performance

With a power consumption of only 530W, it consumes the least energy in its category.

## Non-stop heating function

With SANYO's exclusive system, the cycle inversion is unnecessary, avoiding interruption of the heating function.

## Negative ion generator

Releases a powerful stream of healthy negative ions to revitalise the air, similar to the freshness of an uncontaminated forest or waterfall.

## Ultra-quiet operation

At a noise level of only 22 dB(A), just louder than the noise of rustling leaves, the Shiki Sai Kan air conditioning unit will provide you with superior quality comfort.

## Photocatalytic ceramic apatite filter

Constructed from a triple filtering layer to eliminate odours, particles and bacteria, it provides an effective air purification system that can easily be regenerated with running water.

## Photocatalytic sterilisation

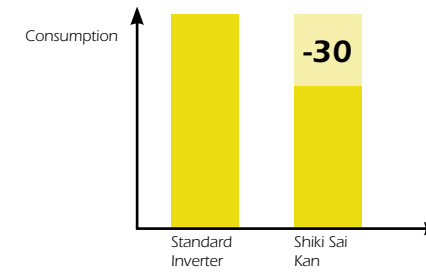
The light-activated sterilising filter captures bacteria, germs and allergens and neutralises them with radiation from the LED lamp. This LED lamp also provides the regeneration function for the filtering system, guaranteeing constant and durable performance.

## Good design award 2005

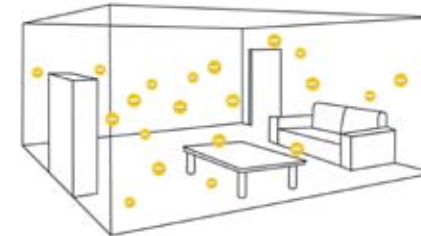
The unit-designed symmetrically in the horizontal and vertical directions, with diagonally chamfered upper and lower corners - creates a perfect equilibrium between the purity and brilliance of the product families. It can therefore complement any interior design. Instead of being merely "an appliance hanging on the wall" it is seen as "an accessory that improves interior design".



### Prized performance



### Negative ion generator

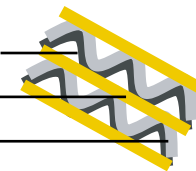


### Photocatalytic ceramic apatite filter

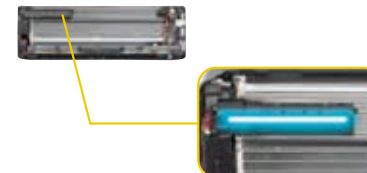
Odour-absorbing layer

Antibacterial layer

Anti dust filter



### Photocatalytic sterilisation



# Shiki Sai Kan

**External unit**



**The external unit is also quiet**



## **Versatile and elegant design**

The smooth silver panel is also available in six other colours, so you can adapt the air conditioning unit to suit your home's interior furnishing.

## **3D airflow**

The flow of air can be delivered in any desired direction by means of four different motors to guarantee optimal distribution within the surrounding environment.

## **Twin-rotor compressor**

SANYO's double compressor rotor not only offers quiet and efficient operation, but also guarantees reliability.

## **Retractable panel**

During operation, the front panel of the air conditioning unit opens to guarantee the optimal distribution of air across the entire surface of the heat exchanger. This improves the uniformity of the airflow, as well as functional efficiency and operational noise levels. When the air conditioner is shut off, the panel automatically returns to the closed position, protecting the unit from dust.

## **Multi-function remote control**

The remote control's large display provides a complete overview of the air conditioner's functions while the integrated temperature sensor ensures operation at optimal temperature, according to your specified preference. The

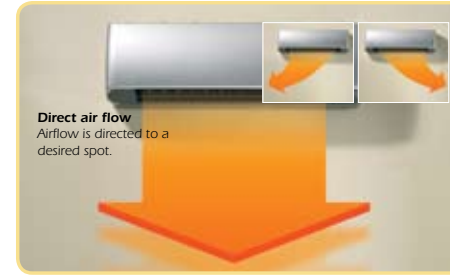
main functions of the air conditioner are immediately available and you can access advanced functions by opening a small window.

## **Multi-use timer**

The useful clock/timer allows several programmes to be configured within a 24-hour period - with or without daily repetition. An additional timer provides a 'sleep' function, which can be used to delay the unit's shut-off function by 1, 2, 3 or 5 hours. This is particularly useful at night.



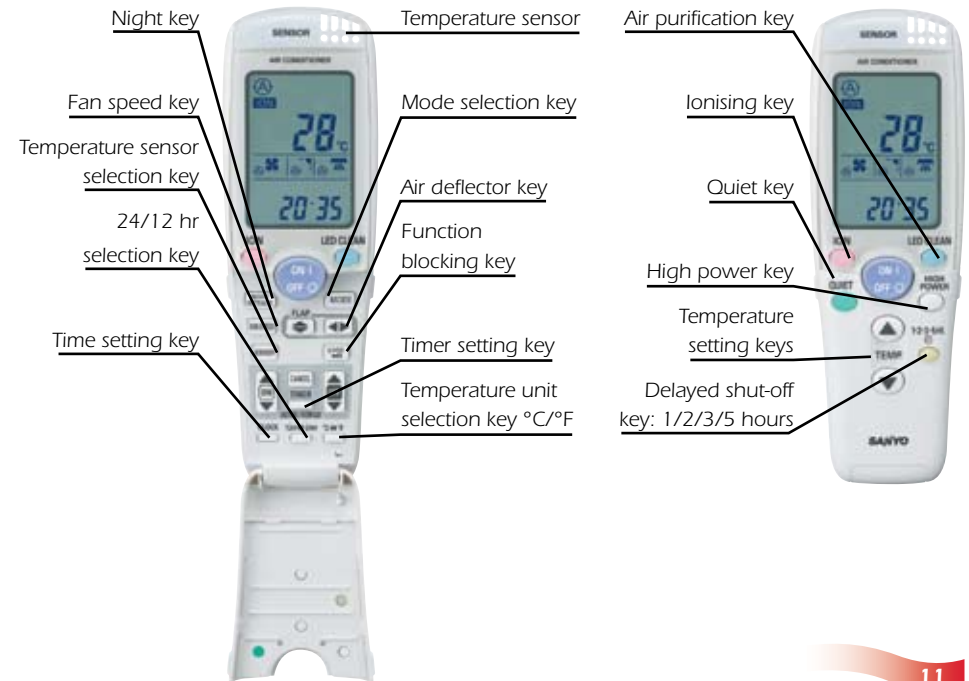
### 3-D Air Vent



### Retractable Panel



### Multi-function Remote Control



# LED-clean inverter range

See page 29 for product specifications



## Double class A

Guarantees maximum energy saving throughout the entire year.

## Avant-garde design

The sleek and discrete design fits perfectly in any interior, be it modern or classic.

## DC inverter technology

Permits accurate and efficient temperature control - at minimum speed, the power consumption is a mere 250W. The exceptional performance of the SANYO Inverter is achieved via a double control (PWM and PAM), optimising operation at both low and high capacities.

## Photocatalytic sterilisation

The light-activated sterilising filter captures bacteria, germs and allergens and neutralises them with radiation from the LED lamp. This LED lamp also provides the regeneration function for the filtering system, guaranteeing constant and durable performance.

## High power key

Enables a comfortable temperature to be reached rapidly by setting the fan to operate at maximum speed for 30 consecutive minutes.

## Ultra-quiet

Emitting only 22 dB(A) - model 9,000 BTU/h - at the lowest fan speed, SANYO's Inverter Air Conditioners are among the quietest units on the market.

## Comfort remote control

The temperature sensor located within the remote control guarantees the best conditions for comfort at the desired location.

## Night key

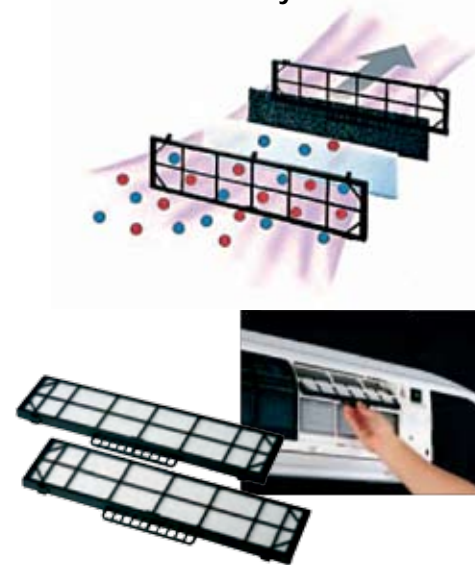
This special function enables you to specify a pleasant ambient temperature, quiet operation and low current consumption during the night.



## Double A Class

**A** Maximum energy saving

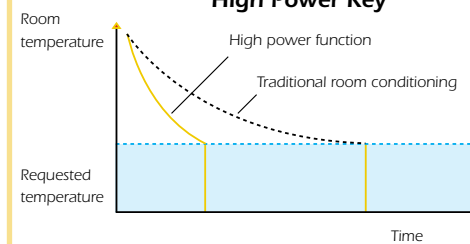
### Double Layer Filter



### Comfort Remote Control



### High Power Key



### Photocatalytic sterilisation



# Ion Inverter Range

See page 30 for product specifications



## Double class A

Guarantees maximum energy saving throughout the entire year.

## Avant-garde design

The sleek and discrete frontal design, embellished with the silver 'Ion Inverter' logo, fits perfectly in any interior, be it modern or classic.

## DC inverter technology

Permits accurate and efficient temperature control - at minimum speed, the power consumption is a mere 250W. The exceptional performance of the SANYO Inverter is achieved via a double control (PWM and PAM), optimising operation at both low and high capacities.

## Ionising filter

Enriches the airflow with negative ions to create the same pleasant sensation and freshness as an uncontaminated forest or waterfall.

## Double-layer filter

Consists of a special antibacterial pre-filter and odour filters that can easily be regenerated with running water.

## High power key

Enables a comfortable temperature to be reached rapidly by setting the fan to operate at maximum speed for 30 consecutive minutes.

## Ultra-quiet

Emitting only 22 dB(A) - model 9,000 BTU/h - at the lowest fan speed, SANYO's Inverter Air Conditioners are among the quietest units on the market.

## Comfort remote control

The temperature sensor located within the remote control guarantees the best conditions for comfort at the desired location.

## Night key

This special function enables you to specify a pleasant ambient temperature, quiet operation and low current consumption during the night.

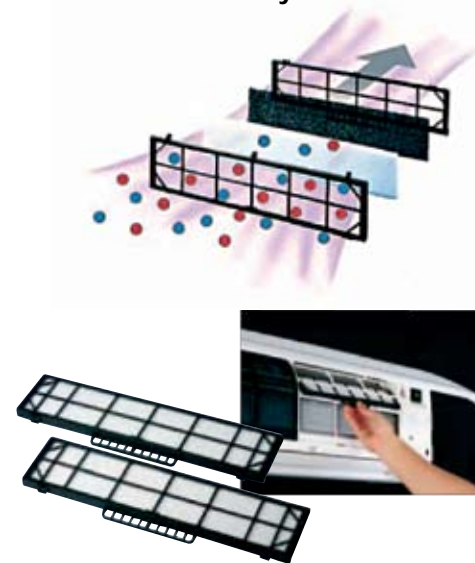




## Double A Class

**A** Maximum energy saving

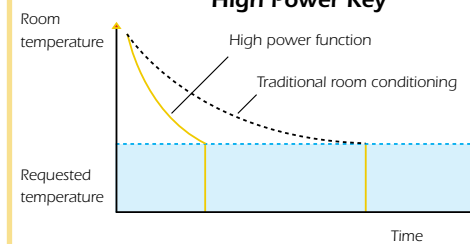
### Double Layer Filter



### Comfort Remote Control



### High Power Key

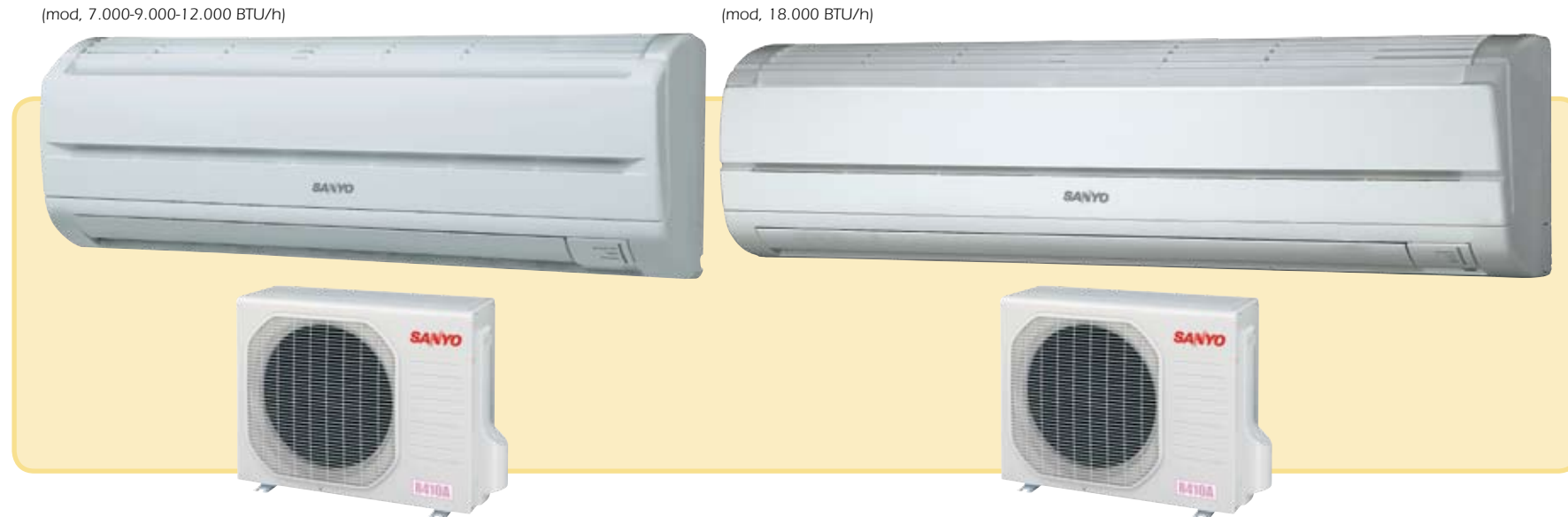


### Negative ion generator



# Classic On-Off Systems

See page 31 for product specifications



## Compact and harmonious design

The sleek and discrete frontal design fits perfectly in any interior, be it modern or classic.

## Double class A

Guarantees maximum energy saving throughout the entire year.

## Double-layer filter

Consists of a special antibacterial pre-filter and odour filters that can easily be regenerated with running water.

## Comfort remote control

The temperature sensor located within the remote control guarantees the best conditions for comfort at the desired location.

## Multi-use timer

The useful clock/timer allows several programmes to be configured within a 24-hour period - with or without daily repetition. An additional timer provides a 'sleep' function, which can be used to delay the unit's shut-off function by 1 hour.

## High power key

Enables a comfortable temperature to be reached rapidly by setting the fan to operate at maximum speed for 30 consecutive minutes.

## Quiet key

Guarantees a quiet operation at only 25 dB(A) for models 7,000, 9,000 and 12,000 BTU/h.

## Pre-heating function

Avoids a cold airflow when starting the system in heating mode, by providing an immediate flow of warm air.

## Night key

This special function enables you to specify a pleasant ambient temperature, quiet operation and low current consumption during the night.

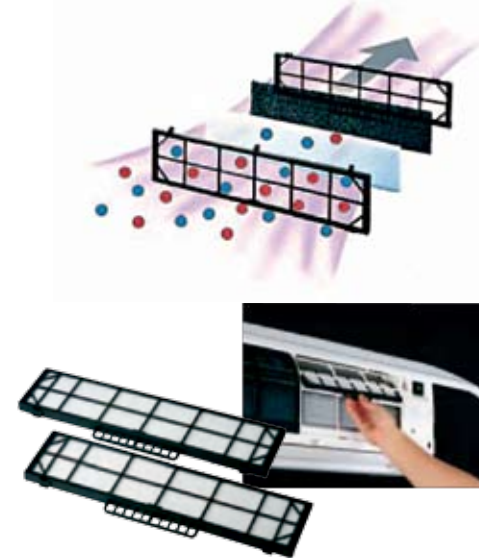
# Classic On-Off Systems



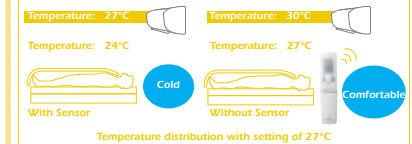
## Double A Class

**A** Maximum energy saving

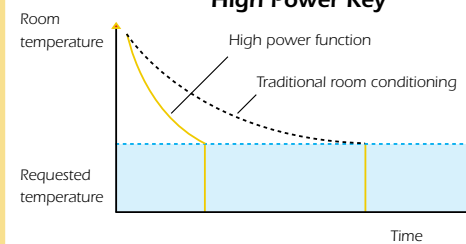
### Double Layer Filter



### Comfort Remote Control



### High Power Key



# Multi-split DC Inverter

See page 32 for product specifications



## Ultra-compact dimensions

The two-room contemporary air conditioning unit can be delivered with an external unit that is only 19% larger than the mono-split version (14,000 BTU/h multi model).

## Twin-rotor compressor

SANYO's double compressor rotor not only offers quiet and efficient operation, but also guarantees reliability.

## DC inverter technology

Guarantees precise and efficient control of the power as a function of the requirement in every single room, allowing a significant energy saving with respect to on/off systems. The exceptional performance of the SANYO Inverter is achieved via a double control (PWM and PAM), optimising operation at both low and high capacities.

## Double class A

Guarantees maximum energy saving throughout the entire year.

## Negative ion generator

Releases a powerful stream of healthy negative ions to revitalise the air similar to the freshness of an uncontaminated forest or waterfall.

## Comfort remote control

The temperature sensor located within the remote control guarantees the best conditions for comfort at the desired location.

## Night key

This special function enables you to specify a pleasant ambient temperature, quiet operation and low current consumption during the night.

## Non-stop heating function

With SANYO's exclusive system, the cycle inversion for defrosting is unnecessary, avoiding interruption of the heating function.

## Photocatalytic ceramic apatite filter

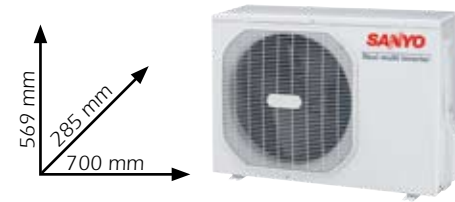
Constructed from a triple filtering layer to eliminate odours, particles and bacteria, it provides an effective air purification system that can easily be regenerated with running water.



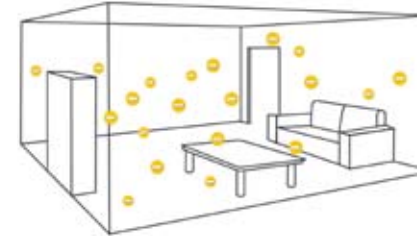
## Double A Class

**A** Maximum energy saving

### Ultra-compact dimensions



### Negative ion generator

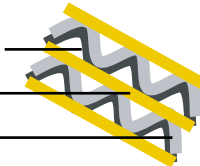


### Photocatalytic ceramic apatite filter

Odour-absorbing layer

Antibacterial layer

Anti-dust filter



### Comfort Remote Control





**VIRUS WASHER**

## For rooms up to 40 m<sup>2</sup>

It is commonly stated that the average adult inhales 15,000 litres of air every day. Given that air is so important to our existence, it is fundamental that we treat this invisible substance that surrounds us with care.

That is why SANYO has developed the Virus Washer, which is able to inactivate viruses that are present in the air by electrolysing the water. With this innovative system, the air is literally 'washed', rendering it fresh and clean.

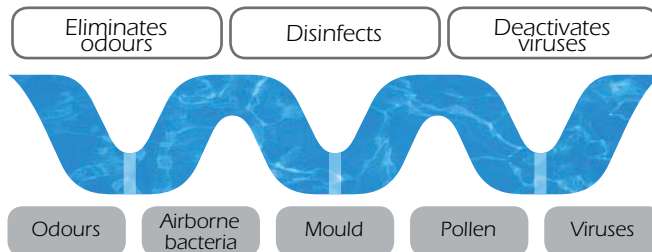
**SANYO's virus washer has already set new benchmarks for air purification.**



See page 34 for product specifications



### The power of water as an air purifier



# Virus Washer

## Destroys viruses, pollen and allergens in the air

The combination of hydroxyl radicals and hypochloric acid that is contained in the electrolysed water acts to destroy points on the surface of a virus. This enables any substance dispersed in the air - such as viruses, bacteria, fungi and pollen, acari (mites, ticks) and odour molecules - to be encapsulated, rendered inactive and deodorised.

### Effective on all contaminating agents

#### Virus deactivation

Reduction of 99.5% of viruses present in the air

#### Allergen control

Reduction of pollen by 95%

Reduction of acari (ticks and mites) by 99%

Reduction of flakes from cats and dogs by 97%

#### Disinfecting effect

Reduces mould by 99%

Eliminates 99% of airborne bacteria

#### Deodorising effect

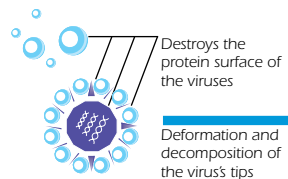
Rapid removal of odours from cigarette smoke and pets



### Combined action of electrolytic water

#### Deactivates viruses

Destroys the protein surface of the viruses.



#### Destroys pollen

Wraps around pollen destroying the surfaces.



#### Eliminates odours

Water vapour encapsulates the molecules and eliminates odours.



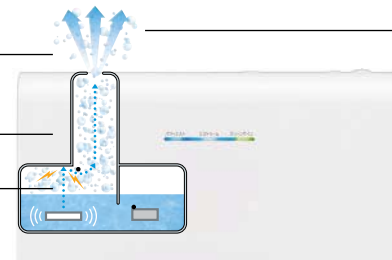
### Disinfecting effect of electrolysed water

#### Vapour generating method

3 Vapour dispersion

2 Generation of electrolysed water

1 Ultrasonic vibrating element



#### Extensive disinfecting effect

Disinfecting, electrolytic vapour is generated by ultrasonic vibration. Since electrolytic vapour is effective on minute particles in the range of 10 nanometres to 10 micrometres in diameter, a wide range of contaminants can be removed, from relatively large pollens to microscopic viruses.

1 nanometre =  $10^{-9}$  m  
1 micrometre =  $10^{-6}$  m



# Virus Washer

**A lasting disinfecting effect that purifies the air in every corner of the room**

Several objects in a room, such as tables and sofas, can obstruct airflow from an air conditioner. To resolve this problem, SANYO uses a system that disperses vapour in three directions: upwards, to the left and to the right. These jets of air effectively disinfect the room, reaching every corner - even in and around furniture.

**360° protection of the environment in which we live germs embed themselves in spaces like these:**



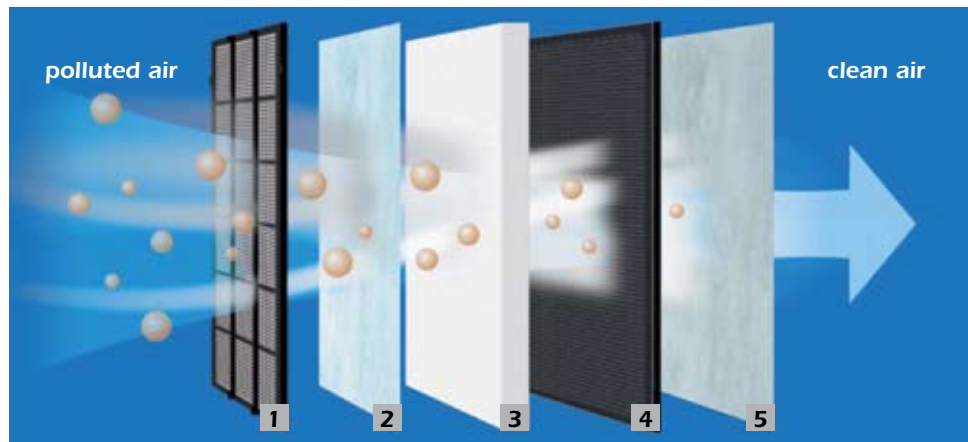
# Virus Washer

## Particles and odours are captured by a high performance, five layer filter

The large and multi-directional air inlets capture even the finest particles. Even microscopic odours and contaminants that are trapped are removed by a high performance, five layer filter. This includes a layer that is effective against allergens and an HEPA disinfecting filter.



## 5-layered filter air purification



## Functions of the five filtering layers:

### 1. Pre-filter

Removes large particles. Can be cleaned by washing under running water or using a vacuum cleaner.

### Reduction of odours

### 2. Allergen disinfecting filter

Renders trapped bacteria and mites from dust and pollen inactive.

### Reduction of 99% of fungi and bacteria

### Reduction of 98% of mites from dust

### Reduction of 99% of pollen

### 3. HEPA filter

Removes 99.97% of fine particles down to 0.3 micrometers.

### Bacteria; fungi and spores; dust mites; pollens; domestic dust; dust

### 4. Nanotech carbon odour filter

Captures and eliminates odours from smoke, tobacco, domestic animals and formaldehyde.

### 5. Catechin disinfecting filter

Produced with an antibacterial substance containing catechin, it renders the trapped viruses and bacteria inactive.

### Reduction of 99% of fungi and bacteria

# Air Purifier Ioniser

## Triple-layer filter

SANYO's filtering system comprises three different filters that guarantee effective air treatment and simple maintenance.

## Anti-pollen function

An automatic fan speed function guarantees the effective removal of pollen and spores.

## Timer

The purifier's shut-off may be delayed by 1, 2 or 8 hours, enabling you to enjoy purified and ionised air throughout the night.

## HEPA filter

Removes and renders inactive 99% of bacteria, spores and contaminants by means of an antibacterial coating on the filter's surface.

## Activated charcoal filter

By exploiting the properties of activated charcoal, this filter can effectively absorb and retain odours.

## Adjustable inclination

The device may be inclined to promote optimal purifying effectiveness.

## Negative ion generator

Releases a powerful stream of healthy negative ions to revitalise the air, similar to the freshness of an uncontaminated forest or waterfall.

## Large air inlets

Placed on all sides, the large air inlets effectively reach all corners within the environment.

## Powerful and quiet airflow

Using the three-speed fan selector, it is possible to select an optimal airflow for your environment and needs.

## Low power consumption

At minimum speed, power consumption is below 20W - less than that of a table lamp

See page 34 for product specifications



# Air Purifier Ioniser



**Triple Layer Filtering**



**Adjustable inclination**



**Negative ion generator**



**Large air inlets**



# Product Specifications

## ROOM AIR CONDITIONERS: DC INVERTER SYSTEMS

MINI SHIKI SAI KAN (see page 7)					
		Model 96		Model 126	
Performance		Cooling	Heating	Cooling	Heating
Capacity	kW	0.9-2.65-3.6	0.9-3.6-4.9	0.9-3.5-3.6	0.9-4.8-5.4
Power input	W	250-650-1040	250-650-1400	250-1025-1200	250-1165-1600
EER/COP		4.21	4.31	3.41	3.81
Energy class		A	A	A	A
Running amperes	A	1.3-3.3-5.4	1.2-4.0-6.8	1.2-4.8-5.6	1.1-5.8-7.3
Annual energy consumption (cooling)	kW	315	-	512.5	-
Power supply	V,Ph,Hz	230, 1+N, 50 outdoor unit			
Indoor Unit		SAP-KRV96EHDS		SAP-KRV126EHDS	
Air circulation	(H) m <sup>3</sup> /h	480	480	500	500
Moisture removal	Litres/h	1.6	-	2.0	-
Sound power level	(H) dB(A)	56	56	57	57
Sound pressure level	(Quiet/L/M/H) dB(A)	22/28/35/41	22/28/35/41	22/28/35/42	22/29/36/42
Dimensions	(HxWxD) mm	265x789x180		265x789x180	
Net weight	kg	9.5		9.5	
Outdoor Unit		SAP-CRV96EHDS		SAP-CRV126EHDS	
Sound power level	(H) dB(A)	63	64	65	66
Sound pressure level	(H) dB(A)	45	46	47	48
Dimensions	(HxWxD) mm	565x790x265		565x790x265	
Net weight	kg	36		36	
Installation Data		Model 96		Model 126	
Pipe size function/discharge	Inches	1/4, 3/8		1/4, 3/8	
Max piping length	m	15		15	
Max elevation diff. - O.U. - I.U.	m	7		7	
Chargeless piping length	m	7.5		7.5	
Amount of additional refrigerant	AMP	15		15	



# Product Specifications



## ROOM AIR CONDITIONERS: DC INVERTER SYSTEMS cont

SHIKI SAI KAN (see page 8)					
		SAP-KCRV94EHDX		SAP-KCRV124EHDX	
Performance		Cooling	Heating	Cooling	Heating
Capacity min-nom-max	kW	0,9-2,65-3,8	0,9-3,6-5,5	0,9-3,5-4,2	0,9-4,8-6,0
	BTU/h	3.100-9.000-13.000	3.100-12.300-18.800	3.100-11.900-14.300	3.100-16.400-20.500
Power consumption min-nom-max	W	250-530-1350	250-720-1450	250-875-1435	250-1140-2150
	A	1,6-2,4-6,9	1,6-3,3-9,9	1,6-4,0-7,8	1,6-5,2-9,9
Efficiency EER/COP	W/W	5,00	5,00	4,00	4,21
Energy class	-	A	A	A	A
Annual power consumption (cooling)	kWh	265	-	437,5	-
Power supply	V,Ph,Hz	230, 1+N, 50		230, 1+N, 50	
Internal Unit		SAP-KRV94EHDX		SAP-KRV124EHDX	
Maximum air flow	m <sup>3</sup> /h	600	600	630	630
Dehumidifying capacity	Litres/h	1,8	-	2	-
Sound pressure level (Quiet/B/M/A)	dB(A)	22/30/38/39	22/30/38/40	22/30/38/40	22/30/38/41
Sound power level (A)	dB(A)	54	55	55	56
Dimensions (HxLxD)	mm	300x898x200		300x898x200	
Net weight	kg	12,5		12,5	
External Unit		SAP-CRV94EHDX		SAP-CRV124EHDX	
Sound pressure level (A)	dB(A)	49	50	50	51
Sound power level (A)	dB(A)	67	68	68	69
Dimensions (HxLxD)	mm	569x790x285		569x790x285	
Net weight	kg	40		40	
Installation Data		model 94		model 124	
Refrigerant pipe diameter discharge/suction	mm(in)	6,35 (1/4)/9,52 (3/8)		6,35 (1/4)/9,52 (3/8)	
Maximum pipe length	m	15		15	
Maximum elevation difference ext. unit - int. unit	m	10		10	
Maximum precharged pipe length	m	7,5		7,5	
Additional refrigerant (in excess of 7,5m)	g/m	15		15	

Note: Shiki-Sai-Kan internal units can also be supplied without the silver coloured front panel by ordering models SAP-KRV94EHX and SAP-KRV124EHX.

## ROOM AIR CONDITIONERS: DC INVERTER SYSTEMS cont

LED-clean inverter range (see page 12)					
		SAP-KCRV96EHE		SAP-KCRV126EHE	
Performance		Cooling	Heating	Cooling	Heating
Capacity min-nom-max	kW	0,9-2,5-3,2	0,9-3,3-4,3	0,9-3,3-3,8	0,9-4,0-5,0
	BTU/h	3.100-8.500-10.900	3.100-11.300-14.700	3.100-11.300-13.000	3.100-13.600-17.100
Power consumption min-nom-max	W	250-775-1150	250-915-1360	250-1025-1300	250-1105-1470
	A	1,3-3,9-5,8	1,2-4,4-6,6	1,1-4,7-6,0	1,1-5,1-6,7
Efficiency EER/COP	W/W	3,23	3,61	3,22	3,62
Energy class	-	A	A	A	A
Annual power consumption (cooling)	kWh	387,5	-	512,5	-
Power supply	V,Ph,Hz	230, 1+N, 50		230, 1+N, 50	
Internal Unit		SAP-KRV96EHE		SAP-KRV126EHE	
Maximum air flow	m <sup>3</sup> /h	350	430	520	570
Dehumidifying capacity	Litres/h	1,4	1,8	-	-
Sound pressure level	(Quiet/B/M/A) dB(A)	22/30/36/39	22/30/36/39	25/30/36/40	25/30/36/40
Sound power level	(A) dB(A)	56	56	57	57
Dimensions	(HxLxD) mm	285x825x219		285x825x219	
Net weight	kg	9		9	
External Unit		SAP-CRV96EHE		SAP-CRV126EHE	
Sound pressure level	(A) dB(A)	47	47	48	48
Sound power level	(A) dB(A)	63	63	64	64
Dimensions	(HxLxD) mm	548x720x265		548x720x265	
Net weight	kg	30		32	
Installation Data		model 96		model 126	
Refrigerant pipe diameter discharge/suction	mm(in)	6,35 (1/4)/9,52 (3/8)		6,35 (1/4)/9,52 (3/8)	
Maximum pipe length	m	15		15	
Maximum elevation difference ext. unit - int. unit	m	10		10	
Maximum precharged pipe length	m	7,5		7,5	
Additional refrigerant	(in excess of 7,5m) g/m	15		15	



# Product Specifications



## ROOM AIR CONDITIONERS: DC INVERTER SYSTEMS cont

		ION INVERTER (see page 14)			
		SAP-KCRV93EHE		SAP-KCRV123EHE	
Performance		Cooling	Heating	Cooling	Heating
Capacity min-nom-max	kW	0,9-2,65-3,2	0,9-3,6-5,0	0,9-3,5-3,8	0,9-4,2-5,8
	BTU/h	3.100-9.000-10.900	3.100-12.300-17.100	3.100-11.900-13.000	3.100-14.300-19.800
Power consumption min-nom-max	W	250-775-1150	250-995-1340	250-1090-1300	250-1165-1500
	A	1,3-3,9-5,9	1,2-4,8-6,5	1,2-5,2-6,2	1,2-5,5-7,1
Efficiency EER/COP	W/W	3,51	3,62	3,21	3,61
Energy class	-	A	A	A	A
Annual power consumption (cooling)	kWh	377,5	-	545	-
Power supply	V,Ph,Hz	230, 1+N, 50		230, 1+N, 50	
Internal Unit		SAP-KRV93EHE		SAP-KRV123EHE	
Maximum air flow	m <sup>3</sup> /h	480	530	500	530
Dehumidifying capacity	Litres/h	1,6	-	2,0	-
Sound pressure level	(Quiet/B/M/A) dB(A)	23/28/31/34	23/28/31/34	25/29/33/36	25/29/31/34
Sound power level	(A) dB(A)	55	55	57	55
Dimensions	(HxLxD) mm	285x825x204		285x825x204	
Net weight	kg	9		9	
External Unit		SAP-CRV93EHE		SAP-CRV123EHE	
Sound pressure level	(A) dB(A)	46	47	47	49
Sound power level	(A) dB(A)	62	63	63	65
Dimensions	(HxLxD) mm	548x720x265		548x720x265	
Net weight	kg	34		35	
Installation Data		model 93		model 123	
Refrigerant pipe diameter discharge/suction	mm(in)	6,35 (1/4)/9,52 (3/8)		6,35 (1/4)/9,52 (3/8)	
Maximum pipe length	m	15		15	
Maximum elevation difference ext. unit - int. unit	m	7		7	
Maximum precharged pipe length	m	7,5		7,5	
Additional refrigerant (in excess of 7,5m)	g/m	15		15	



## ROOM AIR CONDITIONERS: CLASSIC ON/OFF SYSTEMS

CLASSIC ON/OFF SYSTEMS (see page 17)									
		INVERTER HEAT PUMP (page 17)							
		SAP-KCR74EHE		SAP-KCR94EHE		SAP-KCR124EHE		SAP-KCR184EHE	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity min-nom-max	kW	2,09	2,37	2,51	2,85	3,32	3,80	5,15	5,7
	BTU/h	7.100	8.100	8.600	9.700	11.300	13.000	17.600	19.400
Power consumption min-nom-max	W	651	654	781	789	1.034	1.050	1.600	1.580
	A	3,0	3,0	3,6	3,6	4,7	4,8	7,1	7,0
Efficiency EER/COP	W/W	3,21	3,62	3,21	3,61	3,21	3,62	3,22	3,61
Energy class	-	A	A	A	A	A	A	A	A
Annual power consumption (cooling)	kWh	325,5	-	390,5	-	517,0	-	800	-
Internal Unit		SAP-KR74EHEA		SAP-KR94EHEA		SAP-KR124EHEA		SAP-KR184EHEA	
Maximum air flow	m³/h	420	440	470	490	490	520	890	890
Dehumidifying capacity	Litres/h	1,25	-	1,75	-	1,9	-	2,3	-
Sound pressure level	(Quiet/B/M/A) dB(A)	28/30/32/36	27/29/31/35	28/30/33/38	27/29/32/37	28/30/34/41	27/29/33/40	32/35/39/42	32/34/38/4
Sound power level	(A) dB(A)	49	48	51	50	54	53	55	54
Dimensions	(HxLxD) mm	285x825x202		285x825x202		285x825x202		298x1.065x231	
Net weight	kg	10		10		10		12	
Power supply	V,Ph,Hz	230, 1+N, 50		230, 1+N, 50		230, 1+N, 50		230, 1+N, 50	
External Unit		SAP-CR74EHEA		SAP-CR94EHEA		SAP-CR124EHEA		SAP-CR184EHEA	
Sound pressure level	(A) dB(A)	47	48	48	49	50	50	55	56
Sound power level	(A) dB(A)	59	60	60	61	62	62	67	68
Dimensions	(HxLxD) mm	548x720x265		548x720x265		565x790x285		670x880x285	
Net weight	kg	29		35		37		48	
Power supply	V,Ph,Hz	230, 1+N, 50		230, 1+N, 50		230, 1+N, 50		230, 1+N, 50	
Installation Data		model 74		model 94		model 124		model 184	
Refrigerant pipe diameter discharge/suction	mm(in)	6,35 (1/4)/9,52 (3/8)		6,35 (1/4)/9,52 (3/8)		6,35 (1/4)/9,52 (3/8)		6,35 (1/4)/12,7 (1/2)	
Maximum pipe length	m	15		15		15		15	
Maximum elevation difference ext. unit - int. unit	m	7		7		7		7	
Maximum precharged pipe length	m	7,5		7,5		7,5		7,5	
Additional refrigerant (in excess of 7,5m)	g/m	15		15		15		15	



# Product Specifications



## OTHER PRODUCTS: MULTI DC INVERTER AIR CONDITIONERS cont

MULTI SPLIT DC INVERTER EXTERNAL UNIT (see page 18)					
		SAP-CMRV1424EHE		SAP-CMRV1934EHE	
Performance		Cooling	Heating	Cooling	Heating
Capacity min-nom-max	kW	2,0-4,0-5,0	2,2-4,5-5,5	2,9-5,6-6,8	3,4-7,3-8,4
	BTU/h	6.800-13.600-17.000	7.500-15.300-18.700	9.900-19.100-23.200	11.600-24.900-28.600
Nominal power consumption	W	925	925	1550	1735
	A	4,1	4,1	6,88	7,7
Efficiency EER/COP		4,32	4,86	3,61	4,21
Energy class	A	A	A	A	-
Annual power consumption (cooling)	kWh	462,5	-	775	-
External Unit					
Maximum number of internal units		2		3	
Sound pressure level	(A) dB(A)	47	48	50	52
Sound power level	(A) dB(A)	62	63	62	64
Dimensions	(HxLxD) mm	569x700x285		740x900x320	
Net weight	kg	42		65	
Power supply	V,Ph,Hz	230, 1+N, 50		230, 1+N, 50	
Installation data					
		model 1424		model 1934	
Pipe diameter - suction/discharge	mm (in)	2x 6,4(1/4)/9,5(3/8)		3x 6,4(1/4)/9,5(3/8)	
Maximum total pipe length	m	30		45	
Maximum pipe length per unit	m	20		25	
Maximum elevation difference external unit-Internal unit	m	15		15	
Precharged pipe length	m	up to the maximum tube length			

## OTHER PRODUCTS: MULTI DC INVERTER AIR CONDITIONERS cont

MULTI SPLIT DC INVERTER INTERNAL (see page 18)							
		SAP-KMRV74EHE		SAP-KMRV94EHE		SAP-KMRV124EHE	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2,2	2,5	2,65	3,6	3,5	4,2
	BTU/h	7.5	8.5	9	12.3	11.9	14.3
Maximum air flow	m <sup>3</sup> /h	440	460	440	480	480	500
Dehumidification	litres/h	1,3	-	1,6	-	2,0	-
Sound pressure level	(Quiet/B/M/A) dB-A	23/27/30/33	23/27/30/33	23/28/31/34	23/28/31/34	25/29/33/36	25/29/31/34
Sound power level	(A) dB-A	54	54	55	55	57	55
Refrigerant pipe diameter discharge/suction	mm	6,4(1/4)/9,5	(3/8)	6,4(1/4)/9,5(3/8)		6,4(1/4)/9,5(3/8)	
Dimensions	(HxLxD) mm	285x825x202		285x825x202		285x825x202	
Net weight	kg	10		10		10	
Power supply	V,Ph,Hz	230, 1+N, 50		230, 1+N, 50		230, 1+N, 50	

**OTHER PRODUCTS: MULTI DC INVERTER AIR CONDITIONERS cont**

COMBINATIONS																	
External Unit models		Cooling								Heating							
		Room A		Room B		Room C		Total Power				Room A		Room B		Room C	
		Nominal Power		Nominal Power		Nominal Power		Power Min-Nom-Max				Nominal Power		Nominal Power		Nominal Power	
		kW	BTU/h	kW	BTU/h	kW	BTU/h	kW	BTU/h	kW	BTU/h	kW	BTU/h	kW	BTU/h	kW	BTU/h
SAP-CMRV1424EHE	1 Room	74*	2,2	7.5	-	-	-	-	1,2-2,2-2,6	4.100-7.500-8.900	2,5	8.5	-	-	-	-	-
		94*	2,65	9	-	-	-	-	1,2-2,65-3,2	4.100-9.000-10.900	3,6	12.3	-	-	-	-	-
		124*	3,5	11.9	-	-	-	-	1,3-3,5-3,6	4.400-11.900-12.300	4,2	14.3	-	-	-	-	-
	2 Rooms	74 + 74	1,8	6.1	1,8	6.1	-	-	2,0-3,6-4,5	6.800-12.200-15.300	2,5	8.5	2,5	8.5	-	-	-
		74 + 94	1,68	5.7	2,02	6.9	-	-	2,0-3,7-4,8	6.800-12.600-16.400	2,5	8.5	3,6	12.3	-	-	-
		74 + 124	1,51	5.1	2,39	8.1	-	-	2,0-3,9-4,9	6.800-13.200-16.700	2,4	8.2	3,9	13.3	-	-	-
SAP-CMRV1934EHE	1 Room	74*	2,2	7.5	-	-	-	-	1,4-2,2-2,6	4.800-7.500-8.900	2,5	8.5	-	-	-	-	-
		94*	2,65	9	-	-	-	-	1,4-2,65-3,2	4.800-9.000-10.900	3,6	12.3	-	-	-	-	-
124*		3,5	11.9	-	-	-	-	1,5-3,5-3,6	5.100-11.900-12.300	4,2	14.3	-	-	-	-	-	
SAP-CMRV1934EHE	2 Rooms	94 + 94	2,5	8.5	2,5	8.5	-	-	2,0-5,0-6,3	6.800-17.000-21.500	3,2	10.9	3,2	10.9	-	-	-
		94 + 124	2,24	7.6	2,96	10.1	-	-	2,1-5,2-6,8	7.200-17.700-23.200	3,07	10.5	3,58	12.2	-	-	-
	3 Rooms	124 + 124	2,7	9.2	2,7	9.2	-	-	2,0-5,4-6,8	6.800-18.400-23.200	3,45	11.8	3,45	11.8	-	-	-
		74 + 74 + 74	1,77	6	1,77	6	1,77	6	2,5-5,3-6,8	8.500-18.000-23.200	2,18	7.4	2,18	7.4	2,18	7.4	7.4
		74 + 74 + 94	1,69	5.8	1,69	5.8	2,03	6.9	2,9-5,4-6,8	9.900-18.500-23.200	2,02	6.9	2,02	6.9	2,91	9.9	9.9
SAP-CMRV1934EHE	3 Rooms	74 + 94 + 94	1,63	5.6	1,96	6.7	1,96	6.7	2,9-5,55-6,8	9.900-18.900-23.200	1,88	6.4	2,71	9.2	2,71	9.2	9.2
		74 + 74 + 124	1,56	5.3	1,56	5.3	2,48	8.5	2,9-5,6-6,8	9.900-19.100-23.200	1,94	6.6	1,94	6.6	3,26	11.1	11.1
SAP-CMRV1934EHE	3 Rooms	74 + 94 + 124	1,48	5	1,78	6.1	2,35	8	2,9-5,6-6,8	9.900-19.100-23.200	1,77	6	2,55	8.7	2,98	10.2	10.2

Note: A minimum of two internal units must be connected to a Multi external unit  
 \*Performance refers to an internal unit



# Product Specifications



## OTHER PRODUCTS: VIRUS WASHER

VIRUS WASHER (see page 21)			
WITH ELECTROLYTIC TECHNOLOGY ABC-VW24			
Advised surface area		m <sup>2</sup>	40
Power consumption (B/M/A)		W	8-16-57
Fan speed			3
Air flowrate (B/M/A)		m <sup>3</sup> /h	72-168-306
Sound pressure level (B/M/A)		dB(A)	18-37-52
Particle filter			HEPA disinfectant
Odour filter			Nanotech carbon
Antibacterial treatment			Catechin
Timer			1/2/8 hours
Dimensions (HxLxD)		mm	600x340x180
Net weight		kg	7,1
Power supply		V,Ph,Hz	230, 1+N, 50

## OTHER PRODUCTS: AIR PURIFIER IONISER

AIR PURIFIER IONISER (see page 25)			
Advised surface area		m <sup>2</sup>	25
Power consumption min-max		W	19-56
Fan speed			3
Air flowrate (B/M/A)		m <sup>3</sup> /h	36/110/180
Sound pressure level (B/M/A)		dB-A	14/25/33
Particle filter			HEPA disinfectant
Odour filter			Active charcoal
Antibacterial treatment			-
Timer			1 hour/2 hours/8 hours
Dimensions (HxLxD)		mm	430x405x132
Net weight		kg	4,1
Power supply		V,Ph,Hz	230, 1+N, 50

	PERFORMANCE VARIATIONS											
	Cooling				Dehumidifying				Heating			
	External Dry BulbTemperature		Internal Dry Bulb Temperature		External Dry BulbTemperature		Internal Dry Bulb Temperature		External Wet BulbTemperature		Internal Dry Bulb Temperature	
	Min.	Max	Min.	Max	Min.	Max	Min.	Max	Min.	Max	Min.	Max
Shiki Sai Kan	-15°C	+43°C	+19°C	+32°C	-15°C	+43°C	+15°C	+32°C	-15°C	+18°C	+16°C	+27°C
Led-clean inverter	+19°C	+43°C	+19°C	+32°C	+19°C	+43°C	+15°C	+32°C	-9°C	+18°C	+16°C	+27°C
Ion Inverter	+19°C	+43°C	+19°C	+32°C	+19°C	+43°C	+15°C	+32°C	-15°C	+18°C	+16°C	+27°C
Classic On/Off	+19°C	+43°C	+19°C	+32°C	+19°C	+43°C	+15°C	+32°C	-9°C	+18°C	+16°C	+27°C
Multi DC Inverter	+19°C	+43°C	+19°C	+32°C	+19°C	+43°C	+15°C	+32°C	-15°C	+18°C	+16°C	+27°C
Portable Power-8	-	-	+15°C	+35°C	-	-	+10°C	+35°C	-	-	-	-

The data in this catalogue are indicative. SANYO reserves the right to modify the models at any point in time for technical or commercial reasons. The performance of SANYO Air Conditioners is based on the following conditions: Cooling: Indoor temperature 27°C DB (Dry bulb)/19°C WB (Wet bulb), Outdoor temperature 35°C DB/24°C WB. Heating: Indoor temperature 20°C DB, Outdoor temperature 7°C DB/6°C WB. Functional limits may vary as follows, depending on the model.







**SANYO**



Indicates conformation  
with EC Directives



**ISO 9001: 2001**  
Certificate Number: JQ116B



**ISO 14001: 2001**  
Certificate Number: ECOOJ0303-33



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#### Rating Conditions

The cooling and heating capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB, Outdoor temperature 35°C DB/24° C WB.

Heating: Indoor temperature 20°C DB, Outdoor Temperature 7°C DB 6°C WB.



Think GAIA  
For Life and the Earth

**SANYO**



## **Room Air Conditioners 2007/08**

SANYO Air Conditioners. The natural choice.



**SANYO**

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# SANYO Air Conditioners

## SANYO Air Conditioners - the natural choice

With almost 50 years' experience in the industry, SANYO has earned its reputation as an innovator in air conditioning, consistently delivering market-leading technology and reliability. From the world's first heat pump air conditioners developed in 1960 to the first gas driven VRF systems in the 1980s and the first 3-pipe VRF system developed in 1989, our continuous programme of research and development has ensured that SANYO's products remain at the forefront of innovation.

However, developing market-leading technology is only one part of the story. At SANYO we are committed to delivering a complete service to all of our clients, from customer service to ensuring we have the most reliable products in the industry.



## 2007 - a year of innovation

Here at SANYO we are excited about the future. 2006 was a breakthrough year, with 53 new products launched across the whole range and 2007 is set to be a landmark year, with plans to launch many revolutionary new technologies including solar-powered air conditioning, the CO<sub>2</sub> water heater and the Virus Washer to name just a few. You don't have to wait to find out about these new products - more information on all of these products is contained within this brochure.

If you would like to be the first to hear about our new products, register for our newsletter via our website [www.sanyoaircon.eu](http://www.sanyoaircon.eu)



SANYO's Solar Ark, the world's largest solar power generator.

# Think GAIA - the environmental philosophy of SANYO

## Environmental sustainability and "Think GAIA"

In the latter part of the last century, mankind's pursuit of convenience and material comforts left indelible stains such as global warming and environmental destruction. SANYO has always had a strong environmental focus. However, in 2005 we took that a stage further and based our whole corporate philosophy on the concept of "Think GAIA". Under this vision SANYO has committed to using its global resources and skills to develop solutions for a sustainable coexistence on earth.

## What is "Think GAIA"?

"GAIA", originally the mythological goddess of the earth, is a concept rapidly gaining momentum today. Based around the belief that living organisms on the earth affect the nature of their environment, the concept of "GAIA" was first proposed in 1979 by the English scientist James Lovelock, who participated in NASA's Mars exploration programme during the 1960s. Lovelock proposed the idea of earth as a living, green organism where mankind and all living things live in harmony. His recent book "The Revenge of GAIA" serves as a wake-up call and has sparked much public debate.



## SANYO - committed to developing environmental technologies

At SANYO actions speak louder than words. We are dedicated to incorporating the Think GAIA ethos throughout our business - an example of this is our Solar Ark, which is the world's largest solar power generator with over 5000 cells, used to supply one of our production plants.

Think GAIA has also been the driving force behind many environmentally sustainable products that are already widely available, including:

- **ECOi Electric VRF systems** - we have developed some of the most energy-efficient and reliable products in the industry.
- **Gas driven VRF system** - providing an energy-efficient solution that delivers a reduced carbon footprint.
- **Virus washer** - suppresses 99% of airborne viruses from treated air including common cold, flu and avian flu. Now available as a free-standing unit, it will soon be available in air conditioning systems.
- **Solar powered air-conditioners** - set to revolutionise the air conditioning industry.

## World-leading innovators

The Think GAIA concept is driving environmentally sustainable product development throughout the whole SANYO corporation, including the eneloop battery, which can be recharged 1000 times and has a solar charger, and the revolutionary AQUA washing machine, which uses ozone rather than detergent and recycles its water.



The eneloop battery can be recharged 1000 times and has a solar charger.



The revolutionary AQUA washing machine uses ozone rather than detergent and recycles its water.



SANYO supplies the nickel-metal batteries used in hybrid cars such as Ford's Escape Hybrid and Honda's Accord Hybrid.





**ROOM AIR CONDITIONERS**

# Introduction

SANYO's room air conditioners are specifically designed for small to medium size areas such as homes and small offices. As with all SANYO air conditioning systems, room air conditioners are a result of an extensive research and development programme developed since 1958.

Our innovative products are the ideal solution when you need quiet, efficient room air conditioning to create a comfortable environment within a realistic budget.

The latest generation of SAP models are among the most technically advanced and energy-efficient systems available today and are backed by SANYO's renowned reliability and customer service.

In addition to 1:1 split systems, SANYO also produce the Flexi Multi - an advanced range of R410A DC Inverter Heat Pump Multi split systems. 2, 3 or 4 indoor units can be connected to a single outdoor unit of 5.6kW or 9.0kW.

## Benefits

### Environmentally friendly

The SAP range utilises the non-ozone depleting R410A refrigerant, which means you can benefit from a comfortable environment without compromising the environment.

### Reliability and comfort

Product quality not only implies high performance but, above all, high product reliability - our products are capable of guaranteeing durable function for a long period of time. However, when dealing with air conditioners, comfort is a priority and the multiple special functions that SANYO air conditioners are equipped with demonstrate an extraordinary attention to care for the environment in which we live. Furthermore, all Split type units include a heat pump function, guaranteeing the right internal temperature both in summer and in winter.

### Increased efficiency

Innovations in the system mean that the SANYO range of room conditioners deliver market-leading efficiency.

### Cost effective running

Increased efficiency also means lower energy consumption and lower operating costs for you.

### Quiet operation

Our leading technology means you can enjoy the benefits of air conditioning without the noise.

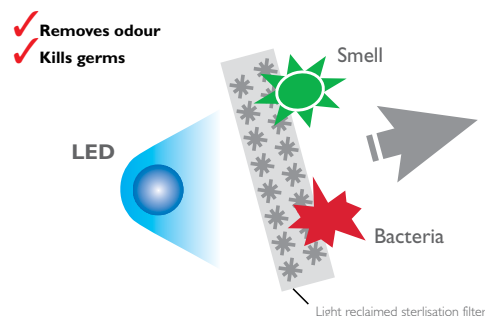
### Stylish design

All our range is designed to look good in any environment, but for the ultimate in style the Shiki Sai Kan and the new Mini Shiki Sai Kan come with a choice of front panels to match any interior décor.

## Features

### Cleans air of bacteria, germs and allergens

Units equipped with photocatalytic sterilisation contain a special anti-bacterial function, which is equipped with a UV lamp. The lamp, coupled with a regenerative filter, enables the elimination of bacteria, germs and allergens in the air. The function can be activated by pushing the LED CLEAN key. This activates the UV antibacterial unit for approximately one hour, holding bacteria within the filter and eliminating all bacteria in the treated airflow.



The light reclaimed sterilisation filter attracts airborne bacteria, germs and allergens, and inactivates these pollutants with LED irradiation.



# Class A Energy Efficiency

## High Energy Efficiency

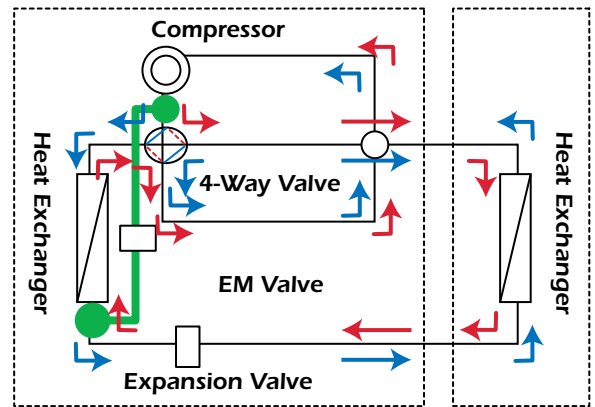
SANYO conforms to the 2002/31/EC Directive - 92/75/EEC "Energy Labelling Directive (ELD)", which became legislation in June 2004 on all air conditioning products up to 12kW cooling capacity. The DC inverter technology helps us to achieve the 'A' class, the highest level of energy efficiency as clearly indicated on the standard labelling system.

Energy		Air conditioning	Product Type
Manufacturer		<b>SANYO</b>	
External Unit		SAP -***	Reference
Internal Unit		SAP -***	
<b>More Efficient</b>		<b>A</b>	<b>Energy Class</b> There are seven classes, from "A" to "G"
A			
B			
C			
D			
E			
F			
<b>Less Efficient</b>			
G			
<b>Annual energy consumption in cooling mode KWh/year</b> (Annual consumption depends on climate and how the unit is used)		***	<b>Annual energy consumption</b> The annual energy consumption is calculated by multiplying the consumption at full cooling capacity by an average of 500 hours of operation.
<b>Cooling output</b>	KW	***	<b>Energy efficiency ratio</b> The higher the value of this ratio, the more efficient is the air conditioning unit.
<b>Energy efficiency ratio</b> Full load (the higher the better)		***	
<b>Type</b>			<b>TYPE OF CLIMATE</b>
Cooling Only	—		
Cooling + Heating	←		
Air Cooled	←		
Water Cooled	←		
<b>Heat Output</b>	KW	***	
<b>Heating Performance</b> A: higher G: lower		ABCDEF G	
<b>Noise</b> (dB(A) re 1 pW)		** **	<b>Product noise</b> Inside Outside
Further information is contained in product brochures.			
Norm EN 814 Air-Conditioner Energy Label Directive 2002/31/EC			

## Non-stop heating function

In traditional air conditioners, when the external temperature becomes extremely cold, it is necessary to invert the refrigeration cycle in order to defrost the external heat exchanger and attain correct functional efficiency of the external unit. During this defrosting cycle, the air conditioner does not provide heat.

With SANYO's exclusive system, the inversion of the cycle is unnecessary, avoiding interruption of the heating function. A sophisticated bypass system, operated by means of an electrically actuated valve, delivers hot refrigerant from the compressor directly to the external heat exchanger. This means that the inversion of the refrigeration cycle is no longer necessary and the heating function is always efficient.



## Sensor temperature function

Modern architecture calls for installation of air conditioning systems in spaces that are not ideal for comfortable cooling and heating of the local environment. SANYO's infrared remote controls are equipped with an ambient temperature sensor. This sensor can be activated instead of the one mounted on the internal unit by pressing the sensor key on the remote control. In this manner, the required temperature is guaranteed exactly where it is requested, regardless of the position of the unit within the room.

## Advanced Twin Rotary Compressor

The dual rotors revolve smoothly in a well-balanced fashion for stable and efficient performance. This also contributes to increased comfort and rapid cooling, as well as the unit's extra quiet, economical and reliable operation.







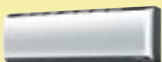














## SANYO participates in the Eurovent certification programme

Eurovent/Cecomaf is an independent organisation of major air conditioning manufacturers who have agreed, on a voluntary basis, to adhere to performance certification programmes.

The presence of the Eurovent logo confirms that a manufacturer's performance data has been verified by independent laboratories. It is also a guarantee that information such as capacity, current draw and noise levels meet consumer requirements.

# The SANYO SAP Range

Inverter Systems						
Capacity (kW)			2.65	3.5	5.1	7.1
	Shiki Sai Kan Wall Mounted Units		■	■		
	Mini Shiki Sai Kan Wall Mounted Units		■	■		
	KRV Inverter - wall mounted units		■	■	■	■
	XRV Inverter - 4 way cassettes		■	■	■	
	F(T)RV Inverter - floor and ceiling mounted units		■	■	■	■
	URV Inverter - concealed duct		■	■	■	■

Constant Speed Systems					
Capacity (kW)		2.6	3.5	5.1	6.4
	KR Constant Speed - wall mounted units		■	■	■
	XR Constant Speed - 4 way cassettes		■	■	
	FTR Constant Speed - wall & ceiling units		■	■	■
	UR Constant Speed - concealed duct		■	■	■



**INVERTER SYSTEMS**

# Shiki Sai Kan Wall Mounted Units

**SANYO's Shiki Sai Kan model integrates cutting-edge technology including the industry's top-class energy-saving design, a wide array of airflow control and heating/cooling operation down to -15°C.**

- Amazing performance in energy-saving: COP up to 5.0
- No reverse cycle defrost. Utilises hot gas injection defrosting
- Sleek & stylish panel design in a choice of 7 designer colours
- Standard version silver
- Super quiet mode: 22 dB(A)
- LED photocatalytic sterilisation function features high performance odour, germ and bacteria filters

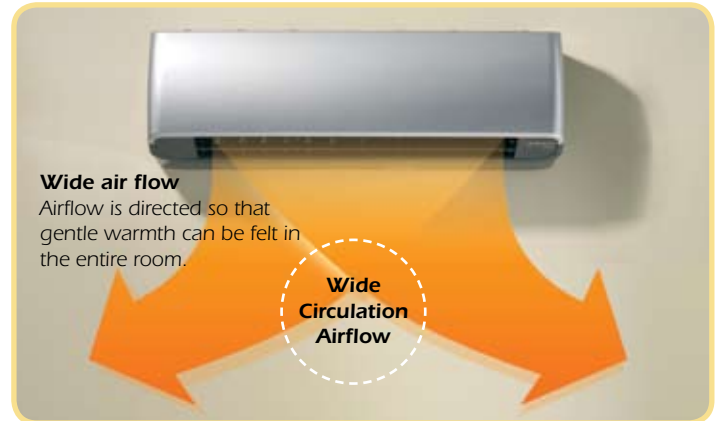
## Negative Ions generator

The negative ions generator fills and revitalises your room with healthy negative ions throughout the year. Negative ions help clean the air of pollutants and are beneficial to health.

\*Ion generating power - over 100,000 parts/cc

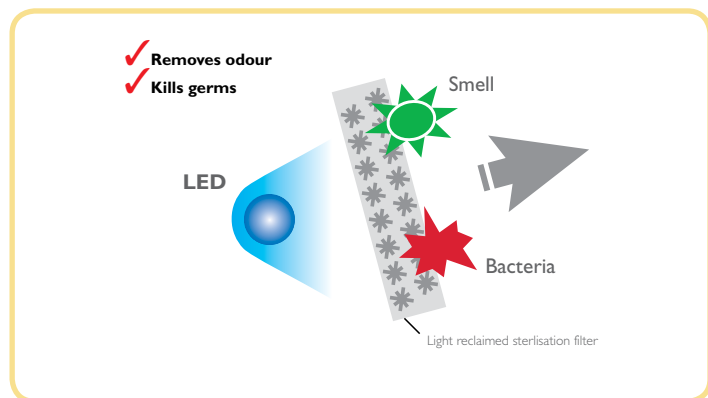


## 6 Colour choices (options)



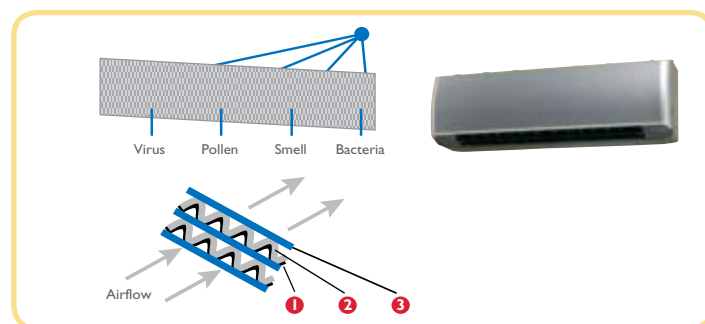
## Photocatalytic sterilisation

The light reclaimed sterilisation filter attracts airborne bacteria, germs and allergens, and inactivates these pollutants with LED irradiation.



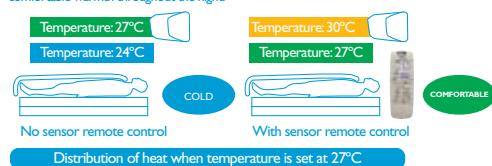
## Air clean apatite filter

Apatite or calcium phosphate is highly effective in trapping germs, mites, pollen, dirt and dust, as well as cigarette odour. The triple layered air clean apatite filter consists of antibacterial, deodorising and dust-collecting sections that maintain healthy, clean air in your room.



## Built-in temperature sensor

The temperature sensor incorporated into the remote control monitors the temperature around you. Place the sensor remote control at your bedside so that you can enjoy comfortable warmth throughout the night.



### 1 Deodorising layer -

- Activated carbon zeolite deodoriser
- Photocatalyst deodoriser

### 2 Dust collecting layer

- Electrically charged fibre dust collector

### 3 Antibacterial layer

- Ceramic apatite antibacterial action
- Photocatalyst antibacterial action

		INVERTER HEAT PUMP			
		size 94		size 124	
Performance		Cooling	Heating	Cooling	Heating
Capacity	kW	2.65 (0.90-3.80)*	3.60 (0.90-5.50)*	3.50 (0.90-4.20)*	4.80 (0.90-6.00)*
Power input	W	250-530-1350	250-720-1450	250-875-1435	250-1140-1545
EER/COP		5.00	5.00	4.00	4.21
Energy class		A	A	A	A
EU Total	kW	2.55	3.2	3.37	4.3
EU Sensible	kW	2.3	-	2.7	-
Running amperes	A	2.4 (1.6-6.9)	3.3 (1.6-9.9)	4.0 (1.6-7.8)	5.2 (1.6-9.9)
Indoor Unit		SAP-KRV94EHDX		SAP-KRV124EHDX	
Air circulation	(H) m <sup>3</sup> /h	600		630	
Moisture removal	Litres/h	1.8		2.0	
Sound pressure level	(Quiet Mode/H/M/L) dB(A)	22/39/38/30		22/40/38/30	
Dimensions	(HxWxD) mm	300x898x200		300x898x200	
Net weight	kg	12.5		12.5	
Power supply		220 - 240V/1ϕ 50Hz			
Outdoor Unit		SAP-CRV94EHDX		SAP-CRV124EHDX	
Sound power level	(H) dB(A)	67		68	
Sound pressure level	(H) dB(A)	49		50	
Dimensions	(HxWxD) mm	569x790x285			
Net weight	kg	40			
Power supply		220 - 240V/1ϕ 50Hz			
Installation Data		size 94		size 124	
Pipe size suction/discharge	Inches	1/4, 3/8			
Max piping length	m	15			
Precharged piping length	m	7.5			
Amount of additional refrigerant	g/m	15			
Max elevation difference - O.U. - I.U.	m	10			
Recommended fuse size	AMP	16			
Communication cables	mm	3 Core + Earth			
Power supply to		Indoor unit			

Following the success and popularity of the Shiki Sai Kan, SANYO have developed a smaller version. Not only stylish, it also offers exceptional energy saving performance: COP up to 4.31.



Simple elegant design with panels available in 5 different colours



- Cooling and heating down to -15°C
- The LED photocatalytic sterilization function ensures excellent performance to combat odours, germs and bacteria
- Automatic sweep control
- Apatite ceramic filter
- Multi-functional remote control with built-in temperature sensor
- Clock with ON/OFF program timer
- Washable front panel
- Low noise levels: 22 dBA (Quiet mode)
- Night Set Back/Economy mode function ensures quiet and energy saving cooling and heating

		INVERTER HEAT PUMP			
		Model 96		Model 126	
Performance		Cooling	Heating	Cooling	Heating
Capacity	kW	2.65 (0.9-3.6)	3.6 (0.9-4.9)	3.5 (0.9-3.6)	4.8 (0.9-5.4)
Power input	W	250-650-1040	250-650-1400	250-1025-1200	250-1165-1600
EER/COP		4.21	4.31	3.41	3.81
Energy class		A	A	A	A
Running amperes	A	3.3 (1.3-5.4)	4.0 (1.2-6.8)	4.8 (1.2-5.6)	5.8 (1.1-7.3)
Annual energy consumption (cooling)	kW	315	-	512.5	-
Power supply	V,ph,Hz	230, 1+N, 50 outdoor unit			
Indoor Unit		SAP-KRV96EHDS		SAP-KRV126EHDS	
Air circulation	(H) m <sup>3</sup> /h	480	480	500	500
Moisture removal	Litres/h	1.6	-	2.0	-
Sound power level	(H) dB(A)	56	56	57	57
Sound pressure level	(Quiet/L/M/H) dB(A)	22/28/35/41	22/28/35/41	22/28/35/42	22/29/36/42
Dimensions	(HxWxD) mm	265x789x180		265x789x180	
Net weight	kg	9.5		9.5	
Outdoor Unit		SAP-CRV96EHDS		SAP-CRV96EHDS	
Sound power level	(H) dB(A)	63	64	65	66
Sound pressure level	(H) dB(A)	45	46	47	48
Dimensions	(HxWxD) mm	565x790x265		565x790x265	
Net weight	kg	36		36	
Installation Data		Model 96		Model 126	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8	
Max piping length	m	15		15	
Max elevation diff. - O.U. - I.U.	m	7		7	
Chargeless piping length	m	7.5		7.5	
Amount of additional refrigerant	AMP	15		15	

**Ideal solution when you need quiet, energy-efficient and controllable room air conditioning.**



- New stylish appearance with flat front panel
- Auto restart after power failure and auto changeover
- Washable and reusable air clean apatite filter
- Infrared remote control with 24-hour clock with on/off program timer
- Cooling & heating operation down to -15°C (size 184 & 244)

		INVERTER HEAT PUMP							
		size 93		size 123		size 184		size 244	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.65 (0.90-3.20)*	3.60 (0.90-5.00)*	3.50 (0.90-3.80)*	4.20 (0.90-5.80)*	5.15 (1.20-5.50)*	6.00 (1.30-6.40)*	7.10 (1.20-8.00)*	8.50 (1.30-9.50)*
Power input	W	250-755-1150	250-995-1340	250-1090-1300	250-1165-1500	250-1500-1800	270-1575-1930	280-2355-2845	290-2490-3150
EER/COP		3.51	3.62	3.21	3.61	3.43	3.81	3.01	3.41
Energy class		A	A	A	A	A	A	B	B
EU Total	kW	2.55	2.95	3.37	3.52	4.96	5.04	6.84	5.31
EU Sensible	kW	2.06	-	2.5	-	3.9	-	4.99	-
Running amperes	A	3.9 (1.3-5.9)	4.8 (1.2-6.5)	5.2 (1.2-6.2)	5.5 (1.2-7.1)	7.0 (1.2-8.4)	7.4 (1.3-9.0)	10.7 (1.2-13.6)	11.3 (1.3-15.1)
Indoor Unit		SAP-KRV93EHFP		SAP-KRV123EHFP		SAP-KRV184EHFP		SAP-KRV244EHFP	
Air circulation	(H) m <sup>3</sup> /h	480	530	500	530	890	920	1020	1110
Moisture removal	Litres/h	1.6	-	2.0	-	2.3	-	2.3	-
Sound pressure level	(H/M/L) dB(A)	34/31/28	34/31/28	36/33/29	34/31/29	42/38/30	41/38/30	47/44/41	46/43/40
Dimensions	(HxWxD) mm	285x825x204		285x825x204		298x1065x231		298x1065x231	
Net weight	kg	9		9		12		12	
Power supply		220 - 240V/1ø 50Hz							
Outdoor Unit		SAP-CRV93EHFP		SAP-CRV123EHFP		SAP-CRV184EH		SAP-CRV244EH	
Sound power level	(H) dB(A)	64	65	65	67	69	70	73	74
Sound pressure level	(H) dB(A)	46	47	47	49	51	52	55	56
Dimensions	(HxWxD) mm	548x720x265		548x720x265		670x880x285		740x900x320	
Net weight	kg	34		35		44		59	
Power supply		220 - 240V/1ø 50Hz							
Installation Data		size 93		size 123		size 184		size 244	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8		1/4, 1/2		1/4, 5/8	
Max piping length	m	15		15		30		30	
Precharged piping length	m	7.5		7.5		10		10	
Amount of additional refrigerant	g/m	15		15		25		25	
Max elevation difference O.U. - I.U.	m	7		7		15		15	
Recommended fuse size	AMP	10		10		16		20	
Communication cables	mm	3 Core + Earth							
Power supply to		Indoor unit		Indoor unit		Outdoor unit		Outdoor unit	

The XRV DC inverter driven cassette is designed to fit into a standard 600mm x 600mm ceiling grid and is ideal for small commercial and retrofit projects.



- DC inverter technology for precise temperature control
- Auto restart after power failure and auto changeover
- Infrared remote control with 24-hour clock with on/off program timer
- Cooling & heating operation down to -15°C (size 184)
- Built-in drain pump gives 250mm lift

		INVERTER HEAT PUMP					
		size 93		size 123		size 184	
		Cooling	Heating	Cooling	Heating	Cooling	Heating
Performance							
Capacity	kW	2.65 (0.90-3.20)*	3.60 (0.90-5.00)*	3.50 (0.90-3.80)*	4.20 (0.90-5.80)*	5.15 (1.20-5.50)*	6.00 (1.30-6.40)*
Power input	W	250-755-1150	250-995-1340	250-1090-1300	250-1165-1500	250-1500-1800	270-1575-1930
EER/COP		3.51	3.62	3.21	3.61	3.43	3.81
Energy class		A	A	A	A	A	A
EU Total	kW	2.55	3.06	3.37	3.57	4.96	5.1
EU Sensible	kW	1.8	-	2.77	-	3.86	-
Running amperes	A	3.9 (1.3-5.9)	4.8 (1.2-6.5)	5.2 (1.2-6.2)	5.5 (1.2-7.1)	7.0 (1.2-8.4)	7.4 (1.3-9.0)
Indoor Unit		SAP-XRV93EH		SAP-XRV123EH		SAP-XRV184EH	
Air circulation	(H) m <sup>3</sup> /h	700		700		750	
Moisture removal	Litres/h	0.5	-	1.0	-	2.3	-
Sound pressure level	(H/M/L) dB(A)	43/39/36		43/39/36		45/40/37	
Dimensions - Unit	(HxWxD) mm	296x575x575		296x575x575		296x575x575	
Dimensions - Panel	(HxWxD) mm	64x730x730		64x730x730		64x730x730	
Net weight - Unit	kg	16.5		16.5		16.5	
Net weight - Panel	kg	2.5		2.5		2.5	
Power supply		220 - 240V/1ø 50Hz					
Outdoor Unit		SAP-CRV93EHFP		SAP-CRV123EHFP		SAP-CRV184EH	
Sound power level	(H) dB(A)	64	65	65	67	69	70
Sound pressure level	(H) dB(A)	46	47	47	49	51	52
Dimensions	(HxWxD) mm	548x720x265		548x720x265		670x880x285	
Net weight	kg	34		35		44	
Power supply		220 - 240V/1ø 50Hz					
Installation Data		size 93		size 123		size 184	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8		1/4, 1/2	
Max piping length	m	15		15		30	
Precharged piping length	m	7.5		7.5		10	
Amount of additional refrigerant	g/m	15		15		25	
Max elevation difference O.U. - I.U.	m	7		7		15	
Recommended fuse size	AMP	10		10		16	
Communication cables	mm	3 Core + Earth					
Power supply to		Indoor unit		Indoor unit		Outdoor unit	

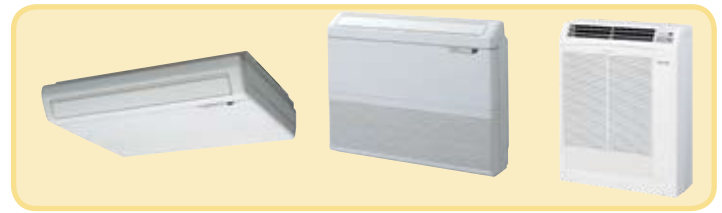


# F(T)RV Inverter - floor & ceiling mounted units

## R410A

**INVERTER**  
Air Conditioner

**SANYO's inverter console range provides outstanding performance and energy-saving features as well as a solution to difficult installation situations.**



- DC inverter technology for precise temperature control
- Auto restart after power failure and auto changeover
- Cooling & heating operation down to -15°C (size 184 & 244)
- Infrared remote control with 24-hour clock with on/off program timer
- Night set back/Economy mode function ensuring energy saving in cooling and heating

		INVERTER HEAT PUMP							
		size 93		size 123		size 184		size 244	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.65 (0.90-3.20)*	3.60 (0.90-5.00)*	3.50 (0.90-3.80)*	4.20 (0.90-5.80)*	5.15 (1.20-5.50)*	6.00 (1.30-6.40)*	7.10 (1.20-8.00)*	8.50 (1.30-9.50)*
Power input	W	250-755-1150	250-995-1340	250-1090-1300	250-1165-1500	250-1500-1800	270-1575-1930	280-2355-2845	290-2490-3150
EER/COP		3.51	3.62	3.21	3.61	3.43	3.81	3.01	3.41
Energy class		A	A	A	A	A	A	B	B
EU Total	kW	2.55	2.95	3.37	3.52	4.96	5.04	6.84	5.31
EU Sensible	kW	1.8	-	2.77	-	3.86	-	4.91	-
Running amperes	A	3.9 (1.3-5.9)	4.8 (1.2-6.5)	5.2 (1.2-6.2)	5.5 (1.2-7.1)	7.0 (1.2-8.4)	7.4 (1.3-9.0)	10.7 (1.2-13.6)	11.3 (1.3-15.1)
Indoor Unit		SAP-FRV93EH		SAP-FTRV123EH		SAP-FTRV184EH		SAP-FTRV244EH	
Air circulation	(H) m <sup>3</sup> /h	400		700		800		840	
Moisture removal	Litres/h	1.0	-	1.3	-	2.0	-	2.2	-
Sound pressure level	(H/M/L) dB(A)	43/40/34		43/40/34		39/44/48		44/47/50	
Dimensions	(HxWxD) mm	700x560x200		680x900x190		680x900x190		680x900x190	
Net weight	kg	18.6		23.5		23.5		23.5	
Power supply		220 - 240V/1ø 50Hz							
Outdoor Unit		SAP-CRV93EHFP		SAP-CRV123EHFP		SAP-CRV184EH		SAP-CRV244EH	
Sound power level	(H) dB(A)	64	65	65	67	69	70	73	74
Sound pressure level	(H) dB(A)	46	47	47	49	51	52	55	56
Dimensions	(HxWxD) mm	548x720x265		548x720x265		670x880x285		740x900x320	
Net weight	kg	34		35		44		59	
Power supply		220 - 240V/1ø 50Hz							
Installation Data		size 93		size 123		size 184		size 244	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8		1/4, 1/2		1/4, 5/8	
Max piping length	m	15		15		30		30	
Precharged piping length	m	7.5		7.5		10		10	
Amount of additional refrigerant	g/m	15		15		25		25	
Max elevation difference O.U. - I.U.	m	7		7		15		15	
Recommended fuse size	AMP	10		10		16		20	
Communication cables	mm	3 Core + Earth							
Power supply to		Indoor unit		Indoor unit		Outdoor unit		Outdoor unit	

The URV DC inverter driven ducted unit is ideal for flexible, concealed air conditioning in all types of room air conditioning applications.



- DC inverter technology for precise temperature control
- Auto restart after power failure and auto changeover
- Fresh air knockout
- Infrared remote control with 24-hour clock with on/off program timer
- Built-in drain pump gives 250mm lift

		INVERTER HEAT PUMP							
		size 93		size 123		size 184		size 244	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.65 (0.90-3.20)*	3.60 (0.90-5.00)*	3.50 (0.90-3.80)*	4.20 (0.90-5.80)*	5.15 (1.20-5.50)*	6.00 (1.30-6.40)*	7.10 (1.20-8.00)*	8.50 (1.30-9.50)*
Power input	W	250-755-1150	250-995-1340	250-1090-1300	250-1165-1500	250-1500-1800	270-1575-1930	280-2355-2845	290-2490-3150
EER/COP		3.51	3.62	3.21	3.61	3.43	3.81	3.01	3.41
Energy class		A	A	A	A	A	A	B	B
EU Total	kW	2.55	2.95	3.37	3.52	4.96	5.04	6.84	5.31
EU Sensible	kW	2.16	-	2.56	-	3.97	-	5.1	-
Running amperes	A	3.9 (1.3-5.9)	4.8 (1.2-6.5)	5.2 (1.2-6.2)	5.5 (1.2-7.1)	7.0 (1.2-8.4)	7.4 (1.3-9.0)	10.7 (1.2-13.6)	11.3 (1.3-15.1)
Indoor Unit		SAP-URV93EH		SAP-URV123EH		SAP-URV184EH		SAP-URV244EH	
Air circulation	(H) m <sup>3</sup> /h	600		600		875		1000	
Moisture removal	Litres/h	0.8		1.5		1.8		2.6	
External static pressure (std/booster)	Pa	50/70		50/70		50/7		50/70	
Sound pressure level (H/M/L)	dB(A)	54/43/40		54/43/40		TBA		TBA	
Dimensions (HxWxD)	mm	266x926x571		266x926x571		266x1058x571		266x1058x571	
Net weight	kg	30		30		35		35	
Power supply		220 - 240V/1ø 50Hz							
Outdoor Unit		SAP-CRV93EHFP		SAP-CRV123EHFP		SAP-CRV184EH		SAP-CRV244EH	
Sound power level	(H) dB(A)	64	65	65	67	69	70	73	74
Sound pressure level	(H) dB(A)	46	47	47	49	51	52	55	56
Dimensions (HxWxD)	mm	548x720x265		548x720x265		670x880x285		740x900x320	
Net weight	kg	34		35		44		59	
Power supply		220 - 240V/1ø 50Hz							
Installation Data		size 93		size 123		size 184		size 244	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8		1/4, 1/2		1/4, 5/8	
Max piping length	m	15		15		30		30	
Precharged piping length	m	7.5		7.5		10		10	
Amount of additional refrigerant	g/m	15		15		25		25	
Max elevation difference O.U. - I.U.	m	7		7		15		15	
Recommended fuse size	AMP	10		10		16		20	
Communication cables	mm	3 Core + Earth							
Power supply to		Indoor unit		Indoor unit		Outdoor unit		Outdoor unit	

# CRV Outdoor Units

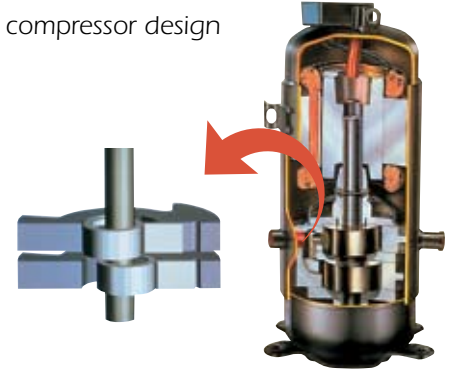
The Room Air Conditioners outdoor units utilise the latest SANYO twin rotary compressor in which perfectly balanced dual rotors revolve smoothly and efficiently to provide powerful, quiet and vibration-free performance.



## Rapid and accurate temperature control

The Room Air Conditioner Systems use Advanced Digital Hybrid (ADH) technology for better, smarter and more cost-efficient year-round climate control. Immediately following start up, the DC compressor operates at maximum power to provide almost instant heating or cooling. As the desired air temperature is reached, a special Pulse Width Module automatically adjusts the compressor's frequency to exactly meet the cooling or heating requirements of the room. The result is exceptionally precise temperature control, less noise and significant energy savings.

Advanced DC compressor design



**CONSTANT SPEED SYSTEMS**

**SANYO's online fixed-speed range provides outstanding performance and offers a low-cost alternative to inverter technology.**



- Auto restart after power failure
- Multi-functional wireless remote control with built-in temperature sensor with on/off program timer
- Cold draft prevention
- Quiet mode from 27 dB(A)
- Automatic cooling & heating changeover

		CONSTANT SPEED HEAT PUMP							
		size 94		size 124		size 184		size 224	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.65	3.00	3.50	4.00	5.15	5.70	6.40	7.20
Power input	W	825	830	1090	1105	1600	1580	2275	2240
EER/COP		3.21	3.61	3.21	3.62	3.22	3.61	2.81	3.21
Energy class		A	A	A	A	A	A	C	C
EU Total	kW	2.55	2.46	3.37	3.36	4.74	4.67	5.89	5.90
EU Sensible	kW	2.06	-	2.5	-	3.81	-	4.50	-
Running amperes	A	3.7	3.8	4.9	5.0	7.1	7.0	10.0	9.8
Indoor Unit		SAP-KR94EH		SAP-KR124EH		SAP-KR184EH		SAP-KR224EH	
Air circulation	(H) m <sup>3</sup> /h	480	500	500	530	890	890	980	980
Moisture removal	Litres/h	1.8	-	2.0	-	2.3	-	3.3	3.3
Sound pressure level	(H/M/L) dB(A)	38/33/28	37/32/27	41/34/28	40/33/27	42/39/35	41/38/34	44/40/36	45/41/37
Dimensions	(HxWxD) mm	285x825x189		285x825x189		298x1065x218		298x1065x218	
Net weight	kg	10		10		12		12	
Power supply		220 - 240V/1ø 50Hz							
Outdoor Unit		SAP-CR94EH(A)		SAP-CR124EH(A)		SAP-CR184EH(A)		SAP-CR224EH(A)	
Sound power level	(H) dB(A)	65	66	67	68	73	74	75	76
Sound pressure level	(H) dB(A)	47	48	49	50	55	56	57	58
Dimensions	(HxWxD) mm	548x720x265		565x790x285		670x880x285		670x880x285	
Net weight	kg	35		37		48		56	
Power supply		220 - 240V/1ø 50Hz							
Installation Data		size 94		size 124		size 184		size 224	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8		1/4, 1/2		1/4, 5/8	
Max piping length	m	15		15		30		30	
Precharged piping length	m	7.5		7.5		7.5		10	
Amount of additional refrigerant	g/m	15		15		25		25	
Max elevation difference O.U. - I.U.	m	7		7		7		7	
Recommended fuse size	AMP	10		10		16		16	
Communication cables	mm	4 Core + Earth		4 Core + Earth		6 Core + Earth		6 Core + Earth	
Power supply to		Indoor unit		Indoor unit		Outdoor unit		Outdoor unit	

# XR Constant Speed - 4 way cassettes

**R410A**

The XR online cassette is designed to fit into a standard 600mm x 600mm ceiling grid and is ideal for small commercial and retrofit applications.



- Auto restart after power failure and auto changeover
- Cold draft prevention
- Infrared remote control with 24-hour clock with on/off program timer
- Multi directional airflow provides uniform airflow throughout the room
- Built-in drain pump gives 250mm lift

		CONSTANT SPEED HEAT PUMP					
		size 94		size 124		size 184	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.87	3.10	3.65	4.52	5.15	5.70
Power input	W	875	775	1075	1055	1600	1580
EER/COP		3.28	4.00	3.40	4.28	3.21	3.61
Energy class		A	A	A	A	A	A
EU Total	kW	2.55	2.57	3.37	3.75	4.96	4.73
EU Sensible	kW	2.1	-	2.51	-	3.74	-
Running amperes	A	3.7	3.8	4.9	5.0	7.1	7.0
Indoor Unit		SAP-XR94EH		SAP-XR124EH		SAP-XR184EH	
Air circulation	(H) m <sup>3</sup> /h	700		700		750	
Moisture removal	Litres/h	0.5	-	1.0	-	2.3	-
Sound pressure level	(H/M/L) dB(A)	43/39/36	43/39/36	43/39/36	43/39/36	45/40/37	45/40/37
Dimensions - Unit	(HxWxD) mm	296x575x575		296x575x575		296x575x575	
Dimensions - Panel	(HxWxD) mm	64x730x730		64x730x730		64x730x730	
Net weight - Unit	kg	16.5		16.5		16.5	
Net weight - Panel	kg	2.5		2.5		2.5	
Power supply		220 - 240V/1ø 50Hz					
Outdoor Unit		SAP-CR94EH(A)		SAP-CR124EH(A)		SAP-CR184EH(A)	
Sound power level	(H) dB(A)	65	66	67	68	73	74
Sound pressure level	(H) dB(A)	47	48	49	50	55	56
Dimensions	(HxWxD) mm	548x720x265		565x790x285		670x880x285	
Net weight	kg	35		37		48	
Power supply		220 - 240V/1ø 50Hz					
Installation Data		size 94		size 124		size 184	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8		1/4, 1/2	
Max piping length	m	15		15		30	
Precharged piping length	m	7.5		7.5		7.5	
Amount of additional refrigerant	g/m	15		15		25	
Max elevation difference O.U. - I.U.	m	7		7		7	
Recommended fuse size	AMP	10		10		16	
Communication cables	mm	4 Core + Earth		4 Core + Earth		6 Core + Earth	
Power supply to		Indoor unit		Indoor unit		Indoor unit	

# FTR Constant Speed - wall & ceiling mounted units

**R410A**

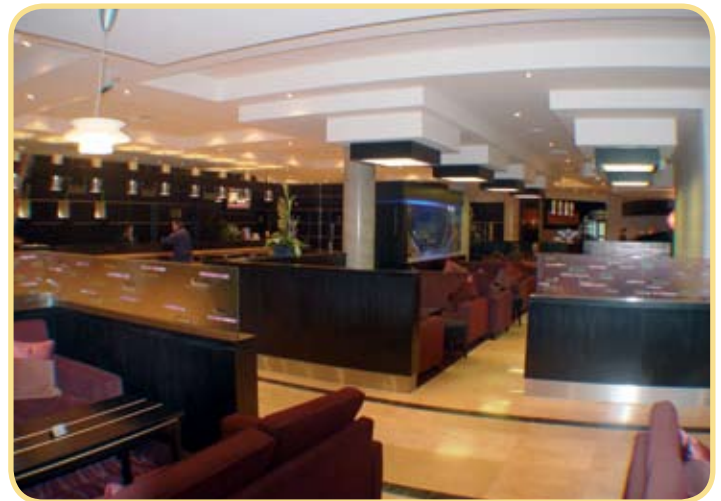
**SANYO's online fixed-speed FTR range of console units can be mounted on the ceiling or on the floor to provide a flexible solution to difficult installation situations.**



- Auto restart after power failure and auto changeover
- Cold draft prevention in heating mode
- Lightweight and compact
- Infrared remote control with 24-hour clock with on/off program timer
- Automatic louvre control provides uniform airflow throughout the room

		CONSTANT SPEED HEAT PUMP							
		size 94		size 124		size 184		size 224	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.65	3.20	3.60	4.35	5.15	5.70	6.40	7.20
Power input	W	825	810	1055	1045	1600	1580	2275	2240
EER/COP		3.21	3.95	3.41	4.16	3.22	3.61	2.81	3.21
Energy class		A	A	A	A	A	A	C	C
EU Total	kW	2.55	2.62	3.37	3.57	4.96	4.67	6.16	5.90
EU Sensible	kW	1.8	-	2.77	-	3.61	-	4.13	-
Running amperes	A	3.7	3.8	4.9	5.0	7.1	7.0	10.0	9.8
Indoor Unit		SAP-FR94EH		SAP-FTR124EH		SAP-FTR184EH		SAP-FTR224EH	
Air circulation	(H) m <sup>3</sup> /h	400		700		800		840	
Moisture removal	Litres/h	1.0	-	1.3	-	2.0	-	2.2	-
Sound pressure level	(H/M/L) dB(A)	43/40/34	43/40/34	47/43/38	47/43/38	39/44/48		44/47/50	
Dimensions	(HxWxD) mm	700x560x200		680x900x190		680x900x190		680x900x190	
Net weight	kg	18.6		23.5		23.5		23.5	
Power supply		220 - 240V/1ø 50Hz							
Outdoor Unit		SAP-CR94EH(A)		SAP-CR124EH(A)		SAP-CR184EH(A)		SAP-CR224EH(A)	
Sound power level	(H) dB(A)	65	66	67	68	73	74	75	76
Sound pressure level	(H) dB(A)	47	48	49	50	55	56	57	58
Dimensions	(HxWxD) mm	548x720x265		565x790x285		670x880x285		670x880x285	
Net weight	kg	35		37		48		56	
Power supply		220 - 240V/1ø 50Hz							
Installation Data		size 94		size 124		size 184		size 224	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8		1/4, 1/2		1/4, 5/8	
Max piping length	m	15		15		30		30	
Precharged piping length	m	7.5		7.5		7.5		10	
Amount of additional refrigerant	g/m	15		15		25		25	
Max elevation difference O.U. - I.U.	m	7		7		7		7	
Recommended fuse size	AMP	10		10		16		16	
Communication cables	mm	4 Core + Earth		4 Core + Earth		6 Core + Earth		6 Core + Earth	
Power supply to		Indoor unit		Indoor unit		Indoor unit		Indoor unit	

The online UR ducted unit is ideal for flexible, concealed cooling and heating in all types of room air conditioning applications.



- Auto restart after power failure and auto changeover
- Cold draft prevention
- Fresh air knockout
- Infrared remote control with 24-hour clock with on/off program timer
- Built-in drain pump gives 250mm lift

		CONSTANT SPEED HEAT PUMP							
		size 94		size 124		size 184		size 224	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.65	3.00	3.50	4.62	5.15	5.70	6.40	7.20
Power input	W	880	780	1130	1060	1600	1580	2275	2240
EER/COP		3.49	4.1	3.58	4.36	3.22	3.61	2.81	3.21
Energy class		A	A	A	A	A	A	C	C
EU Total	kW	2.55	2.95	3.37	3.52	4.96	5.04	6.84	5.31
EU Sensible	kW	2.16	-	2.67	-	3.97	-	5.1	-
Running amperes	A	3.7	3.8	4.9	5.0	7.1	7.0	10.0	9.8
Indoor Unit		SAP-UR94EH		SAP-UR124EH		SAP-UR184EH		SAP-UR224EH	
Air circulation (H)	m <sup>3</sup> /h	600		600		875		1000	
Moisture removal	Litres/h	0.8	-	1.5	-	1.8	-	2.6	-
External static pressure (std/booster)	Pa	49/69		49/69		49/69		49/69	
Sound pressure level (H/M/L)	dB(A)	45/43/40				45/38/33		48/40/37	
Dimensions (HxWxD)	mm	266x852x571				266x1058x571			
Net weight	kg	30				35			
Power supply		220 - 240V/1ø 50Hz							
Outdoor Unit		SAP-CR94EH(A)		SAP-CR124EH(A)		SAP-CR184EH(A)		SAP-CR224EH(A)	
Sound power level (H)	dB(A)	65	66	67	68	73	74	75	76
Sound pressure level (H)	dB(A)	47	48	49	50	55	56	57	58
Dimensions (HxWxD)	mm	548x720x265		565x790x285		670x880x285		670x880x285	
Net weight	kg	35		37		48		56	
Power supply		220 - 240V/1ø 50Hz							
Installation Data		size 94		size 124		size 184		size 224	
Pipe size suction/discharge	Inches	1/4, 3/8		1/4, 3/8		1/4, 1/2		1/4, 5/8	
Max piping length	m	15		15		30		30	
Precharged piping length	m	7.5		7.5		7.5		10	
Amount of additional refrigerant	g/m	15		15		25		25	
Max elevation difference O.U. - I.U.	m	7		7		7		7	
Recommended fuse size	AMP	10		10		16		16	
Communication cables	mm	4 Core + Earth		4 Core + Earth		6 Core + Earth		6 Core + Earth	
Power supply to		Indoor unit		Indoor unit		Indoor unit		Indoor unit	



**FLEXI MULTI SPLIT SYSTEMS**



# Flexi Multi DC Inverter Heat Pump Multi Split Systems

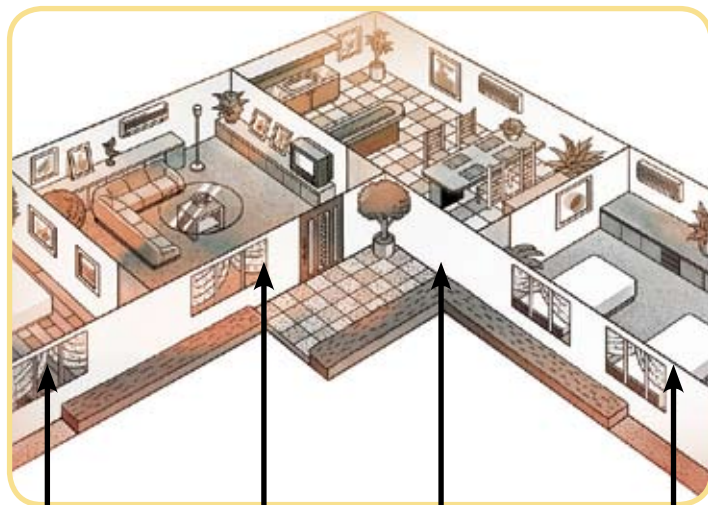
R410A

INVERTER  
Air Conditioner

## The flexible solution

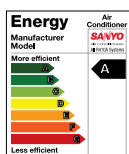
The new SANYO Flexi Multi range of heat pump multi split systems are the ideal, flexible solution for providing quiet and efficient air conditioning to 2, 3 or 4 areas from a single outdoor unit.

- 5 system capacities 4.00kW to 9.40kW
- 6 indoor model styles
- 2, 3 or 4 way multi split
- DC inverter technology for precise temperature control and low start current
- Provides heating or cooling as required



R410A

The Flexi Multi systems utilise the non-ozone depleting R410A refrigerant. This means increased system performance, increased energy efficiency and improved heat transfer, which results in smaller pipe sizes and more compact indoor units.



All Flexi Multi DC inverter models are rated as EEL Category A, which confirms that they are amongst the most energy-efficient systems available. Power consumption during operation is substantially less than that of lower rated units and consequently both the day to day running costs and full life cycle costs are significantly reduced.

## Simple, one touch control

- Full function Remote Controller
- Built-in temperature sensor
- Temperature setting
- Operational mode selection
- Fan speed control
- 24 hour on/off timer
- 1 hour timer



- Exceptional energy saving performance : COP up to 4.31
- Simple elegant design with panels available in 5 different colours
- Cooling and heating down to -15°C
- The LED photocatalytic sterilization function ensures excellent performance to combat odours, germs and bacteria
- Automatic sweep control
- Apatite ceramic filter



Wall mounted unit		SAP-KRV96EHDS			
Performance		Cooling		Heating	
Capacity	kW	2.65		3.60	
Air circulation	(H) m <sup>3</sup> /h	480		480	
Moisture removal	Litres/h	1.6		-	
Sound pressure level	(Q/L/M/H) dB(A)	22/28/35/41		22/28/35/41	
Sound power level	(H) dB(A)	56		56	
Tube Diameter Narrow/Wide	mm(in)	1/4, 3/8			
Dimensions	(HxWxD) mm	265x789x180			
Net weight	kg	9.5			
Power supply	V, Ph, Hz	230, 1+N, 50 to outdoor unit			

## KMRV Wall Units 2.20kW - 7.10kW

- Designed for flush mounting against a wall
- Auto swing louvres for optimum air distribution
- 3 fan speeds
- Quiet operation
- High power mode for rapid cooling or heating



Wall mounted unit		SAP-KMRV74EH		SAP-KMRV94EH		SAP-KMRV124EH		SAP-KRV184EH		SAP-KRV244EH	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	2.20	2.50	2.65	3.60	3.50	4.20	5.15	6.00	7.10	8.50
Air circulation	(H) m <sup>3</sup> /h	520	650	520	650	580	700	680	800	1100	1170
Moisture removal	Litres/h	1.6	-	1.6	-	2.0	-	2.8	-	3.4	-
Sound pressure level	(Q/L/M/H) dB(A)	23/†/†/33	23/†/†/33	23/†/†/34	23/†/†/34	25/†/†/36	25/†/†/34	28/30/38/42	28/30/38/41	30/41/44/47	30/40/43/46
Tube Diameter Narrow/Wide	Inches	1/4, 3/8		1/4, 3/8		1/4, 3/8		1/4, 1/2		1/4, 5/8	
Dimensions	(HxWxD) mm	285x825x202		285x825x202		285x825x202		298x1065x231		298x1065x231	
Net weight	kg	10		10		10		12		12	
Power supply	V, Ph, Hz	230, 1+N, 50 - to outdoor unit									

† data to be confirmed

# XMRV 4 Way Blow Compact Cassettes

## 2.65kW - 5.15kW

**R410A**

**INVERTER**  
Air Conditioner

- Designed to fit into standard 600mm x 600mm ceiling grid
- Fresh air knock out
- Multi directional airflow
- Integrated drain pump gives 250mm lift
- Auto swing louvres for optimum air distribution
- Quiet operation



Semi-concealed 4 way unit		SAP-XMRV94EH		SAP-XMRV124EH		SAP-XRV184EH	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating
Nominal capacity	kW	2.65	3.60	3.50	4.20	5.15	6.00
Air circulation	(H) m <sup>3</sup> /h	700		700		750	
Moisture removal	Litres/h	1.5	-	1.8	-	2.0	-
Sound pressure level	(L/M/H) dB(A)	36/39/43		36/39/43		37/40/45	
Sound power level	(H) dB(A)	52		52		54	
Tube diameter Narrow/Wide	mm(in)	6.35 (1/4)/9.52 (3/8)		6.35 (1/4)/9.52 (3/8)		6.35 (1/4)/12.7 (1/2)	
Dimensions (HxWxD) - Unit	mm	296x575x575		296x575x575		296x575x575	
Dimensions (HxWxD) - Panel	mm	64x730x730		64x730x730		64x730x730	
Net weight - Unit	kg	16.5		16.5		16.5	
Net weight - Panel	kg	2.5		2.5		2.5	
Power supply	V, Ph, Hz			230, 1+N, 50 to outdoor unit			

## FMRV Floor Unit 2.65kW

- Ideal for perimeter air conditioning
- Compact design, just 200mm deep, requires small installation space
- Quiet operation from 34dB(A)
- 3 fan speeds
- Infra red remote control



Floor and Floor/Ceiling unit		SAP-FMRV94EH	
Performance		Cooling	Heating
Nominal capacity	kW	2.65	3.60
Air circulation	(H) m <sup>3</sup> /h	400	
Moisture removal	Litres/h	1.5	-
Sound pressure level	(L/M/H) dB(A)	34/40/43	
Sound power level (H)	dB(A)	54	
Tube diameter Narrow/Wide	mm(in)	6.35 (1/4)/9.52 (3/8)	
Dimensions (HxWxD)	mm	700x560x200	
Net weight	kg	18.6	
Power supply	V, Ph, Hz	230, 1+N, 50 to outdoor unit	

# FT (M)RV Floor/Ceiling Units 3.50kW - 7.10kW

**R410A**

**INVERTER**  
Air Conditioner

- Flexible design allows floor or ceiling mounting without modification
- Large and wide air distribution
- Auto air sweep for optimum distribution
- 3 fan speeds
- Quiet operation
- Infrared remote control



Floor and Floor/Ceiling unit		SAP-FTMRV124EH		SAP-FTRV184EH		SAP-FTRV244EH	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating
Nominal capacity	kW	3.50	4.20	5.15	6.00	7.10	8.50
Air circulation	(H) m <sup>3</sup> /h	700		800		900	
Moisture removal	Litres/h	1.8	-	2.0	-	2.0	-
Sound pressure level	(L/M/H) dB(A)	35/40/44		39/44/48		44/47/50	
Sound power level	(H) dB(A)	55		59		61	
Tube diameter Narrow/Wide	mm(in)	6.35 (1/4)/9.52 (3/8)		6.35 (1/4)/12.7 (1/2)		6.35 (1/4)/15.88 (5/8)	
Dimensions	(HxWxD) mm	680x900x190		680x900x190		680x900x190	
Net weight	kg	23.5		23.5		23.5	
Power supply	V, Ph, Hz	230, 1+N, 50 to outdoor unit					

# UMRV Ducted Units 2.65kW - 7.10kW

- Ideal for flexible, concealed air conditioning
- Infrared remote control
- Built-in drain pump gives 250mm lift
- 3 fan speeds

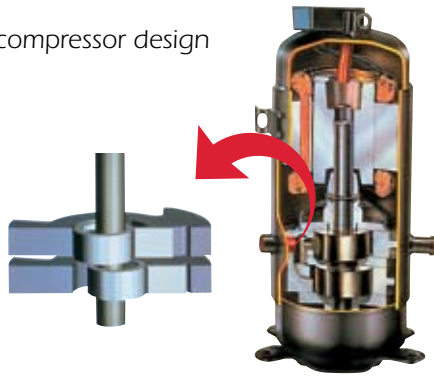


Concealed duct unit		SAP-UMRV94EH		SAP-UMRV124EH		SAP-URV184EH		SAP-URV244EH	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Nominal capacity	kW	2.65	3.60	3.50	4.20	5.15	6.00	7.10	8.50
Air circulation	(H) m <sup>3</sup> /h	600		600		875		1000	
Moisture removal	Litres/h	1.5	-	1.8	-	2.0	-	2.5	-
External static pressure (std/booster)	Pa	49/69		49/69		49/69		49/69	
Sound pressure level	(L/M/H) dB(A)	40/43/45		40/43/45		33/38/45		37/40/48	
Sound power level	(H) dB(A)	54		54		54		57	
Tube diameter Narrow/Wide	mm(in)	6.35 (1/4)/9.52 (3/8)		6.35 (1/4)/9.52 (3/8)		6.35 (1/4)/12.7 (1/2)		6.35 (1/4)/15.88 (5/8)	
Dimensions	(HxWxD) mm	266x852x571		266x852x571		266x1058x571		266x1058x571	
Net weight	kg	30		30		35		35	
Power supply	V, Ph, Hz	230, 1+N, 50 to outdoor unit							

The Room Air Conditioners outdoor units utilise the latest SANYO twin rotary compressor in which perfectly balanced dual rotors revolve smoothly and efficiently to provide powerful, quiet and vibration-free performance.

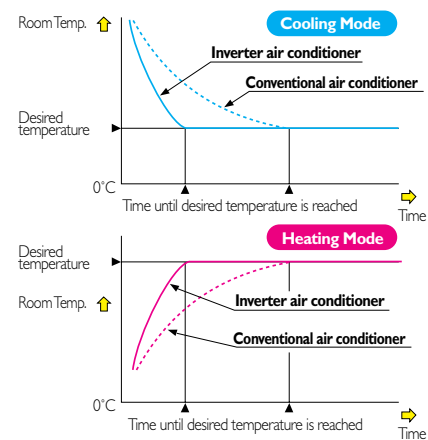


Advanced DC compressor design



### Rapid and accurate temperature control

The Room Air Conditioner Systems use Advanced Digital Hybrid (ADH) technology for better, smarter and more cost-efficient year-round climate control. Immediately following start up, the DC compressor operates at maximum power to provide almost instant heating or cooling. As the desired air temperature is reached, a special Pulse Width Module automatically adjusts the compressor's frequency to exactly meet the cooling or heating requirements of the room. The result is exceptionally precise temperature control, less noise and significant energy savings.



		INVERTER HEAT PUMP									
Outdoor unit		SAP-CMRV1424EH		SAP-CMRV1924EH		SAP-CMRV1934EH		SAP-CMRV2444EH		SAP-CMRV3144EH	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	4.00 (1.20-5.50)	4.50 (1.40-6.50)	5.60 (2.10-6.80)	7.30 (2.40-8.40)	5.60 (2.10-6.80)	7.30 (2.40-8.40)	6.80 (2.90-8.10)	8.60 (3.40-9.00)	8.00 (2.90-9.20)	9.40 (3.40-9.80)
Power input	W	†/925/†	†/925/†	†/1695/†	†/1735/†	†/1695/†	†/1735/†	†/200/†	†/2000/†	†/1725/†	†/2040/†
EER/COP		4.32	4.86	3.30	4.21	3.30	4.21	3.40	4.30	4.64	4.61
Energy class	A	A	A	A	A	A	A	A	A	A	A
Running amperes	A	4.1	4.1	7.52	7.7	7.52	7.7	8.87	8.87	7.58	8.96
Connectable units	No	2	2	2	2	3	3	4	4	4	4
Sound pressure level	(H) dB(A)	47	48	50	52	50	52	50	52	50	52
Pipe size suction/discharge	Inches	2x 1/4 / 2x 3/8		2x 1/4 / 2x 3/8		3x 1/4 / 3x 3/8		4x 1/4 / 3 x 3/8, 1/2		4x 1/4 / 2 x 3/8, 2x 1/2	
Max piping length - Total	m	30		45		45		60		70	
Max piping length - per Unit	m	20		25		25		25		30	
Max elevation diff. O.U. - I.U.	m	15		15		15		15		15	
Precharged piping length - Total	m	30		45		45		45		45	
Dimensions (HxWxD)	mm	569x790x285		740x900x320		740x900x320		740x900x320		890x900x320	
Net weight	kg	42		65		65		65		82	
Power supply	V,Ph,Hz	220 - 240V/1ø 50Hz									

† data to be confirmed

# Flexi Multi Indoor Unit Operating Capacities

## R410A

## INVERTER Air Conditioner

MODEL NO.			SAP-CMRV1424EH									
Performance			Cooling					Heating				
			Indoor capacity (kW)				Total capacity (kW)	Indoor capacity (kW)				Total capacity (kW)
			A	B	C	D		A	B	C	D	
Combination of 2 rooms	1 Room	74	2.2	-	-	-	2.2	2.5	-	-	-	2.5
		94	2.65	-	-	-	2.65	3.6	-	-	-	3.6
		124	3.5	-	-	-	3.5	4.2	-	-	-	4.2
	2 Rooms	74+74	1.8	1.8	-	-	3.6	2.1	2.1	-	-	4.2
		74+94	1.68	2.02	-	-	3.7	1.72	2.48	-	-	4.2
		74+124	1.51	2.39	-	-	3.9	1.64	2.76	-	-	4.4
		94+94	2	2	-	-	4	2.25	2.25	-	-	4.5
		94+124	1.71	2.28	-	-	4	2.08	2.42	-	-	4.5

MODEL NO.			SAP-CMRV1934EH									
Performance			Cooling					Heating				
			Indoor capacity (kW)				Total capacity (kW)	Indoor capacity (kW)				Total capacity (kW)
			A	B	C	D		A	B	C	D	
Combination of 3 rooms	1 Room	74	2.2	-	-	-	2.2	2.5	-	-	-	2.5
		94	2.65	-	-	-	2.65	3.6	-	-	-	3.6
		124	3.5	-	-	-	3.5	4.2	-	-	-	4.2
		184	5.15	-	-	-	5.15	6	-	-	-	6
	2 Rooms	74+74	2.2	2.2	-	-	4.4	2.5	2.5	-	-	5
		74+94	2.2	2.65	-	-	4.85	2.5	3.6	-	-	6.1
		74+124	1.97	3.13	-	-	5.1	2.4	3.9	-	-	6.3
		74+184	1.65	3.85	-	-	5.5	2.03	4.87	-	-	6.9
		94+94	2.5	2.5	-	-	5	3.2	3.2	-	-	6.45
		94+124	2.24	2.96	-	-	5.2	3.07	3.58	-	-	6.65
		94+184	1.9	3.7	-	-	5.6	2.74	4.56	-	-	7.3
		124+124	2.7	2.7	-	-	5.4	3.45	3.45	-	-	6.9
	3 Rooms	124+184	2.27	3.33	-	-	5.6	3.01	4.29	-	-	7.3
		74+74+74	1.77	1.77	1.77	-	5.3	2.18	2.18	2.18	-	6.55
		74+74+94	1.69	1.69	2.03	-	5.4	2.02	2.02	2.91	-	6.95
		74+74+124	1.56	1.56	2.48	-	5.6	1.94	1.94	3.26	-	7.15
		74+74+184	1.29	1.29	3.02	-	5.6	1.66	1.66	3.98	-	7.3
		74+94+94	1.63	1.96	1.96	-	5.55	1.88	2.71	2.71	-	7.3
		74+94+124	1.48	1.78	2.35	-	5.6	1.77	2.55	2.98	-	7.3
		74+94+184	1.23	1.48	2.88	-	5.6	1.51	2.17	3.62	-	7.3
			1.34	2.13	2.13	-	5.6	1.67	2.81	2.81	-	7.3
		94+94+94	1.87	1.87	1.87	-	5.6	2.43	2.43	2.43	-	7.3
		94+94+124	1.69	1.69	2.23	-	5.6	2.31	2.31	2.69	-	7.3
			1.54	2.03	2.03	-	5.6	2.19	2.56	2.56	-	7.3
			1.87	1.87	1.87	-	5.6	2.43	2.43	2.43	-	7.3

MODEL NO.			SAP-CMRV2444EH									
Performance			Cooling					Heating				
			Indoor capacity (kW)				Total capacity (kW)	Indoor capacity (kW)				Total capacity (kW)
			A	B	C	D		A	B	C	D	
Combination of 4 rooms	1 Room	74	2.2	-	-	-	2.2	2.5	-	-	-	2.5
		94	2.65	-	-	-	2.65	3.6	-	-	-	3.6
		124	3.5	-	-	-	3.5	4.2	-	-	-	4.2
		184	5.15	-	-	-	5.15	6	-	-	-	6
		244	6.8	-	-	-	6.8	8	-	-	-	8
	2 Rooms	74+74	2.2	2.2	-	-	4.4	2.5	2.5	-	-	5
		74+94	2.2	2.65	-	-	4.85	2.5	3.6	-	-	6.1
		74+124	2.2	3.5	-	-	5.7	2.5	4.2	-	-	6.7
		74+184	1.98	4.62	-	-	6.6	2.44	5.86	-	-	8.3
		74+244	1.61	5.19	-	-	6.8	1.95	6.65	-	-	8.6
		94+94	2.65	2.65	-	-	5.3	3.6	3.6	-	-	7.2
		94+124	2.54	3.36	-	-	5.9	3.51	4.09	-	-	7.6
		94+184	2.28	4.42	-	-	6.7	3.15	5.25	-	-	8.4
		94+204	1.85	4.95	-	-	6.8	2.56	6.04	-	-	8.6
		124+124	3.3	3.3	-	-	6.6	4	4	-	-	8
	3 Rooms	124+184	2.75	4.05	-	-	6.8	3.5	5	-	-	8.5
		124+244	2.25	4.55	-	-	6.8	2.84	5.76	-	-	8.6
		184+184	3.4	3.4	-	-	6.8	4.3	4.3	-	-	8.6
		74+74+74	2.2	2.2	2.2	-	6.5	2.5	2.5	2.5	-	7.5
		74+74+94	2.06	2.06	2.48	-	6.6	2.3	2.3	2.3	-	8
		74+74+124	1.88	1.88	2.99	-	6.75	2.26	2.26	3.79	-	8.3
		74+74+184	1.57	1.57	3.67	-	6.8	1.95	1.95	4.69	-	8.6
		74+94+94	1.97	2.4	2.4	-	6.7	2.16	3.12	3.12	-	8.4
		74+94+124	1.79	2.16	2.85	-	6.8	2.06	2.97	3.47	-	8.5
		74+94+184	1.5	1.8	3.5	-	6.8	1.78	2.56	4.26	-	8.6
		74+124+124	1.63	2.59	2.59	-	6.8	1.97	3.31	3.31	-	8.6
		74+124+182	1.38	2.19	3.23	-	6.8	1.69	2.84	4.06	-	8.6
		94+94+94	2.27	2.27	2.27	-	6.8	2.87	2.87	2.87	-	8.6
		94+94+124	2.05	2.05	2.7	-	6.8	2.72	2.72	3.17	-	8.6
		94+94+184	1.72	1.72	3.35	-	6.8	2.35	2.35	3.91	-	8.6
94+124+124	1.87	2.47	2.47	-	6.8	2.58	3.01	3.01	-	8.6		
94+124+184	1.59	2.11	3.1	-	6.8	2.24	2.62	3.74	-	8.6		
124+124+124	2.27	2.27	2.27	-	6.8	2.87	2.87	2.87	-	8.6		
124+124+184	1.96	1.96	2.88	-	6.8	2.51	2.51	3.58	-	8.6		

This multi outdoor unit allows up to 4 indoor units to be connected. However, all 4 indoor units must not be operated simultaneously. Shut down at least one of the 4 indoor units to match one of the combinations found in the above table.

# Flexi Multi Indoor Unit Operating Capacities

## R410A

### INVERTER Air Conditioner

MODEL NO.			SAP-CMRV1924EH									
Performance			Cooling					Heating				
			Indoor capacity (kW)				Total capacity (kW)	Indoor capacity (kW)				Total capacity (kW)
			A	B	C	D		A	B	C	D	
Combination of 2 rooms	1 Room	74	2.2	-	-	-	2.2	2.5	-	-	-	2.5
		94	2.65	-	-	-	2.65	3.6	-	-	-	3.6
		124	3.5	-	-	-	3.5	4.2	-	-	-	4.2
		184	5.15	-	-	-	5.15	6	-	-	-	6
	2 Rooms	74+74	2.2	2.2	-	-	4.4	2.5	2.5	-	-	5
		74+94	2.2	2.65	-	-	4.85	2.5	3.6	-	-	6.1
		74+124	1.97	3.13	-	-	5.1	2.4	3.9	-	-	6.3
		74+184	1.65	3.85	-	-	5.5	2.03	4.87	-	-	6.9
		94+94	2.5	2.5	-	-	5	3.2	3.2	-	-	6.45
		94+124	2.24	2.96	-	-	5.2	3.07	3.58	-	-	6.65
		94+184	1.9	3.7	-	-	5.6	2.74	4.56	-	-	7.3
		124+124	2.7	2.7	-	-	5.4	3.45	3.45	-	-	6.9
		124+184	2.27	3.33	-	-	5.6	3.01	4.29	-	-	7.3

MODEL NO.			SAP-CMRV3144EH									
Performance			Cooling					Heating				
			Indoor capacity (kW)				Total capacity (kW)	Indoor capacity (kW)				Total capacity (kW)
			A	B	C	D		A	B	C	D	
Combination of 2 rooms	1 Room	74	2.2	-	-	-	2.2	2.5	-	-	-	2.5
		94	2.65	-	-	-	2.65	3.6	-	-	-	3.6
		124	3.5	-	-	-	3.5	4.2	-	-	-	4.2
		184	5.15	-	-	-	5.15	6	-	-	-	6
		244	7.1	-	-	-	7.1	8.5	-	-	-	8.5
	2 Rooms	74+74	2.2	2.2	-	-	4.4	2.5	2.5	-	-	5
		74+94	2.2	2.65	-	-	4.85	2.5	3.6	-	-	6.1
		74+124	2.2	3.5	-	-	5.7	2.5	4.2	-	-	6.7
		74+184	2.14	5.01	-	-	7.15	2.5	6	-	-	8.5
		74+244	1.81	5.84	-	-	7.65	2.01	6.84	-	-	8.85
		94+94	2.65	2.65	-	-	5.3	3.6	3.6	-	-	7.2
		94+124	2.54	3.36	-	-	5.9	3.51	4.09	-	-	7.6
		94+184	2.46	4.79	-	-	7.25	3.24	5.41	-	-	8.65
		94+244	2.11	5.64	-	-	7.75	2.68	6.32	-	-	9
124+124		3.4	3.4	-	-	6.8	4	4	-	-	8	
3 Rooms	124+184	3.03	4.47	-	-	7.5	3.6	5.15	-	-	8.75	
	124+244	2.63	5.33	-	-	7.95	3.02	6.12	-	-	9.14	
	184+184	3.95	3.95	-	-	7.9	4.5	4.5	-	-	9	
	184+244	3.36	4.64	-	-	8	3.89	5.51	-	-	9.4	
	74+74+74	2.2	2.2	2.2	-	6.6	2.5	2.5	2.5	-	7.5	
	74+74+94	2.2	2.2	2.65	-	7.05	2.47	2.47	3.56	-	8.5	
	74+74+124	2.03	2.03	3.23	-	7.3	2.34	2.34	3.93	-	8.6	
	74+74+184	1.77	1.77	4.15	-	7.7	2.01	2.01	4.83	-	8.85	
	74+74+244	1.53	1.53	4.94	-	8	1.71	1.71	5.82	-	9.25	
	74+94+94	2.11	2.54	2.54	-	7.2	2.23	3.21	3.21	-	8.65	
	74+94+124	1.95	2.35	3.1	-	7.4	2.12	3.06	3.57	-	8.75	
	74+94+184	1.72	2.07	4.02	-	7.8	1.86	2.68	4.46	-	9	
	74+94+244	1.47	1.77	4.75	-	8	1.61	2.32	5.47	-	9.4	
	74+124+124	1.82	2.89	2.89	-	7.6	2.03	3.41	3.41	-	8.85	
	74+124+184	1.6	2.55	3.75	-	7.9	1.79	3.01	4.3	-	9.1	
	74+124+244	1.38	2.19	4.44	-	8	1.55	2.6	5.26	-	9.4	
	74+184+184	1.41	3.3	3.3	-	8	1.62	3.89	3.89	-	9.4	
	74+184+244	1.22	2.85	3.93	-	8	1.38	3.32	4.7	-	9.4	
	94+94+94	2.43	2.43	2.43	-	7.3	2.95	2.95	2.95	-	8.85	
	94+94+124	2.26	2.26	2.98	-	7.5	2.81	2.81	3.28	-	8.9	
	94+94+184	2	2	3.89	-	7.9	2.51	2.51	4.18	-	9.2	
	94+94+244	1.71	1.71	4.58	-	8	2.16	2.16	5.09	-	9.4	
	94+124+124	2.13	2.81	2.81	-	7.75	2.7	3.15	3.15	-	9	
	94+124+184	1.88	2.48	3.65	-	8	2.43	2.83	4.04	-	9.3	
	94+124+244	1.6	2.11	4.29	-	8	2.08	2.42	4.9	-	9.4	
	94+184+184	1.64	3.18	3.18	-	8	2.17	3.62	3.62	-	9.4	
	124+124+124	2.65	2.65	2.65	-	7.95	3.03	3.03	3.03	-	9.1	
	124+124+184	2.3	2.3	3.39	-	8	2.73	2.73	3.9	-	9.35	
	124+124+244	1.99	1.99	4.03	-	8	2.34	2.34	4.73	-	9.4	
124+184+244	2.03	2.99	2.99	-	8	2.44	3.48	3.48	-	9.4		
4 Rooms	74+74+74+74	1.88	1.88	1.88	1.88	7.5	2.18	2.18	2.18	2.18	8.7	
	74+74+74+94	1.82	1.82	1.82	2.19	7.65	1.99	1.99	1.99	2.87	8.85	
	74+74+74+124	1.71	1.71	1.71	2.72	7.85	1.91	1.91	1.91	3.21	8.95	
	74+74+74+184	1.5	1.5	1.5	3.51	8	1.71	1.71	1.71	4.11	9.25	
	74+74+74+244	1.28	1.28	1.28	4.15	8	1.47	1.47	1.47	4.99	9.4	
	74+74+94+94	1.76	1.76	2.12	2.12	7.75	1.85	1.85	2.67	2.67	9.05	
	74+74+94+124	1.66	1.66	2	2.64	7.95	1.79	1.79	2.57	3	9.15	
	74+74+94+184	1.44	1.44	1.74	3.38	8	1.61	1.61	2.32	3.86	9.4	
	74+74+94+244	1.24	1.24	1.5	4.01	8	1.37	1.37	1.98	4.67	9.4	
	74+74+124+124	1.54	1.54	2.46	2.46	8	1.72	1.72	2.88	2.88	9.2	
	74+74+124+184	1.35	1.35	2.15	3.16	8	1.55	1.55	2.6	3.71	9.4	
	74+74+184+184	1.2	1.2	2.8	2.8	8	1.38	1.38	3.32	3.32	9.4	
	74+94+94+94	1.7	2.05	2.05	2.05	7.85	1.73	2.49	2.49	2.49	9.2	
	74+94+94+124	1.6	1.93	1.93	2.55	8	1.67	2.41	2.41	2.81	9.3	
	74+94+94+184	1.39	1.68	1.68	3.26	8	1.5	2.16	2.16	3.59	9.4	
	74+94+124+124	1.49	1.79	2.36	2.36	8	1.62	2.33	2.72	2.72	9.4	
	74+94+124+184	1.3	1.57	2.07	3.05	8	1.44	2.08	2.42	3.46	9.4	
	74+124+124+124	1.39	2.2	2.2	2.2	8	1.56	2.61	2.61	2.61	9.4	
	74+124+124+184	1.23	1.95	1.95	2.87	8	1.39	2.34	2.34	3.34	9.4	
	94+94+94+94	2	2	2	2	8	2.35	2.35	2.35	2.35	9.4	
	94+94+94+124	1.85	1.85	1.85	2.45	8	2.26	2.26	2.26	2.63	9.4	
	94+94+94+184	1.62	1.62	1.62	3.15	8	2.01	2.01	2.01	3.36	9.4	
94+94+124+124	1.72	1.72	2.28	2.28	8	2.17	2.17	2.53	2.53	9.4		
94+94+124+184	1.52	1.52	2.01	2.95	8	1.94	1.94	2.27	3.24	9.4		
94+124+124+124	1.61	2.13	2.13	2.13	8	2.09	2.44	2.44	2.44	9.4		
124+124+124+124	2	2	2	2	8	2.35	2.35	2.35	2.35	9.4		



**VIRUS WASHER**



# Virus Washer Commercial Use Air Purifying System

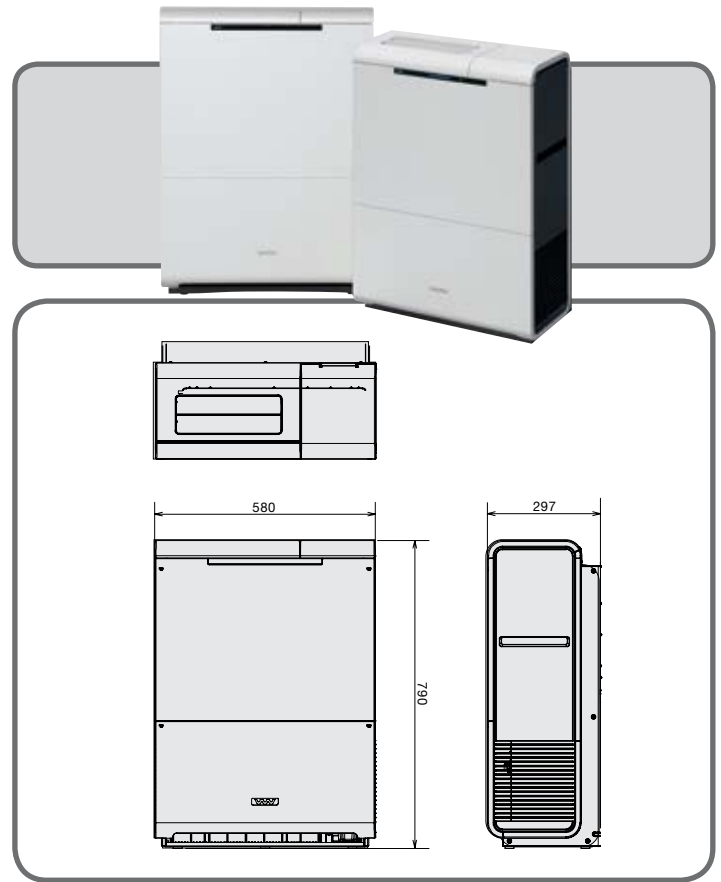


The quality of the air we breathe is important for our well-being, and in places where people gather, such as schools, hospitals and other public facilities, airborne germs are often present. Infectious airborne viruses can be rendered harmless from the treated air by SANYO's Electrolyzed Water Technology.

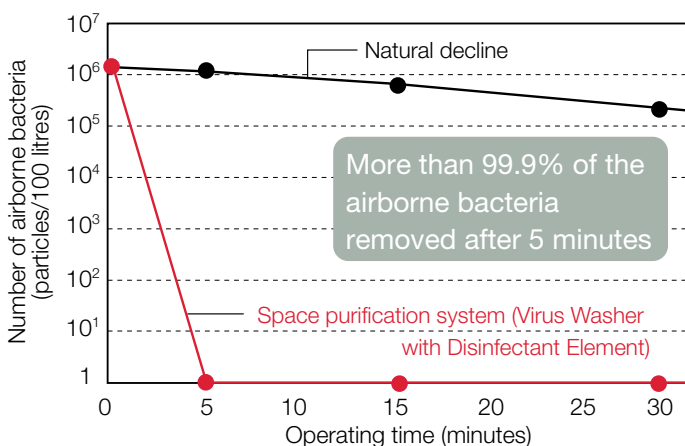
The Virus Washer also reduces airborne bacteria and mould, as well as pollen and dust mite allergens, to provide cleaner air for you, your colleagues and clients.\*

\* Verification testing methods and results available on request.

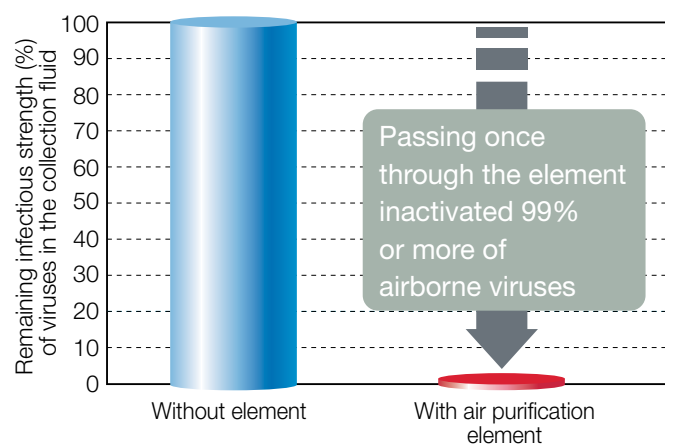
- Inactivates more than 99% of airborne viruses and bacteria, and reduces pollen and dust mite allergens from treated air.
- Improves air hygiene.
- Designed for enclosed spaces up to 100m<sup>2</sup> (300m<sup>3</sup>) such as within hospitals, offices and other public places.
- Humidifies dry air.
- Easy to install.



## Results of Virus Inactivation Test



## Airborne bacteria disinfectant test results



(Joint research conducted with the Gunma Prefectural Institute of Public Health and Environmental Sciences)

# Virus Washer

## Commercial Use Air Purifying System



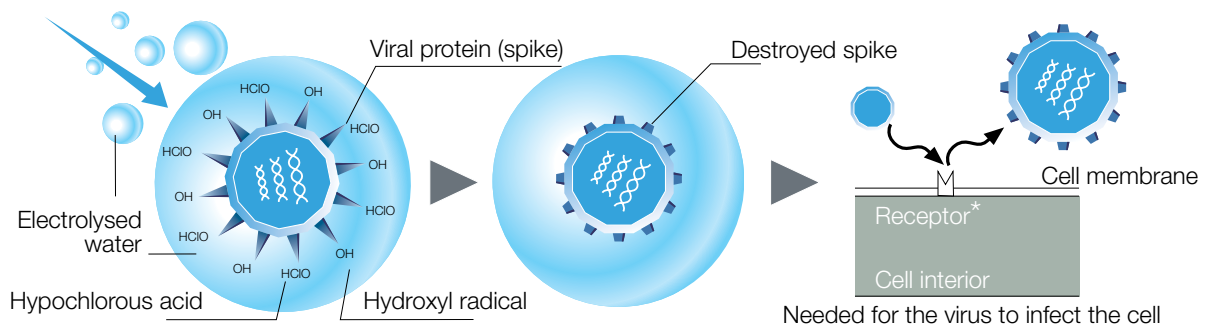
### Inactivates airborne viruses with the power of electrolyzed water.

The Virus Washer uses an Electrolyzed Water Disinfecting Element to inactivate viruses and other airborne microbes and particles. Electrolyzed water runs over the air purification element in the Virus Washer. Indoor air is then forced to circulate through the element, inactivating airborne viruses which pass through it. Independent verification tests have shown that electrolyzed water is effective in suppressing more than 99% of viruses in the air passing through the disinfectant element in a single pass.

### Powerful cleaning - can be used in schools, hospitals, offices, and other large spaces.

To clean the air in large spaces where many people come and go, the fan speed can be set to 480 > 600 m<sup>3</sup>/h (8 > 10 m<sup>3</sup>/min). This makes the Virus Washer suitable for use in schools, hospitals and other large spaces where people gather. The powerful cleaning capacity is capable of circulating the air approximately 2.7 > 3.3 times per hour in a school classroom (approximately 180 m<sup>3</sup>).

### Airborne bacteria disinfectant test results



(Joint research conducted with the Gunma Prefectural Institute of Public Health and Environmental Sciences)

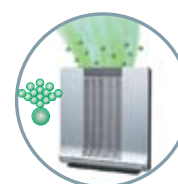
Model number			VWVF10BG
Power source			AC 220 - 240 V, 50-60HZ
Dimensions		mm	790 (H) x 580 (W) x 297 (D)
Weight	Product weight	kg	33
	Operating weight	kg	39 (when water supply tank is full)
Exterior colour (Munsell number)			Front panel: NW-K11 (VW white), Munsell value: N 8.5 Side panel: NW-K12 (VW grey), Munsell value: N 4.0
Operation	Operating modules		High/Mid/Low
	Ambient usage temperature		5-35°C
	Water to be used		Top water (potable)*1 Maximum Total Water: 400ppm as CaCO <sub>3</sub> . Virus Washer Water Filters required above 100ppm TH
Electrical characteristics	Power consumption	W	High: 145, Mid: 78, Low: 57
	Current	A	High: 2.10, Mid: 1.20, Low: 0.88
Ventilating device	Rated airflow	m <sup>3</sup> /min	High: 10, Mid: 5, Low: 2
	Louvre		Two louvres (with swing function, closing with power OFF)
	Airflow direction adjustment range		0° - 23° (airflow direction position memory)
Continuous operating time*3	Summer	Hours	High: 7, Mid: 12, Low: 18*4
	Winter	Hours	High: 8, Mid: 10, Low: 15*5
Disinfectant element			Stationary type
Water supply and drainage			Water supply tank (capacity approx. 6 litres), drainage tank (capacity approx 2 metres)
Operating noise		db (A)	High 49, Mid: 35, Low: 29*2
Specifications with high-performance micro-particle filter mounted			
Model number			AFT-HVW10BG
Particle trapping efficiency		%	Equivalent to 65% by colorimetric essay method (equivalent to 93% by gravimetric method)
Rated Airflow	m <sup>3</sup> /min		High: 8, Mid: 4, Low: 2
	db (A)		High: 49, Mid: 35, Low: 29*2

\* Use only tap water for this product. The direct use of well water or purified water may cause malfunction \* The consumable parts of this product must be replaced at the required intervals to ensure satisfactory operation over a long period of time. For details please refer to the operating instructions that come with the product \* The airflow will be reduced when the high-performance micro-particle filter is mounted.  
\*1: Be sure to use only tap water (drinking water) for this product. The settings of the product may need to be changed to suit the water quality of some regions. Also the tap water of some regions cannot be directly used. For details, please refer to the operating instructions that come with the product. \*2: Operating noise was measured in an anechoic chamber, with measurements taken 1 metre from the front of the product, and 1 metre above the product. These values have a tendency to increase when the product is installed, due to surrounding noise and vibration. \*3: The continuous operating time was measured with a full water supply tank (6 litres). \*4: Approximate times at room temperature of 27°C and 47% humidity. \*5: Approximate times at room temperature of 20°C and 30% humidity.

# ABC Air Cleaner

## Create a clean atmosphere in your office or home.

- HEPA long-life filter eliminates 99% of bacteria, spores and dust
- Carbon filter ensures deodorising power on entire air flow
- Negative ion generator refreshes the atmosphere in your office or home
- Fast reaction to cigarette smoke and house dust via bottom air intake
- Easy-to-clean 3-stage filter can be easily removed
- Special program for eliminating pollen
- 3 fan speeds and timer



MODEL NO.		ABC-HP14
Applied area	m <sup>2</sup>	25
Fan speeds		3
Air circulation	(H/L) m <sup>3</sup> /h	180-36
Power input	(H/L) W	56-19
Dust filter		HEPA Filter & Deodorant Carbon Filter
Delay timer		1 Hour/2 Hour/8 Hour
Dimensions	(HxWxD) mm	430x405x132
Weight	kg	4.1
Power supply		220 - 240V/1ø 50Hz



Think GAIA  
For Life and the Earth

**SANYO**



Indicates conformation  
with EC Directives



ISO 9001: 2001  
Certificate Number: JQ116B



ISO 14001: 2001  
Certificate Number: ECOJ0303-33



SANYO reserves the right to make any variation in specification to the equipment described or to withdraw or replace products without prior notification or public announcement. All descriptions, illustrations, drawings and specifications in this publication are given in good faith, but are intended to present only general particulars and shall not form any part of the contract. For full installation details, please contact your SANYO distributor.

#### Rating Conditions

The cooling and heating capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB, Outdoor temperature 35°C DB/24° C WB.

Heating: Indoor temperature 20°C DB, Outdoor Temperature 7°C DB 6°C WB.



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SANYO Air Conditioners. The natural choice.