Think GAIA
For Life and the Earth

SANYO

SANYO Air Conditioners. The natural choice.

- Room Air Conditioners
- Commercial Split Systems
- Electric VRF
- Gas Driven VRF
- CO_2 ECO Heating System
- Hydronic Products

New Product Range 2009/10

New Product Range 2009/10

With increasing concern about the link between carbon emissions and rising global temperatures, the need to use energy more efficiently is becoming ever more pressing.

SANYO is committed to developing environmentally sustainable technologies

The Virus Washer effectively suppresses viruses, bacteria and allergens

SANYO is the world leader in solar PV cells

Highly efficient air conditioning for heating and cooling

AQUA washing machine uses ozone rather than detergent

Hybrid car batteries - including Ford Galaxy and Honda Accord

Eneloop batteries can be recharged 1000 times

World powers are working together to tackle the problem with international negotiations including UN Conferences, Kyoto Mechanisms and the Intergovernmental Panel on Climate Change. But although targets are set at national and international level, behaviour must change on an individual basis to have any hope of battling global warming.

As individual consumers we are beginning to consider the environmental impact of our buying decisions: choosing hybrid cars, opting for recyclable packaging, considering food miles - and increasingly scrutinising the homes we buy and the way we heat them.

With the introduction of environmental legislation, such as SAP building regulations and home information packs, in future acting responsibility will become less of a choice for the homeowner or builder and more of a necessity.

The challenge for manufacturers now is to provide sustainable alternatives to traditional technologies.

Think GAIA

For Life and the Earth

SANYO has continually stepped up to this challenge. Its reputation as an innovator has been earned over years of continuous research and development resulting in industry leading products that have blazed a trail in terms of efficiency and environmental sustainability. SANYO's sustainable energy solutions include Eneloop rechargeable batteries, hybrid car batteries and solar power cells. In fact SANYO is a world leader in the development of photovoltaic solar cells.

In 2005 SANYO announced its brand vision, 'Think Gaia'. Gaia is the mythical keeper of the earth and was the name chosen by English Scientist James Lovelock to express the concept of the earth as a single living organism where mankind and all living things can coexist in harmony. SANYO is committed to business practices and developing technologies that are beneficial and not damaging to this harmonious relationship but protect it for future generations.

SANYO Airconditioners - The natural choice.

SANYO introduced heat pump air conditioners in 1960 and has continued to pioneer the industry ever since with environmental technology innovations such as the ECOi Electric VRF system, which dramatically improved energy efficiency; the Gas-driven VRF system with latest models that also generate hot water and electricity; highly efficient water and floor heating with the CO_2 ECO heat pumps and introducing this year the PACi Hydronic Split System.

The SANYO Solar Arc. Theworld'slargestsolar power generator.

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The Room Air Conditioning range, specifically designed for small to medium sized areas, is, like all our air conditioning systems, the result of an extensive research and development program developed since 1958. Our innovative products offer the ideal solution when you need quiet, efficient room air conditioning to create a comfortable environment within a realistic budget. The latest generation of Residential Air Conditioners (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 with up to 5 indoor units that can be connected to an outdoor unit.

Energy Class

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.

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 new Shiki Sai Kan and Mini Shiki Sai Kan come with a choice of front panels to match any interior décor.

SANYO Air Conditioners provide comfort cooling and heating

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Inverter Systems

INVERTER				
Capacity (kW)	2.65	3.50	5.10	7.10
Shiki Sai Kan - wall mounted	✓	✓		
Mini Shiki Sai Kan - wall mounted	✓	✓		
KRV type - wall mounted	✓	✓	✓	✓
XRV type - 4 way cassette	✓	✓	✓	
F/FT - floor & ceiling mounted	✓	✓	✓	✓
URV type - concealed duct	✓	✓	✓	✓

Constant Speed (On/Off) systems

Capacity (kW)	2.65	3.50	5.10	6.40
KR type - wall mounted	✓	✓		
KR type (4 Series) - wall mounted	✓	✓	✓	✓
XR type - 4 way cassette	✓	✓	✓	
F/FT type - floor & ceiling mounted	✓	✓	✓	✓
UR type - concealed duct	✓	✓	✓	✓

Multi-Split systems

INVERTER	Multiple combinations possible				
Capacity (kW)	2.20	2.65	3.50	5.10	7.10
Mini Shiki Sai Kan - wall mounted		✓	✓		
K Type - wall mounted	✓	✓	✓	✓	✓
XMR type - 4 way cassette		✓	✓	✓	
F/FT type - floor & ceiling mounted		✓	✓	✓	✓
UMR type - concealed duct		✓	✓	✓	✓

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SAP-KRV...EHDX
SAP-CRV...EHDX

Cutting-edge technology, that includes the industry's top-class energy-saving design, a wide array of airflow control options and heating/cooling operation down to -15°C.

SAP-CRV...EHDX

Remote

SAP-KRV...EHDX

Additional 6 stylish colour choices (options)

SPN-EXR(K) Black | SPN-EXR(D) Orange | SPN-EXR(N) Gold | SPN-EXR(T) Brown | SPN-EXR(R) Red | SPN-EXR(W) White

- Amazing performance in energy-saving: COP up to 5.0
- No reverse cycle defrost. Utilises hot gas injection defrosting, for non-stop heating operation
- Sleek & stylish panel design in a choice of 7 designer colours, silver available as standard
- Super quiet mode: 22 dB(A)
- LED photocatalytic sterilisation function features high-performance odour, germ and bacteria filters
- Negative ions generator helps clean the air of pollutants and is beneficial to health
- Air clean apatite filter
- 3D air flow
- Cooling and heating down to -15°C
- Night set back - economy mode function ensures gentle and energy-saving cooling and heating
- Multifunctional wireless remote control with built-in temperature sensor
- Automatic retractable panel to improve air flow, efficiency and reduce sound levels

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, deodourising and dust collecting sections that maintain healthy, clean air in your room.

Photocatalytic sterilisation

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

Negative Ions Generator

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.

Indoor unit			SAP-KRV94EHDX		SAP-KRV124EHDX	
Outdoor unit			SAP-CRV94EHDX		SAP-CRV124EHDX	
System performance			Cooling	Heating	Cooling	Heating
Capacity		kW	2,65 (0,9-3,8)	3,60 (0,9-5,5)	3,50 (0,9-4,2)	4,80 (0,9-6,0)
Power input		W	530 (250-1510)	720 (250-1860)	875 (250-1700)	1140 (250-1860)
EER/COP			5,00	5,00	4,00	4,21
Energy class			A	A	A	A
Annual energy consumption		kWh	265,0	-	437,5	-
Running current		A	2,4 (1,6-6,9)	3,30 (1,6-8,5)	4,00 (1,6-7,8)	5,20 (1,6-8,5)
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Outdoor unit)			
Indoor unit specifications						
Air circulation	(H)	m^3/h	600		630	
Moisture removal	(H)	Litres/h	1,8	-	2,0	-
Sound pressure level	(Qt/L/M/H)	dB(A)	22/30/38/39	22/30/38/40	22/30/38/40	22/30/38/41
Dimensions	(H×W×D)	mm	300x898x200		300x898x200	
Net weight		kg	12,5		12,5	
Outdoor unit specifications						
Sound pressure level	(H)	dB(A)	49	50	50	51
Dimensions	(H×W×D)	mm	569x790x285		569x790x285	
Net weight		kg	40,0		40,0	
Installation data						
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)	
Maximum piping length		m	15		15	
Maximum elevation difference		m	10		10	
Charge less piping length		m	7,5		7,5	
Amount of additional refrigerant		g/m	15		15	
Recommended fuse/circuit breaker capacity		A	10		10	

Specifications subject to change without notice.

Energy class A

INVERTER

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-KRV...EHDS
SAP-CRV...EHDS

Stylish & compact as well as offering an exceptional energy-saving performance: COP up to 4,21.

SAP-CRV...EHDS

Remote

SAP-KRV...EHDS

Additional 4 stylish colour choices (options)

SPN-DS(N) Gold

SPN-DS(L) Blue

SPN-DS(G) Green

SPN-DS(W) White

- Cooling and heating down to -15°C
- The LED photocatalytic sterilisation function ensures excellent performance to combat odours, germs and bacteria
- Automatic sweep control
- Apatite ceramic filter
- Multifunctional remote control with built-in temperature sensor
- Simple elegant design with panels available in 5 colour choice options.
- Clock with ON/OFF program timer
- Washable front panel
- Low noise levels: 22 dB(A) (quiet mode)
- Night set back/economy mode function ensures quiet and energy-saving cooling and heating

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.

Photocatalytic sterilisation

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

Indoor unit			SAP-KRV96EHDS		SAP-KRV126EHDS	
Outdoor unit			SAP-CRV96EHDS		SAP-CRV126EHDS	
System performance			Cooling	Heating	Cooling	Heating
Capacity		kW	2,51 (0,9-3,6)	3,14 (0,9-4,9)	3,50 (0,9-3,9)	4,80 (0,9-5,4)
Power input		W	600 (250-1040)	970 (250-1400)	1025 (250-1200)	1260 (250-1600)
EER/COP			4,21	3,23	3,41	3,81
Energy class			A	C	A	A
Annual energy consumption		kWh	300,0	-	512,5	-
Running current		A	3,1 (1,29-5,38)	4,6 (1,21-6,76)	4,79 (1,17-5,61)	5,77 (1,14-7,32)
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Outdoor unit)			
Indoor unit specifications						
Air circulation	(H)	m^3/h	480	500	510	560
Moisture removal	(H)	Litres/h	1,6	-	2,0	-
Sound pressure level	(Qt/L/M/H)	dB(A)	22/28/35/41	22/28/35/41	22/28/35/42	22/29/36/42
Dimensions	(H×W×D)	mm	265x789x180		265x789x180	
Net weight		kg	9,5		9,5	
Outdoor unit specifications						
Sound pressure level	(H)	dB(A)	45	46	47	48
Dimensions	(H×W×D)	mm	565x790x265		565x790x265	
Net weight		kg	36,0		36,0	
Installation data						
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)	
Maximum piping length		m	15		15	
Maximum elevation difference		m	10		10	
Charge less piping length		m	7,5		7,5	
Amount of additional refrigerant		g/m	15		15	
Recommended fuse/circuit breaker capacity		A	10		10	

Specifications subject to change without notice.

(except model 96)
Energy class A

INVERTER

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-KRV...EH
SAP-CRV...EH

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

SAP-CRV...EH

Remote

SAP-KRV...EH

- New stylish appearance with compact flat panel design
- Cooling and heating down to -15°C (size 186 & 246)
- DC inverter technology for precise temperature control
- Auto restart after power failure and auto changeover
- Powerful start function for rapid cooling/heating
- Washable and reusable air clean apatite filter
- Infrared remote control with 24 hour clock with ON/OFF program time
- Sleek multifunctional wireless remote control with built-in temperature control

Indoor unit			SAP-KRV96EH		SAP-KRV126EH		SAP-KRV186EH		SAP-KRV246EH	
Outdoor unit			SAP-CRV96EH		SAP-CRV126EH		SAP-CRV186EH		SAP-CRV246EH	
System performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,5 (0,9-3,2)	3,3 (0,9-4,3)	3,3 (0,9-3,8)	4,0 (0,9-5,0)	5,15 (1,2-5,5)	6,0 (1,3-6,4)	7,1 (1,2-8,0)	8,5 (1,3-9,5)
Power input		W	775 (250-1150)	915 (250-1360)	1025 (250-1300)	1105 (250-1470)	1500 (250-1800)	1575 (270-1930)	2355 (280-2845)	2490 (290-3150)
EER/COP			3,23	3,61	3,22	3,62	3,43	3,81	3,01	3,41
Energy class			A	A	A	A	A	A	B	B
Annual energy consumption		kWh	387,5	-	512,5	-	750	-	1177,5	-
Running current		A	3,92 (1,26-5,81)	4,42 (1,21-6,57)	4,69 (1,14-5,95)	5,06 (1,14-6,73)	6,9 (1,2-8,4)	7,2 (1,3-9,0)	10,5 (1,2-13,6)	11,0 (1,3-15,1)
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Outdoor unit)							
Indoor unit specifications										
Air circulation	(H)	m^3/h	390	460	530	580	930	980	1130	1180
Moisture removal	(H)	Litres/h	1,4	-	1,8	-	2,3	-	2,3	-
Sound pressure level	(Qt/L/M/H)	dB(A)	22/30/35/38	22/30/35/38	25/30/36/40	25/30/36/40	28/34/38/42	28/34/38/41	30/41/44/47	30/40/43/46
Dimensions	(H×W×D)	mm	285x825x213		285x825x213		298x1065x234		298x1065x234	
Net weight		kg	9		10		12		12	
Outdoor unit specifications										
Sound pressure level	(H)	dB(A)	47	47	48	48	51	52	55	56
Dimensions	(H×W×D)	mm	548x720x265		548x720x265		670x880x285		740x900x320	
Net weight		kg	30		32		44		59	
Installation data										
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)		6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)		12,7 (1/2)		15,88 (5/8)	
Maximum piping length		m	15		15		30		30	
Maximum elevation difference		m	7		7		15		15	
Charge less piping length		m	7,5		7,5		10		10	
Amount of additional refrigerant		g/m	15		15		25		25	
Recommended fuse/circuit breaker capacity		A	10		10		20		20	

Specifications subject to change without notice.

(except model 246)
Energy class A

INVERTER

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-XRV...EH
SAP-CRV...EH

The XRV type DC inverter-driven cassette is ultra compact to fit perfectly into European standard 600 x 600mm ceiling grids and is ideal for small commercial and retrofit projects.

SAP-CRV...EH

Remote

SAP-XRV...EH

PNR-XMRV93EHAA

- Light and compact design making it quick and easy to install
- DC inverter technology for precise temperature control
- Auto restart after power failure and auto changeover
- Auto air sweep control provides uniform air flow in the room
- Powerful start function for rapid cooling/heating
- Automatic cooling/ heating control maintains the desired temperature
- Cooling and heating down to -15°C (Model 186)
- Condensate elimination pump with pressure head up to 250mm
- Multifunctional remote control with integrated temperature sensor
- Clock with ON/OFF program timer
- Washable filter avoids formation of mould and bacteria
- Removable and washable panel with a modern design
- Night Set back/economy mode function ensuring energy-saving in cooling and heating

Indoor unit			SAP-XRV96EH		SAP-XRV126EH		SAP-XRV186EH	
Outdoor unit			SAP-CRV96EH		SAP-CRV126EH		SAP-CRV186EH	
System performance			Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,6 (0,9-3,2)	3,5 (0,9-4,8)	3,3 (0,9-3,8)	4,5 (0,9-5,8)	5,15 (1,20-5,30)	6,0 (1,3-6,4)
Power input		W	810 (250-1180)	930 (250-1545)	980 (250-1325)	1240 (250-1720)	1600 (250-1830)	1650 (270-1960)
EER/COP			3,21	3,76	3,37	3,63	3,22	3,64
Energy class			A	A	A	A	A	A
Annual energy consumption		kWh	405	-	490	-	800	-
Running current		A	4,0 (1,2-6,0)	4,5 (1,2-6,6)	4,6 (1,2-6,3)	5,7 (1,2-7,3)	7,2 (1,2-8,6)	7,4 (1,3-9,2)
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Outdoor unit)					
Indoor unit specifications								
Air circulation	(H)	m3/h	700	700	700	700	790	790
Moisture removal	(H)	Litres/h	1,5	-	1,8	-	2,0	-
Sound pressure level	(L/M/H)	dB(A)	37/40/44	37/40/44	37/40/44	37/40/44	37/40/45	37/40/45
Dimensions Unit	(H×W×D)	mm	296x575x575		296x575x575		296x575x575	
Dimensions Panel	(H×W×D)	mm	41x730x730		41x730x730		41x730x730	
Net weight Unit		kg	16,5		16,5		18,0	
Net weight Panel		kg	2,5		2,5		2,5	
Outdoor unit specifications								
Sound pressure level	(H)	dB(A)	47	47	48	48	51	52
Dimensions	(H×W×D)	mm	548x720x265		548x720x265		670x880x285	
Net weight		kg	30		32		44	
Installation data								
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)		12,7 (1/2)	
Maximum piping length		m	15		15		30	
Maximum elevation difference		m	7		7		7	
Charge less piping length		m	7,5		7,5		10	
Amount of additional refrigerant		g/m	15		15		25	
Recommended fuse/circuit breaker capacity		A	10		10		20	

Specifications subject to change without notice.

Energy class A

INVERTER

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-FRV96EH
SAP-FTRV...EH
SAP-CRV...EH

The floor & ceiling mounted units are flexible and effective alternative to wall-mounted units.

SAP-CRV...EH

Remote

SAP-FRV96EH

SAP-FTRV...EH, ceiling mounted

SAP-FTRV...EH, floor mounted

- DC inverter technology for precise temperature control
- Air flow optimised for heating
- Powerful and lightweight compact design
- Auto restart after power failure and auto changeover
- Automatic air flow control
- Automatic cooling/ heating control maintains the desired temperature
- Cooling and heating down to -15°C (Models 186 and 246)
- Multifunctional remote control with integrated temperature sensor
- Clock with ON/OFF program timer
- Washable filter avoids formation of mould and bacteria
- Washable front panel
- Night Set back/economy mode function ensuring energy-saving in cooling and heating

floor or ceiling application

Indoor unit			SAP-FRV96EH		SAP-FTRV126EH		SAP-FTRV186EH		SAP-FTRV246EH	
Outdoor unit			SAP-CRV96EH		SAP-CRV126EH		SAP-CRV186EH		SAP-CRV246EH	
System performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,55 (0,9-3,2)	3,2 (0,9-4,5)	3,35 (0,9-3,5)	4,3 (0,9-5,8)	5,15 (1,2-5,3)	6,0 (1,3-6,4)	6,15 (1,2-6,9)	7,2 (1,3-8,0)
Power input		W	700 (250-1140)	930 (250-1510)	1090 (250-1330)	1180 (250-1720)	1550 (250-1840)	1710 (270-1970)	1900 (280-2865)	2340 (290-3170)
EER/COP			3,64	3,44	3,07	3,64	3,32	3,51	3,24	3,08
Energy class			A	B	B	A	A	B	A	D
Annual energy consumption		kWh	350	-	545	-	775	-	950	-
Running current		A	3,2 (1,2-5,8)	4,5 (1,2-6,5)	5,1 (1,2-6,4)	5,5 (1,2-7,3)	7,0 (1,2-8,6)	7,8 (1,3-9,2)	8,6 (1,2-13,7)	10,6 (1,3-15,2)
Power supply			220-240V Single-Phase 50Hz (Outdoor unit)							
Indoor unit specifications										
Air circulation	(H)	m3/h	425		700		720		900	
Moisture removal	(H)	Litres/h	1,5	-	1,8	-	2,0	-	2,0	-
Sound pressure level	(L/M/H)	dB(A)	34/40/43		38/43/47		39/44/48		44/47/50	
Dimensions	(H×W×D)	mm	700x560x200		680x900x190		680x900x190		680x900x190	
Net weight		kg	18,0		23,5		23,5		23,5	
Outdoor unit specifications										
Sound pressure level	(H)	dB(A)	47	47	48	48	51	52	55	56
Dimensions	(H×W×D)	mm	548x720x265		548x720x265		670x880x285		740x900x320	
Net weight		kg	30		32		44		59	
Installation data										
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)		6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)		12,7 (1/2)		15,88 (5/8)	
Maximum piping length		m	15		20		30		30	
Maximum elevation difference		m	7		7		7		7	
Charge less piping length		m	7,5		7,5		7,5		7,5	
Amount of additional refrigerant		g/m	15		25		25		25	
Recommended fuse/circuit breaker capacity		A	10		10		20		20	

Specifications subject to change without notice.

INVERTER R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-URV...EH
SAP-CRV...EH

Top performance ducted units providing flexible air-conditioning together with low noise levels. Ideal for flexible, concealed air conditioning applications.

SAP-CRV...EH

Remote

SAP-URV...EH

Plenum

Plenum

- The integrated unit has a height of 266mm to fit standard architectural scheme
- Using the supplementary cable it is possible to increase the static pressure to satisfy any duct-related requirement
- DC inverter technology for precise temperature control
- Light and compact design
- Auto restart after power failure and auto changeover
- Powerful start function for rapid cooling/heating
- Automatic cooling/ heating control maintains the desired temperature
- External electrical panel for rapid cable attachments and simple maintenance
- Cooling and heating down to -15°C (models 186 and 246)
- Condensate elimination pump with pressure head up to 250mm
- Multifunctional remote control with integrated temperature sensor
- Clock with ON/OFF program timer
- The included air filter is easily accessible from the lower part of the unit
- Night Set back/economy mode function ensuring energy-saving in cooling and heating

Indoor unit			SAP-URV96EH		SAP-URV126EH		SAP-URV186EH		SAP-URV246EH	
Outdoor unit			SAP-CRV96EH		SAP-CRV126EH		SAP-CRV186EH		SAP-CRV246EH	
System performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,6 (0,9-3,2)	3,5 (0,9-3,8)	3,5 (0,9-3,8)	4,5 (0,9-5,8)	5,4 (1,2-5,5)	6,0 (1,3-6,4)	7,15 (1,2-7,5)	8,5 (1,3-9,5)
Power input		W	750 (250-1230)	920 (250-1590)	1010 (250-1375)	1245 (250-1765)	1650 (250-1830)	1600 (270-1960)	2370 (280-2850)	2640 (290-3160)
EER/COP			3,47	3,80	3,47	3,61	3,27	3,75	3,02	3,22
Energy class			A	A	A	A	A	A	B	C
Annual energy consumption		kWh	375,0	-	505	-	825	-	1185	-
Running current		A	3,5	4,2	4,6	5,7	7,4	7,3	10,9	12
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Outdoor unit)							
Indoor unit specifications										
Air circulation	(H)	m3/h	620	620	620	620	865	865	985	985
External static pressure std. (booster)	(H)	Pa	49 (69)							
Moisture removal	(H)	Litres/h	1,5	-	1,8	-	2,0	-	2,5	-
Sound pressure level	(L/M/H)	dB(A)	40/43/45	40/43/45	40/43/45	40/43/45	33/38/45	33/38/45	37/40/48	37/40/48
Dimensions	(H×W×D)	mm	266x852x571		266x852x571		266x1058x571		266x1058x571	
Net weight		kg	30		30		35,0		35,0	
Outdoor unit specifications										
Sound pressure level	(H)	dB(A)	47	47	48	48	51	52	55	56
Dimensions	(H×W×D)	mm	548x720x265		548x720x265		670x880x285		740x900x320	
Net weight		kg	30,0		32,0		44,0		59,0	
Installation data										
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)		6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)		12,7 (1/2)		15,88 (5/8)	
Maximum piping length		m	15		15		20		30	
Maximum elevation difference		m	7		7		7		7	
Charge less piping length		m	7,5		7,5		7,5		7,5	
Amount of additional refrigerant		g/m	15		15		25		25	
Recommended fuse / circuit breaker capacity		A	10		10		20		20	

Specifications subject to change without notice.

(except model 246)
Energy class A

INVERTER

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-KR...EHAX
SAP-CR...EHAX

SANYO's new 7 Series KR type unit is stylish, with a sleek and discrete design that fits perfectly in any interior.

SAP-CR...EHAX

Remote

SAP-KR...EHAX

- Lightweight and compact
- Improved efficiency
- LED sterilisation function
- High power function
- Cold draft prevention in heating mode
- Built-in temperature sensor remote controller
- Economy mode (night set back)

The High power key funktion allows a much faster achievement of the desired temperature compared to conventional room airconditioners operations.

Double layer filter

Indoor unit			SAP-KR97EHAX		SAP-KR127EHAX	
Outdoor unit			SAP-CR97EHAX		SAP-CR127EHAX	
System performance			Cooling	Heating	Cooling	Heating
Capacity		kW	2,8	2,8	3,3	3,6
Power input		W	870	775	1025	995
EER/COP			3,22	3,61	3,22	3,62
Energy class			A	A	A	A
Annual energy consumption		kWh	435	-	512,5	-
Running current		A	3,9	3,5	4,6	4,5
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Outdoor unit)			
Indoor unit specifications						
Air circulation	(H)	m3/h	600	600	10	640
Moisture removal	(H)	Litres/h	1,5	-	2,3	-
Sound pressure level	(Qt/L/M/H)	dB(A)	25/31/34/39	25/31/34/39	26/32/35/40	26/32/35/40
Dimensions	(H×W×D)	mm	250x799x205		250x799x205	
Net weight		kg	7,5		7,5	
Outdoor unit specifications						
Sound pressure level	(H)	dB(A)	48	48	50	50
Dimensions	(H×W×D)	mm	510x660x240		598x660x240	
Net weight		kg	27,0		33,0	
Installation data						
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)	
Maximum piping length		m	15		15	
Maximum elevation difference		m	7		7	
Charge less piping length		m	7,5		7,5	
Amount of additional refrigerant		g/m	15		15	
Recommended fuse/circuit breaker capacity		A	10		10	

Specifications subject to change without notice.

Energy class A

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SAP-KR...EHA
SAP-CR...EHA/DHA

SANYO's online fixed-speed range provides outstanding performance and offers an economic alternative to inverter technology.

SAP-CR...EHA/DHA

Remote

SAP-KR...EHA

- Lightweight and compact design for easy installation
- Auto restart after power failure
- Multifunctional wireless remote control with built-in temperature sensor with ON/OFF program timer
- Cold draft prevention
- Automatic cooling and heating changeover
- Ion generator refreshes your room with negative ions (184 & 224)
- Night set back/economy mode function ensures gentle and energy-saving cooling and heating

Indoor unit			SAP-KR74EHA		SAP-KR94EHA		SAP-KR124EHA		SAP-KR184EHA		SAP-KR224EHA	
Outdoor unit			SAP-CR74EHA		SAP-CR94EHA		SAP-CR124EHA		SAP-CR184EHA/DHA		SAP-CR224EHA/DHA	
System performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,2	2,5	2,65	3,0	3,5	4,0	5,15	5,70	6,4	7,2
Power input		W	685	690	825	830	1090	1105	1600	1580	2275	2240
EER/COP			3,21	3,62	3,21	3,61	3,21	3,62	3,22	3,61	2,81	3,21
Energy class			A	A	A	A	A	A	A	A	C	C
Annual energy consumption		kWh	342,5	-	412,5	-	545	-	800	-	1137,5	-
Running current 1ph/3ph		A	3,1	3,1	3,7	3,8	4,9	5,0	7,1/3,2	7,0/3,2	10,0	9,8
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Outdoor unit)						380-415 V, 3 ph, 50 Hz (Outdoor unit)			
Indoor unit specifications												
Air circulation	(H)	m3/h	430	450	480	500	500	530	890	890	980	980
Moisture removal	(H)	Litres/h	1,3	-	1,8	-	2	-	2,3	-	3,3	-
Sound pressure level	(Qt/L/M/H)	dB(A)	25/28/32/36	24/27/31/35	25/28/33/38	24/27/32/37	25/28/34/41	24/27/33/40	32/35/39/42	32/34/38/41	32/37/41/45	32/36/40/44
Dimensions	(H×W×D)	mm	285x825x189		285x825x189		285x825x189		298x1065x218		298x1065x218	
Net weight		kg	10		10		10		12		12	
Outdoor unit specifications												
Sound pressure level	(H)	dB(A)	46	47	47	48	49	50	55	56	57	58
Dimensions	(H×W×D)	mm	548x720x265		548x720x265		565x790x285		670x880x285		670x880x285	
Net weight		kg	29,0		35,0		37,0		48,0		56,0	
Installation data												
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)		6,35 (1/4)		6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)		9,52 (3/8)		12,7(1/2)		15,88 (5/8)	
Maximum piping length		m	15		15		15		30		30	
Maximum elevation difference		m	7		7		7		7		7	
Charge less piping length		m	7,5		7,5		7,5		7,5		10	
Amount of additional refrigerant		g/m	15		15		15		25		25	
Recommended fuse/circuit breaker capacity 1ph/3ph		A	10		10		10		15		10	

Specifications subject to change without notice.

(except model 244)
Energy class A

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-XR...EH(A)
SAP-CR...EHA

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

SAP-CR....EHA

Remote

SAP-XR...EH(A)

PNR-X99EHAA

- Lightweight and compact design for easy installation
- 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
- Auto air sweep control provides uniform air flow in the room
- The modern-style panel can be removed and washed
- Night set back/economy mode function ensures gentle and energy-saving cooling and heating

Indoor unit			SAP-XR94EHA		SAP-XR124EHA		SAP-XR184EH	
Outdoor unit			SAP-CR94EHA		SAP-CR124EHA		SAP-CR184EHA	
System performance			Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,87	3,1	3,65	4,52	5,0	6,0
Power input		W	875	775	1075	1055	1650	1650
EER/COP			3,28	4,0	3,4	4,28	3,03	3,64
Energy class			A	A	A	A	B	A
Annual energy consumption		kWh	437,5	-	537,5	-	825	-
Running current		A	4,5	4,5	5,2	5,3	7,0	7,0
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Indoor unit)				220-240V, 1ph, 50Hz (Outdoor unit)	
Indoor unit specifications								
Air circulation	(H)	m3/h	700	700	700	700	790	790
Moisture removal	(H)	Litres/h	0,5	-	1	-	2,0	-
Sound pressure level	(Qt/L/M/H)	dB(A)	37/40/43	37/40/43	37/40/43	37/40/43	37/40/45	37/40/45
Dimensions Unit	(H×W×D)	mm	296x575x575		296x575x575		296x575x575	
Dimensions Panel			41x730x730		41x730x730		41x730x730	
Net weight unit		kg	16,5		16,5		18	
Net weight panel		kg	2,5		2,5		2,5	
Outdoor unit specifications								
Sound pressure level	(H)	dB(A)	47	48	49	50	55	56
Dimensions	(H×W×D)	mm	548x720x265		565x790x285		670x880x285	
Net weight		kg	35,0		37,0		48,0	
Installation data								
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)		12,7(1/2)	
Maximum piping length		m	15		20		30	
Maximum elevation difference		m	7		7		7	
Precharged piping length		m	7,5		7,5		7,5	
Amount of additional refrigerant		g/m	15		25		25	
Recommended fuse/circuit breaker capacity		A	10		10		20	

Specifications subject to change without notice.

(except model 184)
Energy class A

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SAP-FR94EHA
SAP-FTR...EH(A)
SAP-CR...EHA

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

SAP-CR...EHA

Remote

SAP-FR94EHA

SAP-FTR...EH(A), ceiling mounted

SAP-FTR...EH(A), floor mounted

- Auto restart after power failure and auto changeover
- Cold draft prevention in heating mode
- Lightweight and compact designs
- Infrared remote control with 24 hour clock with ON/OFF program timer
- Automatic louvre control provides uniform airflow throughout the room
- Easy to clean filter prevents mould or bacteria from occurring
- Night set back/economy mode function ensures gentle and energy-saving cooling

Floor or ceiling application

Indoor unit			SAP-FR94EHA		SAP-FTR124EHA		SAP-FTR184EH		SAP-FTR224EH	
Outdoor unit			SAP-CR94EHA		SAP-CR124EHA		SAP-CR184EHA		SAP-CR224EHA	
System performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,65	3,2	3,6	4,35	5,05	5,90	6,25	7,4
Power input		W	825	810	1055	1045	1650	1700	2300	2600
EER/COP			3,21	3,95	3,41	4,16	3,06	3,47	2,72	2,85
Energy class			A	A	A	A	B	B	D	D
Annual energy consumption		kWh	412,5	-	527,5	-	825	-	1150	-
Running current 1ph		A	3,9	3,9	5,0	5,1	7,0	7,2	9,9	11,2
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Indoor unit)				220-240V, 1ph, 50Hz (Outdoor unit)			
Indoor unit specifications										
Air circulation	(H)	m3/h	400	400	700	700	720	720	900	900
Moisture removal	(H)	Litres/h	1,0	-	1,3	-	2,0	-	2,2	-
Sound pressure level	(L/M/H)	dB(A)	34/40/43	34/40/43	38/43/47	38/43/47	39/44/48	39/44/48	44/47/50	44/47/50
Dimensions	(H×W×D)	mm	700x560x200		680x900x190		680x900x190		680x900x190	
Net weight		kg	18,0		23,5		23,5		23,5	
Outdoor unit specifications										
Sound pressure level	(H)	dB(A)	47	48	49	50	55	56	57	58
Dimensions	(H×W×D)	mm	548x720x265		565x790x285		670x880x285		670x880x285	
Net weight		kg	35,0		37,0		48,0		56,0	
Installation data										
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)		6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)		12,7(1/2)		15,88 (5/8)	
Maximum piping length		m	15		20		30		30	
Maximum elevation difference		m	7		7		7		7	
Precharched piping length		m	7,5		7,5		7,5		7,5	
Amount of additional refrigerant		g/m	15		25		25		25	
Recommended fuse/circuit breaker capacity		A	10		10		20		20	

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SAP-UR...EH
SAP-CR...EHA

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

SAP-CR...EHA

Remote

SAP-UR...EH

Plenum

Plenum

- Auto restart after power failure and auto change over
- 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
- Booster cable available to increase static pressure
- Powerful start function for rapid cooling and heating
- External electrical box allows ease of access for service and maintenance
- Night set back and economy mode function ensures energy-saving cooling and heating

Indoor unit			SAP-UR94EHA		SAP-UR124EHA		SAP-UR184EH		SAP-UR224EH	
Outdoor unit			SAP-CR94EHA		SAP-CR124EHA		SAP-CR184EHA		SAP-CR224EHA	
System performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,65	3,0	4,5	4,62	5,20	6,15	6,7	7,4
Power input		W	880	780	1130	1060	1700	1750	2350	2450
EER/COP			3,49	4,1	3,58	4,36	3,06	3,51	2,85	3,02
Energy class			A	A	A	A	B	B	C	D
Annual energy consumption		kWh	440	-	565	-	850	-	1175	-
Running current 1ph		A	4,1	4,2	5,3	5,4	7,2	7,5	10,1	10,5
Power supply		V,ph,Hz	220-240V Single-Phase 50Hz (Indoor unit)				220-240V, 1ph, 50Hz (Outdoor unit)			
Indoor unit specifications										
Air circulation	(H)	m3/h	600	600	600	600	865	865	985	985
Moisture removal	(H)	Litres/h	0,8	-	1,5	-	2,0	-	2,2	-
External static pressure std. (booster)	(H)	Pa	49 (69)							
Sound pressure level	(L/M/H)	dB(A)	40/43/45	40/43/45	40/43/45	40/43/45	33/38/45	33/38/45	33/40/48	33/40/48
Dimensions	(H×W×D)	mm	266x852x571		266x852x571		266x1058x571		266x1058x571	
Net weight		kg	30		30		35		35	
Outdoor unit specifications										
Sound pressure level	(H)	dB(A)	47	48	49	50	55	56	57	58
Dimensions	(H×W×D)	mm	548x720x265		565x790x285		670x880x285		670x880x285	
Net weight		kg	35,0		37,0		48,0		56,0	
Installation data										
Pipe diameter	Narrow	mm(in.)	6,35 (1/4)		6,35 (1/4)		6,35 (1/4)		6,35 (1/4)	
	Wide	mm(in.)	9,52 (3/8)		9,52 (3/8)		12,7(1/2)		15,88 (5/8)	
Maximum piping length		m	15		20		30		30	
Maximum elevation difference		m	7		7		7		7	
Precharched piping length		m	7,5		7,5		7,5		7,5	
Amount of additional refrigerant		g/m	15		25		25		25	
Recommended fuse / circuit breaker capacity		A	10		10		20		20	

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-CMRV1426EH
SAP-CMRV1926EH
SAP-CMRV1936EH
SAP-CMRV2446EH
SAP-CMRV3146EH

SAP-CMRV....EH

Remote

SAP-XRV...EH

SAP-URV...EH

SAP-FTRV...EH

SAP-K(M)RV...EH

SAP-KRV...EHDS

SAP-FRV....EH

Design guaranteed for an extremely efficient and flexible operation.

- DC inverter technology for precise temperature control and a low start-up current
- Twin rotary compressor: the dual rotors guarantee perfect balancing ensuring functional reliability and efficiency. This also contributes to increase comfort and accelerate cooling and heating as well as ensuring an extremely quiet and efficient operation.
- Energy class A/A for the whole range, both in cooling and heating modes
- Operating range decreased to -15°C in heating mode and -5°C in cooling mode
- The volume of the external unit has been decreased by 9%, solving the problem of limited space and does not encumber the exterior
- Non-stop heating by means of SANYO's exclusive hot gas by-pass system
- Renewable and washable apatite ceramic filter
- Photo-catalytic LED sterilization function ensures excellent performance in eliminating odours, germs and bacteria (only wall-mounted units)
- Night Set back/Economy modes to guarantee quiet and energy-efficient cooling and heating
- Programmable start-up and shut-off via 24 hour clock

The flexible solution

- The 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 (new Flexi Multi SAP-CMRV3656EH even up to 5 areas!) from a single outdoor unit.
- 5 system capacities 4.0kW to 8.0kW
- 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

Flexi Multi System Example

Heat-Pump Inverter										
Outdoor units	SAP-CMRV1426EH		SAP-CMRV1926EH		SAP-CMRV1936EH		SAP-CMRV2446EH		SAP-CMRV3146EH	
Performance	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity kW	2,0/4,0/5,0	2,2/4,5/5,5	2,1/5,6/6,8	2,4/7,3/8,4	2,9/5,2/6,5	3,4/6,8/7,8	2,9/6,8/8,1	3,4/8,6/9,0	2,9/8,0/9,2	3,4/9,4/9,8
Power consumption W	925	925	1695	1735	1530	1610	2000	2000	1730	2040
EER/COP W/W	4,32	4,86	3,30	4,21	3,40	4,22	3,40	4,30	4,62	4,61
Energy class	A	A	A	A	A	A	A	A	A	A
Current draw A	4,10	4,10	7,52	7,70	6,88	7,70	8,87	8,87	7,58	8,96
Annual consumption (cooling) kW/h	462,5		847,5		765		1000		865	
Max. number of units N.	2		2		3		4		4	
Sound pressure dB(A)	47	48	47	48	47	48	49	51	47	48
Noise level dB(A)	61	62	61	62	61	62	63	65	61	62
Pipe diameter - suction/discharge mm(in)	2x6,4(1/4) 2x9,5(3/8)		2x6,4(1/4) 2x9,5(3/8)		3x6,4(1/4) 2x9,5(3/8)		3x6,4 (1/4) 3x9,5(3/8) 12,7 (1/2)		4x6,4 (1/4) 2x9,5(3/8) 2x12,7(1/2)	
Maximum total pipe length m	30		45		45		60		70	
Maximum pipe length per unit m	20		25		25		25		30	
Max. elevation difference E.U - I.U m	15		15		15		15		15	
Total pipe length - standard charge m	30		45		45		45*		45**	
Dimensions (HxLxD) mm	569x790x285		740x900x320		740x900x320		740x900x320		890x900x320	
Net weight kg	42		65		65		65		82	
Power supply V,ph,Hz	230, 1+N, 50		230, 1+N, 50		230, 1+N, 50		230, 1+N, 50		230, 1+N, 50	

* For longer pipes, up to 60m add 20 g/m of refrigerant.
** For longer pipes, up to 70m add 20 g/m of refrigerant.
Reference conditions: Annual energy consumption = consumption for 500 hours at nominal load.
* For external temperatures < 7°C the heating capacity will be lower than the nominal capacity.

Specifications subject to change without notice.

Energy class A

INVERTER

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-KRV...EHDS
SAP-K(M)RV...EH
SAP-XRV...EH
SAP-FTRV...EH
SAP-FRV...EH
SAP-URV...EH

SAP-KRV...EHDS

SAP-K(M)RV...EH

SAP-XRV...EH

SAP-FTRV...EH

SAP-FRV...EH

SAP-URV...EH

SAP-KRV96EHDS						
Indoor unit			SAP-KRV96EHDS		SAP-KRV126EHDS	
Performance			Cooling	Heating	Cooling	Heating
Capacity		kW	0,9/2,65/3,6	0,9/3,6/4,9	3,50	4,80
Air circulation	(H)	m³/h	480	500	510	560
Moisture removal	(H)	Litres/h	1,6	-	2,0	-
Sound pressure level	(Qt/L/M/H)	dB(A)	22/28/35/41	22/28/35/41	22/28/35/42	22/29/36/42
Dimensions	(H×W×D)	mm	265x789x180		265x789x180	
Net weight		kg	9,5		9,5	

SAP-K(M)RV…EH												
Indoor unit			SAP-KMRV76EH		SAP-KMRV96EH		SAP-KMRV126EH		SAP-KRV186EH		SAP-KRV246EH	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	-/2,2/-	-/2,5/-	-/2,65/-	-/3,6/-	-/3,5/-	/4,2/-	-/5,15/-	-/6,0/-	-/7,1/-	-/8,5/-
Air circulation	(H)	m³/h	440	480	460	480	480	500	840	880	890	930
Moisture removal	(H)	Litres/h	1,3	-	1,6	-	2,0	-	2,3	-	2,3	-
Sound pressure level	(Qt/L/M/H)	dB(A)	22/27/30/33	22/27/30/33	22/28/31/34	22/28/31/34	25/29/33/36	25/29/31/34	28/34/38/41	28/34/37/40	30/38/41/44	30/37/40/43
Dimensions	(H×W×D)	mm	285x825x213		285x825x213		285x825x213		298x1065x234		298x1065x234	
Net weight		kg	10		10		10		12		12	

SAP-XRV…EH								
Indoor unit			SAP-XRV96EH		SAP-XRV126EH		SAP-XRV186EH	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	-/2,65/-	-/3,6/-	-/3,5/-	/4,2/-	-/5,15/-	-/6,0/-
Air circulation	(H)	m³/h	700	700	700	700	790	790
Moisture removal	(H)	Litres/h	1,5	-	1,8	-	2,0	-
Sound pressure level	(L/M/H)	dB(A)	37/40/44		37/40/44		37/40/45	
Dimensions unit	(H×W×D)	mm	273x575x575		273x575x575		273x575x575	
Dimensions panel			41x730x730		41x730x730		41x730x730	
Net weight		kg	16,5		16,5		18	

SAP-FTRV…EH SAP-FRV…EH										
Indoor unit			SAP-FRV96EH		SAP-FTRV126EH		SAP-FTRV186EH		SAP-FTRV246EH	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	-/2,65/-	-/3,6/-	-/3,5/-	/4,2/-	-/5,15/-	-/6,0/-	-/7,1/-	-/8,5/-
Air circulation	(H)	m³/h	425	425	700	700	720	720	900	900
Moisture removal	(H)	Litres/h	1,6	-	2,0	-	2,8	-	3,4	-
Sound pressure level	(L/M/H)	dB(A)	30/40/43		38/43/47		41/45/49		42/46/50	
Dimensions	(H×W×D)	mm	700x560x200		680x900x190		680x900x190		680x900x190	
Net weight		kg	18		23,5		23,5		23,5	

SAP-URV…EH										
Indoor unit			SAP-URV96EH		SAP-URV126EH		SAP-URV186EH		SAP-URV246EH	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	-/2,65/-	-/3,6/-	-/3,5/-	/4,2/-	-/5,15/-	-/6,0/-	-/7,1/-	-/8,5/-
Air circulation	(H)	m³/h	620	620	620	620	865	865	985	985
Moisture removal	(H)	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	
Dimensions	(H×W×D)	mm	266x852x571		266x852x571		266x1058x571		266x1058x571	
Net weight		kg	30		30		30		35	

All Specifications subject to change without notice.

SAP-CMRV1426EH									
"Indoor unit combination SAP-K(M)RV..6EH"		Cooling				Heating			
Rated capacity (kW)		Capacity (Min.-Max.) (kW)				Capacity (Min.-Max.) (kW)			
Cooling/Heating : 4.0/4.5		Room A	Room B	Total		Room A	Room B	Total	
1 room	7	2,20	-	2,2	(1,2-2,6)	2,50	-	2,5	(1,4-3,5)
	9	2,65	-	2,65	(1,2-3,2)	3,60	-	3,6	(1,4-4,0)
	12	3,50	-	3,5	(1,3-3,6)	4,20	-	4,2	(1,5-4,2)
2 rooms	7 + 7	1,80	1,80	3,6	(2,0-4,5)	2,10	2,10	4,2	(2,0-5,0)
	7 + 9	1,68	2,02	3,7	(2,0-4,8)	1,72	2,48	4,2	(2,0-5,0)
	7 + 12	1,51	2,39	3,9	(2,0-4,9)	1,64	2,76	4,4	(2,2-5,3)
	9 + 9	2,00	2,00	4,0	(2,0-5,0)	2,25	2,25	4,5	(2,2-5,5)
	9 + 12	1,72	2,28	4,0	(2,1-5,0)	2,08	2,42	4,5	(2,4-5,5)

The table lists the wall-mounted type of indor units as representative models. For details on the connection of indoor units other than the wall mounted type, refer to the technical data.

SAP-CMRV1926EH									
"Indoor unit combination SAP-K(M)RV..6EH"		Cooling				Heating			
Rated capacity (kW)		Capacity (Min.-Max.) (kW)				Capacity (Min.-Max.) (kW)			
Cooling/Heating : 5.6/7.3		Room A	Room B	Total		Room A	Room B	Total	
1 room	7	2,20	-	2,2	(1,4-2,6)	2,50	-	2,5	(1,8-4,3)
	9	2,65	-	2,65	(1,4-3,2)	3,60	-	3,6	(1,8-4,7)
	12	3,50	-	3,5	(1,5-3,6)	4,20	-	4,2	(1,9-5,1)
	18	5,15	-	5,15	(1,6-5,8)	6,00	-	6,0	(2,0-7,8)
2 rooms	7 + 7	2,20	2,20	4,4	(2,0-5,1)	2,50	2,50	5,0	(2,0-6,4)
	7 + 9	2,20	2,65	4,85	(2,0-5,8)	2,50	3,60	6,1	(2,1-7,5)
	7 + 12	1,97	3,13	5,1	(2,0-6,7)	2,35	3,95	6,3	(2,1-8,3)
	7 + 18	1,65	3,85	5,5	(2,1-6,8)	2,03	4,87	6,9	(2,4-8,4)
	9 + 9	2,50	2,50	5,0	(2,0-6,3)	3,23	3,23	6,45	(2,3-8,4)
	9 + 12	2,24	2,96	5,2	(2,0-6,8)	3,07	3,58	6,65	(2,3-8,4)
	9 + 18	1,90	3,70	5,6	(2,1-6,8)	2,74	4,56	7,3	(2,4-8,4)
	12 + 12	2,70	2,70	5,4	(2,0-6,8)	3,45	3,45	6,9	(2,3-8,4)
	12 + 18	2,27	3,33	5,6	(2,1-6,8)	3,01	4,29	7,3	(2,4-8,4)

SAP-CMRV1936EH											
"Indoor unit combination SAP-K(M)RV..6EH"		Cooling					Heating				
Rated capacity (kW)		Capacity (Min.-Max.) (kW)					Capacity (Min.-Max.) (kW)				
Cooling/Heating : 5.6/7.3		Room A	Room B	Room C	Total		Room A	Room B	Room C	Total	
1 room	7	2,20	-	-	2,2	(1,4-2,6)	2,50	-	-	2,5	(1,8-4,3)
	9	2,65	-	-	2,65	(1,4-3,2)	3,60	-	-	3,6	(1,8-4,7)
	12	3,50	-	-	3,5	(1,5-3,6)	4,20	-	-	4,2	(1,9-5,1)
	18	5,15	-	-	5,15	(1,6-5,8)	6,00	-	-	6,0	(2,0-7,8)
2 rooms	7 + 7	2,20	2,20	-	4,4	(2,0-5,1)	2,50	2,50	-	5,0	(2,0-6,4)
	7 + 9	2,20	2,65	-	4,85	(2,0-5,8)	2,50	3,60	-	6,1	(2,1-7,5)
	7 + 12	1,97	3,13	-	5,1	(2,0-6,7)	2,35	3,95	-	6,3	(2,1-8,3)
	7 + 18	1,65	3,85	-	5,5	(2,1-6,8)	2,03	4,87	-	6,9	(2,4-8,4)
	9 + 9	2,50	2,50	-	5,0	(2,0-6,3)	3,23	3,23	-	6,45	(2,3-8,4)
	9 + 12	2,24	2,96	-	5,2	(2,0-6,8)	3,07	3,58	-	6,65	(2,3-8,4)
	9 + 18	1,90	3,70	-	5,6	(2,1-6,8)	2,74	4,56	-	7,3	(2,4-8,4)
	12 + 12	2,70	2,70	-	5,4	(2,0-6,8)	3,45	3,45	-	6,9	(2,3-8,4)
	12 + 18	2,27	3,33	-	5,6	(2,1-6,8)	3,01	4,29	-	7,3	(2,4-8,4)
3 rooms	7 + 7 + 7	1,77	1,77	1,77	5,3	(2,5-6,8)	2,18	2,18	2,18	6,55	(2,7-8,4)
	7 + 7 + 9	1,69	1,69	2,03	5,4	(2,9-6,8)	2,02	2,02	2,91	6,95	(3,0-8,4)
	7 + 7 + 12	1,56	1,56	2,48	5,6	(2,9-6,8)	1,94	1,94	3,26	7,15	(3,2-8,4)
	7 + 7 + 18	1,29	1,29	3,02	5,6	(2,9-6,8)	1,66	1,66	3,98	7,3	(3,4-8,4)
	7 + 9 + 9	1,63	1,96	1,96	5,55	(2,9-6,8)	1,88	2,71	2,71	7,3	(3,4-8,4)
	7 + 9 + 12	1,48	1,78	2,35	5,6	(2,9-6,8)	1,77	2,55	2,98	7,3	(3,4-8,4)
	7 + 9 + 18	1,23	1,48	2,88	5,6	(2,9-6,8)	1,51	2,17	3,62	7,3	(3,4-8,4)
	7 + 12 + 12	1,34	2,13	2,13	5,6	(2,9-6,8)	1,67	2,81	2,81	7,3	(3,4-8,4)
	9 + 9 + 9	1,87	1,87	1,87	5,6	(2,9-6,8)	2,43	2,43	2,43	7,3	(3,4-8,4)
	9 + 9 + 12	1,69	1,69	2,23	5,6	(2,9-6,8)	2,31	2,31	2,69	7,3	(3,4-8,4)
	9 + 12 + 12	1,54	2,03	2,03	5,6	(2,9-6,8)	2,19	2,56	2,56	7,3	(3,4-8,4)
	12 + 12 + 12	1,87	1,87	1,87	5,6	(2,9-6,8)	2,43	2,43	2,43	7,3	(3,4-8,4)

The table lists the wall-mounted type of indoor units as representative models.
For details on the connection of indoor units other than the wall mounted type, refer to the technical data.
All Specifications subject to change without notice.

Energy class A

INVERTER

R410A

Flexi Multi Indoor Unit Capacities (continued)

SAP-CMRV2446EH													
"Indoor unit combination SAP-K(M)RV..6EH"		Cooling						Heating					
Rated capacity (kW)		Capacity (Min.-Max.) (kW)						Capacity (Min.-Max.) (kW)					
Cooling/Heating : 6.8/8.6		Room A	Room B	Room C	Room D	Total		Room A	Room B	Room C	Room D	Total	
1 room	7	2,20	-	-	-	2,2	(1,4-2,6)	2,50	-	-	-	2,5	(1,8-4,3)
	9	2,65	-	-	-	2,65	(1,4-3,2)	3,60	-	-	-	3,6	(1,8-4,7)
	12	3,50	-	-	-	3,5	(1,5-3,6)	4,20	-	-	-	4,2	(1,9-5,1)
	18	5,15	-	-	-	5,15	(1,6-5,8)	6,00	-	-	-	6,0	(2,0-7,8)
	24	6,80	-	-	-	6,8	(1,6-6,8)	8,00	-	-	-	8,0	(2,0-8,0)
2 rooms	7 + 7	2,20	2,20	-	-	4,4	(2,0-5,1)	2,50	2,50	-	-	5,0	(2,0-6,4)
	7 + 9	2,20	2,65	-	-	4,85	(2,0-5,8)	2,50	3,60	-	-	6,1	(2,1-7,5)
	7 + 12	2,20	3,50	-	-	5,7	(2,0-6,7)	2,50	4,20	-	-	6,7	(2,1-8,3)
	7 + 18	1,95	4,55	-	-	6,5	(2,1-7,7)	2,38	5,72	-	-	8,1	(2,4-9,0)
	7 + 24	1,57	5,08	-	-	6,65	(2,1-7,9)	2,01	6,44	-	-	8,45	(2,4-9,0)
	9 + 9	2,65	2,65	-	-	5,3	(2,0-6,3)	3,60	3,60	-	-	7,2	(2,3-8,5)
	9 + 12	2,54	3,36	-	-	5,9	(2,0-6,8)	3,51	4,09	-	-	7,6	(2,3-8,5)
	9 + 18	2,28	4,42	-	-	6,7	(2,1-7,9)	3,08	5,13	-	-	8,2	(2,4-9,0)
	9 + 24	1,85	4,95	-	-	6,8	(2,1-7,9)	2,64	5,86	-	-	8,5	(2,4-9,0)
	12 + 12	3,23	3,23	-	-	6,45	(2,0-7,9)	4,00	4,00	-	-	8,0	(2,3-8,5)
	12 + 18	2,69	3,96	-	-	6,65	(2,1-7,9)	3,42	4,88	-	-	8,3	(2,4-9,0)
	12 + 24	2,25	4,55	-	-	6,8	(2,1-7,9)	2,96	5,64	-	-	8,6	(2,4-9,0)
	18 + 18	3,40	3,40	-	-	6,8	(2,1-7,9)	4,28	4,28	-	-	8,55	(2,4-9,0)
3 rooms	7 + 7 + 7	2,17	2,17	2,17	-	6,5	(2,5-7,7)	2,50	2,50	2,50	-	7,5	(2,7-8,5)
	7 + 7 + 9	2,06	2,06	2,48	-	6,6	(2,9-7,9)	2,33	2,33	3,35	-	8,0	(3,0-9,0)
	7 + 7 + 12	1,88	1,88	2,99	-	6,75	(2,9-7,9)	2,26	2,26	3,79	-	8,3	(3,2-9,0)
	7 + 7 + 18	1,57	1,57	3,67	-	6,8	(2,9-7,9)	1,95	1,95	4,69	-	8,6	(3,4-9,0)
	7 + 9 + 9	1,97	2,37	2,37	-	6,7	(2,9-7,9)	2,16	3,12	3,12	-	8,4	(3,4-9,0)
	7 + 9 + 12	1,79	2,16	2,85	-	6,8	(2,9-7,9)	2,06	2,97	3,47	-	8,5	(3,4-9,0)
	7 + 9 + 18	1,50	1,80	3,50	-	6,8	(2,9-7,9)	1,78	2,56	4,26	-	8,6	(3,4-9,0)
	7 + 12 + 12	1,63	2,59	2,59	-	6,8	(2,9-7,9)	1,97	3,31	3,31	-	8,6	(3,4-9,0)
	7 + 12 + 18	1,38	2,19	3,23	-	6,8	(2,9-7,9)	1,69	2,84	4,06	-	8,6	(3,4-9,0)
	9 + 9 + 9	2,27	2,27	2,27	-	6,8	(2,9-7,9)	2,87	2,87	2,87	-	8,6	(3,4-9,0)
	9 + 9 + 12	2,05	2,05	2,70	-	6,8	(2,9-7,9)	2,72	2,72	3,17	-	8,6	(3,4-9,0)
	9 + 9 + 18	1,72	1,72	3,35	-	6,8	(2,9-7,9)	2,35	2,35	3,91	-	8,6	(3,4-9,0)
	9 + 12 + 12	1,87	2,47	2,47	-	6,8	(2,9-7,9)	2,58	3,01	3,01	-	8,6	(3,4-9,0)
	9 + 12 + 18	1,59	2,11	3,10	-	6,8	(2,9-7,9)	2,24	2,62	3,74	-	8,6	(3,4-9,0)
	12 + 12 + 12	2,27	2,27	2,27	-	6,8	(2,9-7,9)	2,87	2,87	2,87	-	8,6	(3,4-9,0)
	12 + 12 + 18	1,96	1,96	2,88	-	6,8	(2,9-7,9)	2,51	2,51	3,58	-	8,6	(3,4-9,0)
4 rooms	7 + 7 + 7 + 7	1,70	1,70	1,70	1,70	6,8	(2,9-8,1)	2,15	2,15	2,15	2,15	8,6	(3,4-9,0)
	7 + 7 + 7 + 9	1,62	1,62	1,62	1,95	6,8	(2,9-8,1)	1,94	1,94	1,94	2,79	8,6	(3,4-9,0)
	7 + 7 + 7 + 12	1,48	1,48	1,48	2,36	6,8	(2,9-8,1)	1,84	1,84	1,84	3,09	8,6	(3,4-9,0)
	7 + 7 + 7 + 18	1,27	1,27	1,27	2,98	6,8	(2,9-8,1)	1,59	1,59	1,59	3,82	8,6	(3,4-9,0)
	7 + 7 + 9 + 9	1,54	1,54	1,86	1,86	6,8	(2,9-8,1)	1,76	1,76	2,54	2,54	8,6	(3,4-9,0)
	7 + 7 + 9 + 12	1,42	1,42	1,71	2,26	6,8	(2,9-8,1)	1,68	1,68	2,42	2,82	8,6	(3,4-9,0)
	7 + 7 + 9 + 18	1,23	1,23	1,48	2,87	6,8	(2,9-8,1)	1,47	1,47	2,12	3,53	8,6	(3,4-9,0)
	7 + 7 + 12 + 12	1,31	1,31	2,09	2,09	6,8	(2,9-8,1)	1,60	1,60	2,70	2,70	8,6	(3,4-9,0)
	7 + 7 + 12 + 18	1,15	1,15	1,82	2,68	6,8	(2,9-8,1)	1,41	1,41	2,38	3,39	8,6	(3,4-9,0)
	7 + 9 + 9 + 9	1,47	1,78	1,78	1,78	6,8	(2,9-8,1)	1,62	2,33	2,33	2,33	8,6	(3,4-9,0)
	7 + 9 + 9 + 12	1,36	1,64	1,64	2,16	6,8	(2,9-8,1)	1,55	2,23	2,23	2,60	8,6	(3,4-9,0)
	7 + 9 + 9 + 18	1,18	1,42	1,42	2,77	6,8	(2,9-8,1)	1,37	1,97	1,97	3,29	8,6	(3,4-9,0)
	7 + 9 + 12 + 12	1,26	1,52	2,01	2,01	6,8	(2,9-8,1)	1,48	2,14	2,49	2,49	8,6	(3,4-9,0)
	7 + 12 + 12 + 12	1,18	1,87	1,87	1,87	6,8	(2,9-8,1)	1,42	2,39	2,39	2,39	8,6	(3,4-9,0)
	9 + 9 + 9 + 9	1,70	1,70	1,70	1,70	6,8	(2,9-8,1)	2,15	2,15	2,15	2,15	8,6	(3,4-9,0)
	9 + 9 + 9 + 12	1,57	1,57	1,57	2,08	6,8	(2,9-8,1)	2,06	2,06	2,06	2,41	8,6	(3,4-9,0)
	9 + 9 + 9 + 18	1,38	1,38	1,38	2,67	6,8	(2,9-8,1)	1,84	1,84	1,84	3,07	8,6	(3,4-9,0)
	9 + 9 + 12 + 12	1,47	1,47	1,93	1,93	6,8	(2,9-8,1)	1,98	1,98	2,32	2,32	8,6	(3,4-9,0)

The table lists the wall-mounted type of indor units as representative models. For details on the connection of indoor units other than the wall mounted type, refer to the technical data.
Specifications subject to change without notice. .

R410A INVERTER Energy class A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SAP-CMRV3146EH													
"IndoorunitcombinationSAP-K(M)RV..6EH"		Cooling						Heating					
Rated capacity (kW)		Capacity (Min.-Max.) (kW)						Capacity (Min.-Max.) (kW)					
Cooling/Heating : 8.0/9.4		Room A	Room B	Room C	Room D	Total		Room A	Room B	Room C	Room D	Total	
1 room	7	2,20	-	-	-	2,2	(1,5-2,6)	2,50	-	-	-	2,5	(1,8-4,3)
	9	2,65	-	-	-	2,65	(1,5-3,2)	3,60	-	-	-	3,6	(1,8-4,7)
	12	3,50	-	-	-	3,5	(1,6-3,6)	4,20	-	-	-	4,2	(1,9-5,1)
	18	5,15	-	-	-	5,15	(1,7-5,8)	6,00	-	-	-	6,0	(2,0-7,8)
	24	7,10	-	-	-	7,1	(1,8-7,4)	8,50	-	-	-	8,5	(2,0-8,8)
2 rooms	7 + 7	2,20	2,20	-	-	4,4	(2,0-5,1)	2,50	2,50	-	-	5,0	(2,0-6,4)
	7 + 9	2,20	2,65	-	-	4,85	(2,0-5,8)	2,50	3,60	-	-	6,1	(2,1-7,5)
	7 + 12	2,20	3,50	-	-	5,7	(2,0-6,7)	2,50	4,20	-	-	6,7	(2,3-8,3)
	7 + 18	2,14	5,01	-	-	7,15	(2,2-7,7)	2,50	6,00	-	-	8,5	(3,0-9,4)
	7 + 24	1,81	5,84	-	-	7,65	(2,3-8,8)	2,01	6,84	-	-	8,85	(3,0-9,8)
	9 + 9	2,65	2,65	-	-	5,3	(2,0-6,5)	3,60	3,60	-	-	7,2	(2,4-8,5)
	9 + 12	2,54	3,36	-	-	5,9	(2,0-7,4)	3,51	4,09	-	-	7,6	(2,6-8,5)
	9 + 18	2,46	4,79	-	-	7,25	(2,3-8,5)	3,24	5,41	-	-	8,65	(3,3-9,4)
	9 + 24	2,11	5,64	-	-	7,75	(2,3-8,8)	2,68	6,32	-	-	9,0	(3,3-9,8)
	12 + 12	3,40	3,40	-	-	6,8	(2,2-8,4)	4,00	4,00	-	-	8,0	(2,9-8,5)
	12 + 18	3,03	4,47	-	-	7,5	(2,6-8,8)	3,60	5,15	-	-	8,75	(3,4-9,8)
	12 + 24	2,61	5,29	-	-	7,9	(2,6-8,8)	3,01	6,09	-	-	9,1	(3,4-9,8)
	18 + 18	3,95	3,95	-	-	7,9	(2,6-8,8)	4,50	4,50	-	-	9,0	(3,4-9,8)
	18 + 24	3,36	4,64	-	-	8,0	(2,7-8,8)	3,89	5,51	-	-	9,4	(3,4-9,8)
3 rooms	7 + 7 + 7	2,20	2,20	2,20	-	6,6	(2,0-7,7)	2,50	2,50	2,50	-	7,5	(2,7-9,0)
	7 + 7 + 9	2,20	2,20	2,65	-	7,05	(2,2-8,4)	2,47	2,47	3,56	-	8,5	(3,0-9,2)
	7 + 7 + 12	2,03	2,03	3,23	-	7,3	(2,4-8,6)	2,34	2,34	3,93	-	8,6	(3,2-9,8)
	7 + 7 + 18	1,77	1,77	4,15	-	7,7	(2,7-9,0)	2,01	2,01	4,83	-	8,85	(3,4-9,8)
	7 + 7 + 24	1,53	1,53	4,94	-	8,0	(2,9-9,0)	1,71	1,71	5,82	-	9,25	(3,4-9,8)
	7 + 9 + 9	2,11	2,54	2,54	-	7,2	(2,3-8,6)	2,23	3,21	3,21	-	8,65	(3,3-9,3)
	7 + 9 + 12	1,95	2,35	3,10	-	7,4	(2,6-9,0)	2,12	3,06	3,57	-	8,75	(3,4-9,8)
	7 + 9 + 18	1,72	2,07	4,02	-	7,8	(2,9-9,0)	1,86	2,68	4,46	-	9,0	(3,4-9,8)
	7 + 9 + 24	1,47	1,77	4,75	-	8,0	(2,9-9,0)	1,61	2,32	5,47	-	9,4	(3,4-9,8)
	7 + 12 + 12	1,82	2,89	2,89	-	7,6	(2,7-9,0)	2,03	3,41	3,41	-	8,85	(3,4-9,8)
	7 + 12 + 18	1,60	2,55	3,75	-	7,9	(2,9-9,0)	1,79	3,01	4,30	-	9,1	(3,4-9,8)
	7 + 12 + 24	1,38	2,19	4,44	-	8,0	(2,9-9,0)	1,55	2,60	5,26	-	9,4	(3,4-9,8)
	7 + 18 + 18	1,41	3,30	3,30	-	8,0	(2,9-9,0)	1,62	3,89	3,89	-	9,4	(3,4-9,8)
	7 + 18 + 24	1,22	2,85	3,93	-	8,0	(2,9-9,0)	1,38	3,32	4,70	-	9,4	(3,4-9,8)
	9 + 9 + 9	2,43	2,43	2,43		7,3	(2,5-8,6)	2,95	2,95	2,95	-	8,85	(3,4-9,4)
	9 + 9 + 12	2,26	2,26	2,98	-	7,5	(2,7-9,0)	2,81	2,81	3,28	-	8,9	(3,4-9,8)
	9 + 9 + 18	2,00	2,00	3,89	-	7,9	(2,9-9,0)	2,51	2,51	4,18	-	9,2	(3,4-9,8)
	9 + 9 + 24	1,71	1,71	4,58	-	8,0	(2,9-9,0)	2,16	2,16	5,09	-	9,4	(3,4-9,8)
	9 + 12 + 12	2,13	2,81	2,81	-	7,75	(2,7-9,0)	2,70	3,15	3,15	-	9.0	(3,4-9,8)
	9 + 12 + 18	1,88	2,48	3,65	-	8,0	(2,9-9,0)	2,43	2,83	4,04	-	9,3	(3,4-9,8)
	9 + 12 + 24	1,60	2,11	4,29	-	8,0	(2,9-9,0)	2,08	2,42	4,90	-	9,4	(3,4-9,8)
	9 + 18 + 18	1,64	3,18	3,18	-	8,0	(2,9-9,0)	2,17	3,62	3,62	-	9,4	(3,4-9,8)
	12 + 12 + 12	2,65	2,65	2,65	-	7,95	(2,9-9,0)	3,03	3,03	3,03	-	9,1	(3,4-9,8)
	12 + 12 + 18	2,30	2,30	3,39	-	8,0	(2,9-9,0)	2,73	2,73	3,90	-	9,35	(3,4-9,8)
	12 + 12 + 24	1,99	1,99	4,03	-	8,0	(2,9-9,0)	2,34	2,34	4,73	-	9,4	(3,4-9,8)
	12 + 18 + 18	2,03	2,99	2,99	-	8,0	(2,9-9,0)	2,44	3,48	3,48	-	9,4	(3,4-9,8)
4 rooms	7 + 7 + 7 + 7	1,88	1,88	1,88	1,88	7,5	(2,9-9,2)	2,18	2,18	2,18	2,18	8,7	(3,4-9,8)
	7 + 7 + 7 + 9	1,82	1,82	1,82	2,19	7,65	(2,9-9,2)	1,99	1,99	1,99	2,87	8,85	(3,4-9,8)
	7 + 7 + 7 + 12	1,71	1,71	1,71	2,72	7,85	(2,9-9,2)	1,91	1,91	1,91	3,21	8,95	(3,4-9,8)
	7 + 7 + 7 + 18	1,50	1,50	1,50	3,51	8,0	(2,9-9,2)	1,71	1,71	1,71	4,11	9,25	(3,4-9,8)
	7 + 7 + 7 + 24	1,28	1,28	1,28	4,15	8,0	(2,9-9,2)	1,47	1,47	1,47	4,99	9,4	(3,4-9,8)
	7 + 7 + 9 + 9	1,76	1,76	2,12	2,12	7,75	(2,9-9,2)	1,85	1,85	2,67	2,67	9,05	(3,4-9,8)
	7 + 7 + 9 + 12	1,66	1,66	2,00	2,64	7,95	(2,9-9,2)	1,79	1,79	2,57	3,00	9,15	(3,4-9,8)
	7 + 7 + 9 + 18	1,44	1,44	1,74	3,38	8,0	(2,9-9,2)	1,61	1,61	2,32	3,86	9,4	(3,4-9,8)
	7 + 7 + 9 + 24	1,24	1,24	1,50	4,01	8,0	(2,9-9,2)	1,37	1,37	1,98	4,67	9,4	(3,4-9,8)
	7 + 7 + 12 + 12	1,54	1,54	2,46	2,46	8,0	(2,9-9,2)	1,72	1,72	2,88	2,88	9,2	(3,4-9,8)
	7 + 7 + 12 + 18	1,35	1,35	2,15	3,16	8,0	(2,9-9,2)	1,55	1,55	2,60	3,71	9,4	(3,4-9,8)
	7 + 7 + 18 + 18	1,20	1,20	2,80	2,80	8,0	(2,9-9,2)	1,38	1,38	3,32	3,32	9,4	(3,4-9,8)
	7 + 9 + 9 + 9	1,70	2,05	2,05	2,05	7,85	(2,9-9,2)	1,73	2,49	2,49	2,49	9,2	(3,4-9,8)
	7 + 9 + 9 + 12	1,60	1,93	1,93	2,55	8,0	(2,9-9,2)	1,67	2,41	2,41	2,81	9,3	(3,4-9,8)
	7 + 9 + 9 + 18	1,39	1,68	1,68	3,26	8,0	(2,9-9,2)	1,50	2,16	2,16	3,59	9,4	(3,4-9,8)
	7 + 9 + 12 + 12	1,49	1,79	2,36	2,36	8,0	(2,9-9,2)	1,62	2,33	2,72	2,72	9,4	(3,4-9,8)
	7 + 9 + 12 + 18	1,30	1,57	2,07	3,05	8,0	(2,9-9,2)	1,44	2,08	2,42	3,46	9,4	(3,4-9,8)
	7 + 12 + 12 + 12	1,39	2,20	2,20	2,20	8,0	(2,9-9,2)	1,56	2,61	2,61	2,61	9,4	(3,4-9,8)
	7 + 12 + 12 + 18	1,23	1,95	1,95	2,87	8,0	(2,9-9,2)	1,39	2,34	2,34	3,34	9,4	(3,4-9,8)
	9 + 9 + 9 + 9	2,00	2,00	2,00	2,00	8,0	(2,9-9,2)	2,35	2,35	2,35	2,35	9,4	(3,4-9,8)
	9 + 9 + 9 + 12	1,85	1,85	1,85	2,45	8,0	(2,9-9,2)	2,26	2,26	2,26	2,63	9,4	(3,4-9,8)
	9 + 9 + 9 + 18	1,62	1,62	1,62	3,15	8,0	(2,9-9,2)	2,01	2,01	2,01	3,36	9,4	(3,4-9,8)
	9 + 9 + 12 + 12	1,72	1,72	2,28	2,28	8,0	(2,9-9,2)	2,17	2,17	2,53	2,53	9,4	(3,4-9,8)
	9 + 9 + 12 + 18	1,52	1,52	2,01	2,95	8,0	(2,9-9,2)	1,94	1,94	2,27	3,24	9,4	(3,4-9,8)
	9 + 12 + 12 + 12	1,61	2,13	2,13	2,13	8,0	(2,9-9,2)	2,09	2,44	2,44	2,44	9,4	(3,4-9,8)
	12 + 12 + 12 + 12	2,00	2,00	2,00	2,00	8,0	(2,9-9,2)	2,35	2,35	2,35	2,35	9,4	(3,4-9,8)

The table lists the wall-mounted type of indor units as representative models. For details on the connection of indoor units other than the wall mounted type, refer to the technical data.
All Specifications subject to change without notice. .

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SAP-CMRV3656EH

SANYO's new 5 in 1 Flexi Multi DC Inverter Heat Pump now allows the connection of up to five indoor units.

SAP-CMRV3656EH

Remote

SAP-XRV....EH

SAP-URV....EH

SAP-FTRV....EH

SAP-K(M)RV....EH

SAP-KRV....EHDS

SAP-FRV....EH

- Energy class A both in cooling and heating operation
- Operation range down to -15°C in heating and -10°C in cooling operation
- DC inverter technology for precise temperature control and a low start-up current
- Twin rotary compressor: the dual rotors guarantee perfect balancing ensuring functional reliability and efficiency. This also contributes to increase comfort and accelerate cooling and heating as well as ensuring an extremely quiet and efficient operation.
- Non-stop heating by means of SANYO's exclusive hot gas by-pass system
- Renewable and washable apatite ceramic filter
- Photo-catalytic LED sterilization function ensures excellent performance in eliminating odours, germs and bacteria (only wall-mounted units)
- Night Set back/Economy modes to guarantee quiet and energy-efficient cooling and heating
- Programmable start-up and shut-off via 24 hour clock

Flexi Multi System Example

Heat- Pump Inverter		
External units	SAP-CMRV3656EH	
Performance	Cooling	Heating
Capacity kW	1,6/10,0/11,5	1,6/12,0/14,5
Power consumption W	2860	2860
EER/COP W/W	3,50	4,20
Energy class	A	A
Max. number of units N.	5	
Sound pressure dB(A)	53/47(quiet mode)	
Pipe diameter - suction/discharge mm(in)	2x6.4(1/4) 2x9.5(3/8)	
Maximum total pipe length m	80	
Maximum pipe length per unit m	30	
Max. elevation difference E.U - I.U m	15	
Total pipe length - standard charge m	45	
Dimensions (HxLxD) mm	910x940x340	
Power supply V,ph,Hz	220 - 240V, 1ph, 50Hz	

Specifications subject to change without notice.

PRELIMINARY DATA

Energy class A

INVERTER

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SAP-CMRV3656EH													
	"Indoor unit combination SAP-K(M)RV..6EH"	Cooling						Heating					
Rated capacity (kW)		Capacity (Min.-Max.) (kW)						Capacity (Min.-Max.) (kW)					
		Room A	Room B	Room C	Room D	Room E	Total	Room A	Room B	Room C	Room D	Room E	Total
1 room	7	2,20	-	-	-	-	2,20 (1,5-2,6)	2,50	-	-	-	-	2,50 (1,8-4,3)
	9	2,65	-	-	-	-	2,65 (1,5-3,2)	3,60	-	-	-	-	3,60 (1,8-4,7)
	12	3,50	-	-	-	-	3,50 (1,6-3,6)	4,20	-	-	-	-	4,20 (1,9-5,1)
	18	5,15	-	-	-	-	5,15 (1,7-5,8)	6,00	-	-	-	-	6,00 (2,0-7,8)
	24	7,10	-	-	-	-	7,10 (1,8-7,4)	8,50	-	-	-	-	8,50 (2,0-8,8)
2 rooms	7+7	2,20	2,20	-	-	-	4,40 (2,0-5,1)	2,50	2,50	-	-	-	5,00 (2,0-6,4)
	7+9	2,20	2,65	-	-	-	4,85 (2,0-5,8)	2,50	3,60	-	-	-	6,10 (2,1-7,5)
	7+12	2,20	3,50	-	-	-	5,70 (2,0-6,7)	2,50	4,20	-	-	-	6,70 (2,3-8,3)
	7+18	2,14	5,01	-	-	-	7,15 (2,2-7,7)	2,50	6,00	-	-	-	8,50 (3,0-9,4)
	7+24	1,81	5,84	-	-	-	7,65 (2,3-8,8)	2,01	6,84	-	-	-	8,85 (3,0-9,8)
	9+9	2,65	2,65	-	-	-	5,30 (2,0-6,5)	3,60	3,60	-	-	-	7,20 (2,4-8,5)
	9+12	2,54	3,36	-	-	-	5,90 (2,0-7,4)	3,51	4,09	-	-	-	7,60 (2,6-8,5)
	9+18	2,46	4,79	-	-	-	7,25 (2,3-8,5)	3,24	5,41	-	-	-	8,65 (3,3-9,4)
	9+24	2,11	5,64	-	-	-	7,75 (2,3-8,8)	2,68	6,32	-	-	-	9,00 (3,3-9,8)
	12+12	3,40	3,40	-	-	-	6,80 (2,2-8,4)	4,00	4,00	-	-	-	8,00 (2,9-8,5)
	12+18	3,03	4,47	-	-	-	7,50 (2,6-8,8)	3,60	5,15	-	-	-	8,75 (3,4-9,8)
	12+24	2,61	5,29	-	-	-	7,90 (2,6-9,5)	3,01	6,09	-	-	-	9,10 (3,4-9,8)
	18+18	3,95	3,95	-	-	-	7,90 (2,6-9,5)	4,50	4,50	-	-	-	9,00 (3,4-9,8)
	18+24	3,70	5,10	-	-	-	8,80 (2,7-9,5)	3,89	5,51	-	-	-	9,40 (3,4-9,8)
	24+24	4,40	4,40	-	-	-	8,80 (2,7-9,5)	4,70	4,70	-	-	-	9,40 (3,4-9,8)
3 rooms	7+7+7	2,20	2,20	2,20	-	-	6,60 (2,0-7,7)	2,50	2,50	2,50	-	-	7,50 (2,7-9,0)
	7+7+9	2,20	2,20	2,65	-	-	7,05 (2,2-8,4)	2,47	2,47	3,56	-	-	8,50 (3,0-9,2)
	7+7+12	2,03	2,03	3,23	-	-	7,30 (2,4-8,6)	2,34	2,34	3,93	-	-	8,60 (3,2-9,8)
	7+7+18	1,77	1,77	4,15	-	-	7,70 (2,7-9,0)	2,01	2,01	4,83	-	-	8,85 (3,4-9,8)
	7+7+24	1,65	1,65	5,31	-	-	8,60 (2,9-10,0)	1,71	1,71	5,82	-	-	9,25 (3,4-9,8)
	7+9+9	2,11	2,54	2,54	-	-	7,20 (2,3-8,6)	2,23	3,21	3,21	-	-	8,65 (3,3-9,3)
	7+9+12	1,95	2,35	3,10	-	-	7,40 (2,6-9,0)	2,12	3,06	3,57	-	-	8,75 (3,4-9,8)
	7+9+18	1,72	2,07	4,02	-	-	7,80 (2,9-9,0)	1,86	2,68	4,46	-	-	9,00 (3,4-9,8)
	7+9+24	1,60	1,93	5,17	-	-	8,70 (2,9-10,0)	1,68	2,42	5,71	-	-	9,80 (3,4-9,8)
	7+12+12	1,82	2,89	2,89	-	-	7,60 (2,7-9,0)	2,03	3,41	3,41	-	-	8,85 (3,4-9,8)
	7+12+18	1,60	2,55	3,75	-	-	7,90 (2,9-9,0)	1,79	3,01	4,30	-	-	9,10 (3,4-9,8)
	7+12+24	1,55	2,46	4,99	-	-	9,00 (2,9-10,0)	1,61	2,71	5,48	-	-	9,80 (3,4-9,8)
	7+18+18	1,58	3,71	3,71	-	-	9,00 (2,9-9,0)	1,69	4,06	4,06	-	-	9,80 (3,4-9,8)
	7+18+24	1,37	3,21	4,42	-	-	9,00 (2,9-10,0)	1,44	3,46	4,90	-	-	9,80 (3,4-9,8)
	9+9+9	2,43	2,43	2,43	-	-	7,30 (2,5-8,6)	2,95	2,95	2,95	-	-	8,85 (3,4-9,4)
	9+9+12	2,26	2,26	2,98	-	-	7,50 (2,7-9,0)	2,81	2,81	3,28	-	-	8,90 (3,4-9,8)
	9+9+18	2,00	2,00	3,89	-	-	7,90 (2,9-9,0)	2,51	2,51	4,18	-	-	9,20 (3,4-9,8)
	9+9+24	1,92	1,92	5,15	-	-	9,00 (2,9-10,0)	2,25	2,25	5,31	-	-	9,80 (3,4-9,8)
	9+12+12	2,13	2,81	2,81	-	-	7,75 (2,7-9,0)	2,70	3,15	3,15	-	-	9,00 (3,4-9,8)
	9+12+18	1,99	2,63	3,87	-	-	8,50 (2,9-9,0)	2,43	2,83	4,04	-	-	9,30 (3,4-9,8)
	9+12+24	1,80	2,38	4,82	-	-	9,00 (2,9-10,0)	2,16	2,53	5,11	-	-	9,80 (3,4-9,8)
	9+18+18	1,84	3,58	3,58	-	-	9,00 (2,9-9,0)	2,26	3,77	3,77	-	-	9,80 (3,4-9,8)
	9+18+24	1,60	3,11	4,29	-	-	9,00 (2,9-10,0)	1,95	3,25	4,60	-	-	9,80 (3,4-9,8)
	12+12+12	2,65	2,65	2,65	-	-	7,95 (2,9-9,0)	3,03	3,03	3,03	-	-	9,10 (3,4-9,8)
	12+12+18	2,59	2,59	3,81	-	-	9,00 (2,9-9,0)	2,86	2,86	4,08	-	-	9,80 (3,4-9,8)
	12+12+24	2,23	2,23	4,53	-	-	9,00 (2,9-10,0)	2,44	2,44	4,93	-	-	9,80 (3,4-9,8)
	12+18+18	2,28	3,36	3,36	-	-	9,00 (2,9-10,0)	2,54	3,63	3,63	-	-	9,80 (3,4-9,8)
	12+18+24	2,00	2,94	4,06	-	-	9,00 (2,9-10,0)	2,20	3,14	4,45	-	-	9,80 (3,4-9,8)
	18+18+18	3,00	3,00	3,00	-	-	9,00 (2,9-10,0)	3,27	3,27	3,27	-	-	9,80 (3,4-9,8)
	18+18+24	2,66	2,66	3,67	-	-	9,00 (2,9-10,0)	2,87	2,87	4,06	-	-	9,80 (3,4-9,8)

R410A INVERTER Energy class A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SAP-CMRV3656EH													
	"Indoor unit combination SAP-K(M)RV..6EH"	Cooling						Heating					
Rated capacity (kW)		Capacity (Min.-Max.) (kW)						Capacity (Min.-Max.) (kW)					
		Room A	Room B	Room C	Room D	Room E	Total	Room A	Room B	Room C	Room D	Room E	Total
4 rooms	7+7+7+7	1,88	1,88	1,88	1,88	-	7,50 (2,9-10,5)	2,18	2,18	2,18	2,18	-	8,70 (3,4-9,8)
	7+7+7+9	1,82	1,82	1,82	2,19	-	7,65 (2,9-10,5)	1,99	1,99	1,99	2,87	-	8,85 (3,4-9,8)
	7+7+7+12	1,71	1,71	1,71	2,72	-	7,85 (2,9-10,5)	1,91	1,91	1,91	3,21	-	8,95 (3,4-9,8)
	7+7+7+18	1,59	1,59	1,59	3,73	-	8,50 (2,9-10,5)	1,71	1,71	1,71	4,11	-	9,25 (3,4-9,8)
	7+7+7+24	1,48	1,48	1,48	4,77	-	9,20 (2,9-10,5)	1,53	1,53	1,53	5,21	-	9,80 (3,4-9,8)
	7+7+9+9	1,76	1,76	2,12	2,12	-	7,75 (2,9-10,5)	1,85	1,85	2,67	2,67	-	9,05 (3,4-9,8)
	7+7+9+12	1,66	1,66	2,00	2,64	-	7,95 (2,9-10,5)	1,79	1,79	2,57	3,00	-	9,15 (3,4-9,8)
	7+7+9+18	1,53	1,53	1,85	3,59	-	8,50 (2,9-10,5)	1,68	1,68	2,42	4,03	-	9,80 (3,4-9,8)
	7+7+9+24	1,43	1,43	1,72	4,62	-	9,20 (2,9-10,5)	1,43	1,43	2,06	4,87	-	9,80 (3,4-9,8)
	7+7+12+12	1,64	1,64	2,61	2,61	-	8,50 (2,9-10,5)	1,72	1,72	2,88	2,88	-	9,20 (3,4-9,8)
	7+7+12+18	1,55	1,55	2,47	3,63	-	9,20 (2,9-10,5)	1,61	1,61	2,71	3,87	-	9,80 (3,4-9,8)
	7+7+12+24	1,35	1,35	2,15	4,35	-	9,20 (2,9-10,5)	1,38	1,38	2,33	4,71	-	9,80 (3,4-9,8)
	7+7+18+18	1,38	1,38	3,22	3,22	-	9,20 (2,9-10,5)	1,44	1,44	3,46	3,46	-	9,80 (3,4-9,8)
	7+7+18+24	1,22	1,22	2,85	3,92	-	9,20 (2,9-10,5)	1,26	1,26	3,02	4,27	-	9,80 (3,4-9,8)
	7+9+9+9	1,70	2,05	2,05	2,05	-	7,85 (2,9-10,5)	1,73	2,49	2,49	2,49	-	9,20 (3,4-9,8)
	7+9+9+12	1,66	2,00	2,00	2,64	-	8,30 (2,9-10,5)	1,67	2,41	2,41	2,81	-	9,30 (3,4-9,8)
	7+9+9+18	1,53	1,84	1,84	3,58	-	8,80 (2,9-10,5)	1,56	2,25	2,25	3,75	-	9,80 (3,4-9,8)
	7+9+9+24	1,36	1,63	1,63	4,38	-	9,00 (2,9-10,5)	1,35	1,94	1,94	4,58	-	9,80 (3,4-9,8)
	7+9+12+12	1,60	1,92	2,54	2,54	-	8,60 (2,9-10,5)	1,69	2,43	2,84	2,84	-	9,80 (3,4-9,8)
	7+9+12+18	1,47	1,77	2,33	3,43	-	9,00 (2,9-10,5)	1,50	2,16	2,53	3,61	-	9,80 (3,4-9,8)
	7+9+12+24	1,31	1,58	2,08	4,23	-	9,20 (2,9-10,5)	1,30	1,88	2,19	4,43	-	9,80 (3,4-9,8)
	7+9+18+18	1,34	1,61	3,13	3,13	-	9,20 (2,9-10,5)	1,35	1,95	3,25	3,25	-	9,80 (3,4-9,8)
	7+9+18+24	1,18	1,43	2,77	3,82	-	9,20 (2,9-10,5)	1,19	1,71	2,85	4,04	-	9,80 (3,4-9,8)
	7+12+12+12	1,59	2,54	2,54	2,54	-	9,20 (2,9-10,5)	1,62	2,73	2,73	2,73	-	9,80 (3,4-9,8)
	7+12+12+18	1,41	2,24	2,24	3,30	-	9,20 (2,9-10,5)	1,45	2,44	2,44	3,48	-	9,80 (3,4-9,8)
	7+12+12+24	1,24	1,98	1,98	4,01	-	9,20 (2,9-10,5)	1,26	2,12	2,12	4,29	-	9,80 (3,4-9,8)
	7+12+18+18	1,27	2,01	2,96	2,96	-	9,20 (2,9-10,5)	1,31	2,20	3,14	3,14	-	9,80 (3,4-9,8)
	9+9+9+9	2,00	2,00	2,00	2,00	-	8,00 (2,9-10,5)	2,45	2,45	2,45	2,45	-	9,80 (3,4-9,8)
	9+9+9+12	1,94	1,94	1,94	2,57	-	8,40 (2,9-10,5)	2,35	2,35	2,35	2,74	-	9,80 (3,4-9,8)
	9+9+9+18	1,82	1,82	1,82	3,54	-	9,00 (2,9-10,5)	2,10	2,10	2,10	3,50	-	9,80 (3,4-9,8)
	9+9+9+24	1,62	1,62	1,62	4,34	-	9,20 (2,9-10,5)	1,83	1,83	1,83	4,32	-	9,80 (3,4-9,8)
	9+9+12+12	1,90	1,90	2,50	2,50	-	8,80 (2,9-10,5)	2,26	2,26	2,64	2,64	-	9,80 (3,4-9,8)
	9+9+12+18	1,75	1,75	2,31	3,40	-	9,20 (2,9-10,5)	2,03	2,03	2,37	3,38	-	9,80 (3,4-9,8)
	9+9+12+24	1,53	1,53	2,03	4,11	-	9,20 (2,9-10,5)	1,77	1,77	2,07	4,19	-	9,80 (3,4-9,8)
	9+9+18+18	1,56	1,56	3,04	3,04	-	9,20 (2,9-10,5)	1,84	1,84	3,06	3,06	-	9,80 (3,4-9,8)
	9+9+18+24	1,39	1,39	2,70	3,72	-	9,20 (2,9-10,5)	1,63	1,63	2,71	3,84	-	9,80 (3,4-9,8)
	9+12+12+12	1,81	2,40	2,40	2,40	-	9,00 (2,9-10,5)	2,18	2,54	2,54	2,54	-	9,80 (3,4-9,8)
	9+12+12+18	1,65	2,18	2,18	3,20	-	9,20 (2,9-10,5)	1,96	2,29	2,29	3,27	-	9,80 (3,4-9,8)
	9+12+12+24	1,46	1,92	1,92	3,90	-	9,20 (2,9-10,5)	1,72	2,01	2,01	4,06	-	9,80 (3,4-9,8)
	12+12+12+12	2,30	2,30	2,30	2,30	-	9,20 (2,9-10,5)	2,45	2,45	2,45	2,45	-	9,80 (3,4-9,8)
	12+12+12+18	2,06	2,06	2,06	3,03	-	9,20 (2,9-10,5)	2,21	2,21	2,21	3,16	-	9,80 (3,4-9,8)
5 rooms	7+7+7+7+7	2,00	2,00	2,00	2,00	2,00	10,00 (3,5-11,5)	2,40	2,40	2,40	2,40	2,40	12,00 (4,0-14,5)
	7+7+7+7+9	1,92	1,92	1,92	1,92	2,31	10,00 (3,5-11,5)	2,21	2,21	2,21	2,21	3,18	12,00 (4,0-14,5)
	7+7+7+7+12	1,79	1,79	1,79	1,79	2,85	10,00 (3,5-11,5)	2,11	2,11	2,11	2,11	3,55	12,00 (4,0-14,5)
	7+7+7+7+18	1,58	1,58	1,58	1,58	3,69	10,00 (3,5-11,5)	1,88	1,88	1,88	1,88	4,50	12,00 (4,0-14,5)
	7+7+7+7+24	1,38	1,38	1,38	1,38	4,47	10,00 (3,5-11,5)	1,62	1,62	1,62	1,62	5,51	12,00 (4,0-14,5)
	7+7+7+9+9	1,85	1,85	1,85	2,23	2,23	10,00 (3,5-11,5)	2,04	2,04	2,04	2,94	2,94	12,00 (4,0-14,5)
	7+7+7+9+12	1,73	1,73	1,73	2,08	2,75	10,00 (3,5-11,5)	1,96	1,96	1,96	2,82	3,29	12,00 (4,0-14,5)
	7+7+7+9+18	1,53	1,53	1,53	1,84	3,58	10,00 (3,5-11,5)	1,75	1,75	1,75	2,53	4,21	12,00 (4,0-14,5)
	7+7+7+9+24	1,35	1,35	1,35	1,62	4,34	10,00 (3,5-11,5)	1,53	1,53	1,53	2,20	5,20	12,00 (4,0-14,5)
	7+7+7+12+12	1,62	1,62	1,62	2,57	2,57	10,00 (3,5-11,5)	1,89	1,89	1,89	3,17	3,17	12,00 (4,0-14,5)
	7+7+7+12+18	1,44	1,44	1,44	2,30	3,38	10,00 (3,5-11,5)	1,69	1,69	1,69	2,85	4,07	12,00 (4,0-14,5)
	7+7+7+12+24	1,28	1,28	1,28	2,03	4,13	10,00 (3,5-11,5)	1,49	1,49	1,49	2,50	5,05	12,00 (4,0-14,5)
	7+7+9+9+9	1,78	1,78	2,15	2,15	2,15	10,00 (3,5-11,5)	1,90	1,90	2,73	2,73	2,73	12,00 (4,0-14,5)
	7+7+9+9+12	1,67	1,67	2,01	2,01	2,65	10,00 (3,5-11,5)	1,83	1,83	2,63	2,63	3,07	12,00 (4,0-14,5)
	7+7+9+9+18	1,48	1,48	1,78	1,78	3,47	10,00 (3,5-11,5)	1,65	1,65	2,37	2,37	3,96	12,00 (4,0-14,5)
	7+7+9+9+24	1,31	1,31	1,58	1,58	4,23	10,00 (3,5-11,5)	1,45	1,45	2,09	2,09	4,93	12,00 (4,0-14,5)
	7+7+9+12+12	1,57	1,57	1,89	2,49	2,49	10,00 (3,5-11,5)	1,76	1,76	2,54	2,96	2,96	12,00 (4,0-14,5)
	7+7+9+12+18	1,40	1,40	1,69	2,23	3,28	10,00 (3,5-11,5)	1,60	1,60	2,30	2,68	3,83	12,00 (4,0-14,5)
	7+7+12+12+12	1,48	1,48	2,35	2,35	2,35	10,00 (3,5-11,5)	1,70	1,70	2,86	2,86	2,86	12,00 (4,0-14,5)
	7+9+9+9+9	1,72	2,07	2,07	2,07	2,07	10,00 (3,5-11,5)	1,78	2,56	2,56	2,56	2,56	12,00 (4,0-14,5)
	7+9+9+9+12	1,61	1,94	1,94	1,94	2,56	10,00 (3,5-11,5)	1,71	2,47	2,47	2,47	2,88	12,00 (4,0-14,5)
	7+9+9+9+18	1,44	1,73	1,73	1,73	3,37	10,00 (3,5-11,5)	1,55	2,24	2,24	2,24	3,73	12,00 (4,0-14,5)
	7+9+9+9+24	1,28	1,54	1,54	1,54	4,12	10,00 (3,5-11,5)	1,38	1,98	1,98	1,98	4,68	12,00 (4,0-14,5)
	7+9+9+12+12	1,52	1,83	1,83	2,41	2,41	10,00 (3,5-11,5)	1,66	2,39	2,39	2,78	2,78	12,00 (4,0-14,5)
	7+9+9+12+18	1,36	1,64	1,64	2,17	3,19	10,00 (3,5-11,5)	1,51	2,17	2,17	2,53	3,62	12,00 (4,0-14,5)
	7+9+9+12+19	1,43	1,73	2,28	2,28	2,28	10,00 (3,5-11,5)	1,60	2,31	2,70	2,70	2,70	12,00 (4,0-14,5)
	9+9+9+9+9	2,00	2,00	2,00	2,00	2,00	10,00 (3,5-11,5)	2,40	2,40	2,40	2,40	2,40	12,00 (4,0-14,5)
	9+9+9+9+12	1,88	1,88	1,88	1,88	2,48	10,00 (3,5-11,5)	2,32	2,32	2,32	2,32	2,71	12,00 (4,0-14,5)
	9+9+9+9+18	1,68	1,68	1,68	1,68	3,27	10,00 (3,5-11,5)	2,12	2,12	2,12	2,12	3,53	12,00 (4,0-14,5)
	9+9+9+9+24	1,50	1,50	1,50	1,50	4,01	10,00 (3,5-11,5)	1,89	1,89	1,89	1,89	4,45	12,00 (4,0-14,5)
	9+9+9+12+12	1,77	1,77	1,77	2,34	2,34	10,00 (3,5-11,5)	2,25	2,25	2,25	2,63	2,63	12,00 (4,0-14,5)
	9+9+12+12+12	1,68	1,68	2,22	2,22	2,22	10,00 (3,5-11,5)	2,18	2,18	2,55	2,55	2,55	12,00 (4,0-14,5)
	9+9+12+12+18	1,52	1,52	2,01	2,01	2,95	10,00 (3,5-11,5)	2,00	2,00	2,33	2,33	3,33	12,00 (4,0-14,5)

The table lists the wall-mounted type of indor units as representative models. For details on the connection of indoor units other than the wall mounted type, refer to the technical data.
Specifications subject to change without notice.

PRELIMINARY DATA

Commercial Split-Systems (PACi)

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High Performance SPW R410A DC Inverter Split Systems

Only recently SANYO's experienced design engineers have gone back to the drawing board and completely overhauled our range of Commercial Split Systems. After extensive research and development we have unveiled the Elite PACi. With its advanced features and superior design, the Elite PACi is one of the top performing split systems in the industry.

Elite PACi

Classic PACi

Big PACi

The expanded range of Commercial Split System is of superior performance and quality, providing more choice for customers.

Specifically designed for commercial and retail applications, the ingenious design of the systems not only overcomes the limitations associated with the installation of traditional split systems, but also offers the end user improved comfort and drastically reduced power consumption.

- Single or three phase power supply across the range
- Low start current of indoor units
- Single, twin, triple and quad options
- Systems pre-charged for 30 metres
- Pipe runs up to 100 metres

The SPW DC inverter systems utilise the non-ozone depleting R410A refrigerant, which gives increased system performance, increased energy-efficiency and improved heat transfer, which results in smaller pipe sizes and more compact indoor units.

Range extends from 5kW through to 25kW

The Elite PACi benefits from increased performance and efficiency, with COP ratings that are some of the highest in the industry. For higher capacities, SANYO's Big PACi is a newly compact design with a twin fan, saving valuable installation space compared to traditional 8-10HP systems.

Wide capacity range

DC inverter-controlled compressors have an operating range of 25-90Hz, which enables the sine wave to be shortened or lengthened, either slowing the compressor to reduce capacity for the nominal figure (measured at 50Hz) or increasing its speed to offer increased output.

Other factors, such as coil size, restrict the maximum output of the system and SANYO would recommend that equipment is always selected at nominal capacity to ensure the optimum lifespan of the equipment.

Affordable technology

When comparing the COPs of DC inverter systems (which are stated at 100% capacity) with an equivalent fixed speed system, the improved energy-efficiency and consequent lower running costs of the DC inverter can be easily calculated. However, DC Inverters control the room temperature far more precisely, generally operating in part load conditions where the COPs are considerably higher, thereby delivering further substantial energy savings and ensuring that this new technology has an almost immediate payback.

* Cooling operation -20°C to 43°C
* Heating operation -20°C to 15°C

Note Heating operation is only for Heat pump model.
Standard PACi heating operation down to -15°C.

Operation range (cooling and heat pump model)

Taking inverter technology to a new level of comfort

The SPW DC Inverters 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.

The DC motor uses powerful neodymium magnets, which are approximately 15-20 times stronger than the ferrite magnets used in conventional AC compressors. This, combined with precise digital control, gives the SANYO DC compressor an operation rate 15-20% higher than that of a conventional AC compressor.

Wide range of indoor units

Not only have the PACi range of outdoor units been completely overhauled, but also our range of indoor units are perfect for a wide variety of applications.

All these units are high-performance and benefits from many features - just as you would expect from SANYO. They are also designed with the needs of the installer as well as the end user in mind, making installation and maintenance a breeze.

Twin rotary compressor

The SPW 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.

All SANYO SPW DC inverter systems are highly rated on EEL, 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.

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Indoor units

Capacity cooling/heating	Class	12		16		18		25			36		48		60		70		90		
	kW	3,6	4,2	4,5	45,2	5,0	5,6	7,1	8,0		10,0	11,2	12,5	14,0	14,0	16,0	20,0	22,4	25,0	28,0	Functions
	BTU/h	12,000	14,000	15,000	17,500	17,000	19,000	24,000	27,000		34,000	38,000	42,500	48,000	48,000	54,500	68,200	76,400	85,300	95,500	
KR type		SPW-KR124GH56B		SPW-KR164GH56B		SPW-KR184GH56B		SPW-KR254GH56B													LONG LIFE FILTER, AUTO
T type		SPW-T125H		SPW-T165H		SPW-T185H		SPW-T255H			SPW-T365H		SPW-T485H		SPW-T605H						LONG LIFE FILTER, AUTO, AUTO
X type		SPW-X125H Panel PNR-XD484GHAB		SPW-X165H Panel PNR-XD484GHAB		SPW-X185H Panel PNR-XD484GHAB		SPW-X255H Panel PNR-XD484GHAB			SPW-X365H Panel PNR-XD484GHAB		SPW-X485H Panel PNR-XD484GHAB		SPW-X605H Panel PNR-XD484GHAB						LONG LIFE FILTER, DP, AUTO, AUTO
XM type		SPW-XM125H Panel PNR-XM185		SPW-XM165H Panel PNR-XM185		SPW-XM185H Panel PNR-XM185															LONG LIFE FILTER, DP, AUTO, AUTO
XMR type		SPW-XMR124EH56B Panel PNR-XM184EHAB		SPW-XMR164EH56B Panel PNR-XM484EHAB		SPW-XMR184EH56B Panel PNR-XM484EHAB															LONG LIFE FILTER, DP, AUTO, AUTO
US type		SPW-US125H		SPW-US165H		SPW-US185H															LONG LIFE FILTER, DP
UMR type		SPW-UMR124EH56B		SPW-UMR164EH56B		SPW-UMR184EH56B															LONG LIFE FILTER, DP
FTR type		SPW-FTR124EH56B		SPW-FTR164EH56B		SPW-FTR184EH56B															LONG LIFE FILTER
U type		SPW-U125H		SPW-U165H		SPW-U185H		SPW-U255H			SPW-U365H		SPW-U485H		SPW-U605H						DP
UR type with filter						SPW-U185SHT		SPW-U255SHT			SPW-U365SHT		SPW-U485SHT		SPW-U605SHT						LONG LIFE FILTER, DP
D type																	SPW-D0705H		SPW-D0905H		

LONG LIFE FILTER Long life filter DP Built-in drain pump AUTO Automatic flap AUTO Automatic swing

Outdoor units

Capacity cooling/heating	HP			2		3			4		5		6		8		10	
	Class			18		25			36		48		60		70		90	
	kW			5,0	5,6	7,1	8,0		10,0	11,2	12,5	14,0	14,0	16,0	20,0	22,4	25,0	28,0
	BTU/h			17,000	19,000	24,000	27,500		34,000	38,000	42,500	48,000	48,000	54,500	68,200	76,400	85,300	95,500
Elite PACi															BIG PACi			
1 phase: 220-240V; 50/60Hz				SPW-C186VEH		SPW-C256VEH			SPW-C366VEHN		SPW-C486VEHN		SPW-C606VEHN		–		–	
3 phase: 380-415V; 50Hz				–		SPW-C256VEH8			SPW-C366VEH8		SPW-C486VEH8		SPW-C606VEH8		SPW-C706VH8		SPW-C906VH8	
Classic PACi																		
1 phase: 220-240V; 50/60Hz				–		SPW-C256VH			SPW-C366VH		SPW-C486VH		–		–		–	
3 phase: 380-415V; 50Hz				–		SPW-C256VH8			SPW-C366VH8		SPW-C486VH8		SPW-C606VH8		–		–	

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-W…H(H)5
SPW-W…H(H)58
SPW-W…H(H)8

The SANYO Hydronic Split System provides more powerful and comfortable Heating & Cooling.

Remote

SPW-W…H(H)5
SPW-W…H(H)58
SPW-W…H(H)8

Warm & Cool water utilisation

The HYDRONIC Split System can be used not only for Heating but also for Cooling applications.

Its high performance and the wide choice are suitable for different kinds of demands.

Various applications

5 types of applications are available:

- 1 zone floor application
- 2 zone floor application
- 1 zone fan coil unit application
- mixed 2 zone application (floor & fan coil unit)
- 1 zone radiator application

Specific accessory parts for the above applications are also available.

Optimised control system for Hydronic circuit

The special remote controller regulates the most suitable operation by sensing the ambient conditions.

It creates the optimal warm / cool water flow for the Hydronic system.

Note: The controller is included in the Hydronic module.

Easy system installation

Basic key components for the hydronic circuit are equipped in the Hydronic module. Thus the installation work becomes much easier.

Capacity and efficiency data

		2 HP	3 HP	4 HP	5 HP	6 HP	8 HP	10 HP
Modele / Model Outdoor unit SPW-C…		186VEH	256VEH	366VEHN	486VEHN	606VEHN	706VH8	906VH8
Indoor Unit with heater SPW-W…		186HH5-E	256HH5-E	366HH5-E	486HH58-E	606HH58-E	706HH8-E	906HH8-E
Indoor Unit without heater SPW-W…		186H5-E	256H5-E	366H5-E	486H58-E	606H58-E	706H8-E	906H8-E
Nominal heating capacity (Gross) A7/6 W30/35	kW	5,45	7,85	10,4	13,6	15,4	20,2	25,2
COP (Gross) A7/6 W30/35		3,95	3,73	4,07	4,08	3,94	3,74	3,66
Nominal heating capacity (Net) A7/6 W30/35	kW	5,4	7,8	10,3	13,5	15,3	20	25
COP (Net) A7/6 W30/35		3,8	3,68	3,91	3,94	3,84	3,6	3,55
Nominal power input (Net)	kW	1,42	2,12	2,63	3,43	3,98	5,55	7,04
Nominal running current	A	7,3	11	14,2	18,8	21,3	8,7	11
Nominal water flow (Net)	m3/h	0,93	1,34	1,8	2,3	2,65	3,48	4,34
External static pressure (Pump)	kPa	47	42	45	42	40	52	45
Nominal heating capacity (Net) A2/1 W*/35	kW	3,6	5,2	7,2	8,55	9,8	13	16,2
COP A2/1 W*/35 (Net) A2/1 W*/35		2,39	2,33	2,6	2,6	2,31	2,23	2,19
Nominal heating capacity (Net) A-7/-8 W*/35	kW	3,2	4,4	5,78	7,7	8,7	11	13,9
COP (Net) A-7/-8 W*/35		2,3	2,25	2,3	2,4	2,3	2,09	2,08
Nominal Cooling capacity (Gross) A35 W23/18	kW	4,95	6,95	9,4	13,4	15,6	18,8	23,5
EER (Gross) A35 W23/18		3,84	3,56	3,7	3,69	3,39	3,18	3,09
Nominal Cooling capacity (Net) A35 W23/18	kW	5	7	9,5	13,5	15,7	19	23,7
EER (Net) A35 W23/18		3,7	3,48	3,64	3,65	3,34	3,13	3,05
Nominal power input (Net) A35 W23/18	kW	1,35	2,01	2,61	3,7	4,7	6,06	7,76
Nominal running current	A	6,6	9,9	13	20,7	25,7	9,5	12,2
Nominal water flow	m3/h	0,86	1,2	1,72	2,3	2,7	3,27	4,08
External static pressure (Pump)	kPa	48	44	46	42	40	54	46

Gross: Performance according to Eurovent standard (excluding circulation pump)
Net: Performance according to the EN14511 standard (including circulation pump)

PRELIMINARY DATA

Specification data Hydro Box

Hydro Box Data		Unit	2 HP	3 HP	4 HP	5 HP	6 HP	8 HP	10 HP
Indoor module with heater SPW-W…		-	186HH5-E	256HH5-E	366HH5-E	486HH58-E	606HH58-E	706HH8-E	906HH8-E
Indoor module without heater SPW-W…		-	186H5-E	256H5-E	366H5-E	486H58-E	606H58-E	706H8-E	906H8-E
Function			Reversible (Heating and Cooling)						
Dimensions Hydro Kit	W/D/H	mm	-	-	527/285/824			-	-
Weight with heater		kg	-	-	42	43	44	-	-
Leaving water temperature range	Heating	°C	25 to 50						
	Cooling		-5 to 20						
Water content indoor unit		l	4,5	4,5	4,7	4,9	5,1	-	-
Electrical heater		kW	3 or 4,5		4 or 6		6 (1Ph), 6 or 9 (3Ph)	12	
Power supply		V/Ph/Hz	230/1/50		230/1/50, 400/3/50			400/3/50	
Nominal capacity pump		kW	0,12	0,13	0,16	0,17	0,17	0,33	0,33
Nominal current pump		A	0,5	0,55	0,7	0,72	0,74	1,4	1,42
External static pressure		kPa	47	42	45	42	40	52	45
Water circuit in/outlet		inches	3/4″		1″			1″1/4″	
Expansion tank		l	6						
Min water content (*)		l	30	40	50	65	75	110	120
Max water content (**)		l	200						

(*) If water content of the system is below minimum the installation of a storage tank is necessary
(**) If water content of the system is upper maximum the installation of an expansion tank is necessary.

Last update: 17th of February 2009

PRELIMINARY DATA

Outdoor unit specification data

		2 HP	3 HP	4 HP	5 HP	6 HP	8 HP	10 HP
Modele / Model Outdoor unit SPW-C…		186VEH	256VEH	366VEHN	486VEHN	606VEHN	706VH8	906VH8
Indoor Unit with heater SPW-W…		186HH5-E	256HH5-E	366HH5-E	486HH58-E	606HH58-E	706HH8-E	906HH8-E
Indoor Unit without heater SPW-W…		186H5-E	256H5-E	366H5-E	486H58-E	606H58-E	706H8-E	906H8-E
Sound power level	dB(A)	-	-	70	72	73	-	-
Sound pressure level		-	-	53	54	56	-	-
Air flow rate	m3/h	2100	3360	6600			7740	
Operation range Heating	°C	-16 to 20		-16 to 35			-16 to 20	
Operation range Cooling		10 to 43		10 to 43			10 to 43	
Compressor		1 x Twin Rotary						
Refrigerant circuit		1						
Refrigerant		R410A						
Refrigerant charge	kg	1,65	2,2	3,6			5,3	6,5
Min piping length	m	-	-	3			-	-
Max piping length	m	-	-	10			-	-
Refrigerant piping dimension (Outdoor to Hydro Box)	inches	1/4″	3/8″ Liquid tube				1/2″	
		1/2″	5/8″ Gas tube				3/4″	
Dimensions Outdoor Unit (W/D/H)	mm	790/285/569	780/340/940	940/410/1330			1526/340/940	
Weight	kg	41	54	90	95		118	128
Power supply	V/Ph/Hz	230/1/50					400/3/50	
Max power input	kW	3,37		4,4	4,98	5,59	7,6	9,17
Starting current	A	3	3	3	3	3	-	-
Max operation current		-	16,5		23	27	12,5	15

Sound testing conditions: 1 m in front at height of 1.5 m

PRELIMINARY DATA

Accessories

Product Code	Type of Application					Remarks
	1 zone floor	2 zone floor	1 zone terminal unit	Mixed 2 zone	1 zone radiator	
70600054	■	■	■	■	■	2 flexible water pipes set (Ø3/4″, 1m)
70600055	■	■	■	■	■	2 flexible water pipes set (Ø1″, 1m)
70600027	■	■	■	■	■	2 flexible water pipes set (Ø1-1/4″, 1m)
70250065		●		●		Room temperature sensor (additional)
-		●				Combination dual-zone module (M2Z P)
-				●		Combination dual-zone module (M2Z M)
70600118	■	●	●	●	●	Buffer tank 35 Lit. (6 ports)
70600218	■	●	●	●	●	Buffer tank 70 Lit. (6 ports)
70600123					●	Water flow adjustment valve 10~40 L/min
70600124					●	Water flow adjustment valve 20~70 L/min
70600125					●	Water flow adjustment valve 30~120 L/min
70600114					●	Strainer Ø1″
70600119					●	Strainer Ø1-1/4″
RCS-TM80BG	■	■	■	■	■	Remote controller (for service work)

● Neccesary ■ May use by neccesity

Elite PACi for high efficiency and top performance

The great designed and engineered Elite PACi is one of the top performers of its type in the industry. Especially designed for light commercial projects where efficiency and performance must not be compromised, the Elite PACi boasts many advanced features. SANYO's DC inverter technology offers outstanding heating and cooling power with quieter operation and energy-saving.

SPW-C...VEH

- Newly designed heat exchanger and outdoor fan means that COP ratings are some of the highest in the industry
- Piping length has been increased by 40% to 70m
- Reduced refrigerant charge to help comply with F-Gas regulations
- Now operates at temperatures as low as -20°C in heating and cooling mode
- Compact and lightweight design for ease of installation
- Available in single phase and three phase
- Very quiet operation with sounds levels from just 53 dB(A)
- Ideal for enhancing the air quality in shops, restaurants and other businesses
- Up to 4 indoor units can be fitted on multi-split systems
- Now 8 different styles of indoor units to provide more flexibility for different applications

Quick start up - takes half the time to reach cool or warm air

SANYO DC inverter technology has efficient rapid heating and cooling capacity which is produced by variable compressor rotation speed; it ensures quicker control of room temperature than conventional air conditioners.

High efficiency

Elite PACi uses a twin rotary compressor. The dual rotors revolve smoothly in a well-balanced fashion for stable and efficient performance. This contributes to increased comfort and rapid heating and cooling as well as ultra-quiet operation.

Elite line up						
HP		2	3	4	5	6
Class		18	25	36	48	60
1phase model (220-240V,50/60Hz)		SPW-C186VEH	SPW-C256VEH	SPW-C366VEHN	SPW-C486VEHN	SPW-C606VEHN
Dimension (HxLxD)	mm	569x790x285	780x940x340	1130x940x410	1130x940x410	1130x940x410
Net weight	kg	41	54	90	95	95
Power Input (Cool/Heat)	W	1290/1430	1950/2150	2500/2800	3570/3660	4370/4430
Sound pressure level (H) (Cool/Heat)	db(A)	46/47	46/48	52/53	53/54	54/56
Max. piping length	m	40	50	70	70	70
Tube diameter	mm (in)	6,35(1/4)/12,7(1/2)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)
3phase model (380-415V; 50Hz)		-	SPW-C256VEH8	SPW-C366VEH8	SPW-C486VEH8	SPW-C606VEH8
Dimension (HxLxD)	mm	-	780x940x340	1130x940x410	1130x940x410	1130x940x410
Net weight	kg	-	65	95	96	96
Power Input (Cool/Heat)	W	-	2090/2140	2480/2800	3570/3660	4310/4430
Sound pressure level (H) (Cool/Heat)	db(A)	-	51/52	48/49	49/50	49/51
Max. piping length	m	-	50	70	70	70
Tube diameter	mm (in)	-	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)

Specifications subject to change without notice.
The table lists the X type of indoor units as representative models. For details on the connection of indoor units other than the X type, refer to the technical data

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Classic PACi for economy and value

SANYO's Classic PACi is the perfect solution for projects which demand quality on a limited budget. With high quality design and engineering, the Classic PACi offers reliability and robust operation. In addition, its compact size and light weight make it ideal for installations with limited space including small commercial and residential applications.

SPW-C...VH

- New single fan design
- SANYO DC inverter compressor
- Quality design and engineering
- Compact size saving valuable footprint
- Lightweight
- Low start current
- Great value and reliability at a low capital cost
- Available in four sizes (3, 4, 5 and 6 HP)
- Available in both single and three phase
- Pipe runs up to 50m
- Ideal for small commercial and residential applications
- Up to 4 indoor units can be fitted on multi-split systems
- Now 8 different styles of indoor units to provide more flexibility for different applications
- Operates at temperatures as low as -15°C in heating mode

Classic line up					
HP		3	4	5	6
Class		25	36	48	60
1phase model (220-240V,50/60Hz)		SPW-C256VH	SPW-C366VH	SPW-C486VH	-
Dimension (HxLxD)	mm	569x790x285	780x940x340	910x940x340	-
Net weight	kg	41	58	71	-
Power Input (Cool/Heat)	W	2190/2340	3400/3390	4450/4220	-
Sound pressure level (H) (Cool/Heat)	db(A)	49/51	50/52	51/54	-
Max. piping length	m	50	50	50	-
Tube diameter	mm (in)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)	-
3phase model (380-415V; 50Hz)		SPW-C256VH8	SPW-C366VH8	SPW-C486VH8	SPW-C606VH8
Dimension (HxLxD)	mm	780x940x340	780x940x340	910x940x340	910x940x340
Net weight	kg	58	65	76	76
Power Input (Cool/Heat)	W	2380/2290	3800/3310	4450/4220	5430/4520
Sound pressure level (H) (Cool/Heat)	db(A)	47/49	51/52	51/54	52/55
Max. piping length	m	50	50	50	50
Tube diameter	mm (in)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)	9,52(3/8)/15,88(5/8)

Specifications subject to change without notice.
The table lists the X type of indoor units as representative models. For details on the connection of indoor units other than the X type, refer to the technical data

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-KR...GH56B

The slimline designed KR type wall mounted unit is small and light, making it ideal for commercial applications. It is also available in a wide variety of capacities.

SPW-KR...GH56B

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-SH1BG

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- Simple, versatile design with anti-mould filters as standard
- Twin rotary compressor dramatically reduces vibration and noise during operation
- Cooling and heating operation down to -15°C
- Low operating sound levels from 32 dB(A)
- Single phase electrical supplier
- Multifunctional wireless remote control with built-in temperature control
- Twin, triple and quadruple split options

Washable front panel

The indoor unit's front panel can be easily removed and washed for trouble-free cleaning.

Elite						
Inverter Heat Pump			size 186		size 256	
Performance			Cooling	Heating	Cooling	Heating
Capacity		kW	1,5/5,0/5,6	1,5/5,6/6,3	2,2/7,1/8,0	2,2/8,0/9,0
Power input	1ph/3ph	W	1560/-	1730/-	2210/2360	2450/2430
EER/COP	1ph/3ph		3,21/-	3,24/-	3,21/3,01	3,27/3,29
Energy class	1ph/3ph		A/-	C/-	A/-	C/-
Running amperes	1ph/3ph	A	7,80/-	8,65/-	11,0/na	12,4/na
Annual energy consumption (cooling)	1ph/3ph	kWh	780/-	-/-	1105/1180	-/-
Indoor Unit			SPW-KR184GH56B		SPW-KR254GH56B	
Air-circulation (H/M/L)		m^3/h	780/660/480		1140/960/720	
Moister removal		Liters/h	2,1	-	4,0	-
Sound Pressure Level (H/M/L)		dB-A	38/34/30		41/37/34	
Dimensions HxWxD		mm	285x995x203		330x1140x228	
Net weight		kg	12		21	
Power supply		V, ph, Hz	220-240,1,50/60			
Outdoor Unit 1ph/3ph			SPW-C186VEH / -		SPW-C256VEH / SPW-C256VEH8	
Sound Pressure Level (H)		dB-A	46	47	46	48
Dimensions H/W/D		mm	569x790x285		780x940x340	
Net weight	1ph/3ph	kg	41/-		54/65	
Power supply		V, ph, Hz	220-240,1,50/60		220-240,1,50/60 / 380-415,3+N,50	
Refrigerant circuit			size 186		size 256	
Tube diameter Narrow/Wide		mm(in)	6,35 (1/4) / 12,7 (1/2)		9,52 (3/8) / 15,88 (5/8)	
Max piping lenght		m	40		50	
Max elevation difference - O.U. above/below I.U.		m	30 / 15		30 / 15	
Chargeless piping lenght		m	30		30	
Amount of additional refrigerant		g/m	20		40	

Specifications subject to change without notice.
na: at time of publication not available

Classic				
Inverter Heat Pump			size 256	
Performance			Cooling	Heating
Capacity		kW	2,2/7,1/8,0	2,2/8,0/9,0
Power input	1ph/3ph	W	2580/2800	2750/2600
EER/COP	1ph/3ph		2,75/2,54	2,91/3,08
Energy class	1ph/3ph		D/-	-/-
Running amperes	1ph/3ph	A	12,9/na	13,7/na
Annual energy consumption (cooling)	1ph/3ph	kWh	1290/1400	-/-
Indoor Unit			SPW-KR254GH56B	
Air-circulation (H/M/L)		m^3/h	1140/960/720	
Moister removal		Liters/h	4,0	-
Sound Pressure Level (H/M/L)		dB-A	41/37/34	
Dimensions HxWxD		mm	330/1140/228	
Net weight		kg	21	
Power supply		V, ph, Hz	220-240,1,50/60	
Outdoor Unit 1ph/3ph			SPW-C256VH / SPW-C256VH8	
Sound Pressure Level (H)		dB-A	49	51
Dimensions H/W/D		mm	569x790x285 / 780x940x340	
Net weight	1ph/3ph	kg	41/58	
Power supply		V, ph, Hz	220-240,1,50/60 / 380-415/3+N,50	
Refrigerant circuit			size 256	
Tube diameter Narrow/Wide		mm(in)	9,52(3/8) / 15,88(5/8)	
Max piping lenght		m	50	
Max elevation difference - O.U. above/below I.U.		m	30/15	
Chargeless piping lenght		m	20	
Amount of additional refrigerant		g/m	40	

Specifications subject to change without notice.
na: at time of publication not available

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-T...H

The range of ceiling mounted units feature a DC fan motor for increased efficiency and reduced operating sound levels. All the units are the same height and depth for a uniform appearance in mixed installations and feature a fresh air knockout for improved air quality.

SPW-T...H

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller (Transmitter, common part)

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- All units just 210mm high
- Twin rotary compressor dramatically reduces vibration and noise during operation
- DC inverter control
- Large and wide air distribution
- SANYO DC fan motor for increased efficiency
- Industry low sound levels
- Twin, triple and quadruple split options

Air distribution is automatically altered depending on the operational mode of the unit.

Further comfort improvement with airflow distribution.

Elite			size 186		size 256		size 366		size 486		size 606	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	1,5/5,0/5,6	1,5/5,6/6,3	2,2/7,1/8,0	2,2/8,0/9,0	2,2/10,0/12,5	2,2/11,2/12,5	2,7/12,5/14,0	2,7/14,0/17,5	2,7/14,0/15,0	2,7/16,0/18,5
Power input	1ph/3ph	W	1450/-	1790/-	2200/2360	2570/2560	2750/2730	2870/2880	3710/3710	3880/3940	4950/4880	4840/4720
EER/COP	1ph/3ph		3,45/-	3,13/-	3,23/3,01	3,11/3,13	3,64/3,66	3,90/3,89	3,37/3,37	3,61/3,55	2,83/2,87	3,31/3,39
Running amperes	1ph/3ph	A	7,33	9,05	11,1/na	13,1/na	13,1/na	13,6/na	19,1/na	18,8/na	25,3/na	24,7/na
Annual energy consumption (cooling)	1ph/3ph	kWh	725/-	-/-	1100/1180	-/-	1375/1365	-/-	-/-	-/-	-/-	-/-
Indoor Unit			SPW-T185H		SPW-T255H		SPW-T365H		SPW-T485H		SPW-T605H	
Air-circulation	(H/M/L)	m³/h	780/660/540		1100/900/840		1650/1380/1200		1800/1560/1320		1800/1560/1320	
Moisture removal		Litres/h	2,0	-	3,0	-	3,9	-	5,6	-	5,6	-
Sound pressure level	(H/M/L)	dB(A)	36/33/30		38/36/33		41/38/35		43/40/37		43/40/37	
Dimensions	(HxWxD)	mm	210x910x680		210x1180x680		210/1595/680		210/1595/680		210/1595/680	
Net weight		kg	21		25		33		33		33	
Power supply		V, ph, Hz	220-240, 1, 50/60									
Outdoor Unit	1ph/3ph		SPW-C186VEH/-		SPW-256VEH/ SPW-256VEH8		SPW-C366VEH/ SPW-C366VEH8		SPW-C486VEH/ SPW-C486VEH8		SPW-C606VEH/ SPW-C606VEH8	
Sound pressure level	1ph/3ph (H)	dB(A)	46/-	47/-	46/51	48/52	52/48	53/49	53/49	54/50	54/49	56/51
Dimensions	(H/W/D)	mm	569x790x285		780x940x340		780x940x410		780x940x410		780x940x410	
Net weight	1ph/3ph	kg	41/-		54/65		90/95		90/96		90/96	
Power supply		V, ph, Hz	220-240, 1, 50/60 / 380-415, 3+N, 50									
Refrigerant Circuit			size 186		size 256		size 366		size 486		size 606	
Tube diameter	narrow/wide	mm (in)	6,35(1/4)/ 12,7(1/2)		9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)	
Max piping length		m	40		50		70		70		70	
Max elevation difference - O.U. above/below I.U.		m	30 / 15		30 / 15		30 / 15		30 / 15		30 / 15	
Chargeless piping length		m	30		30		30		30		30	
Amount of additional refrigerant		g/m	20		40		40		40		40	

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na: not available at time of publication

Classic			size 256		size 366		size 486		size 606	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,2/7,1/8,0	2,2/8,0/9,0	2,2/10,0/11,2	2,2/11,2/12,5	2,7/12,5/13,4	2,7/14,0/16,0	14,0	15,0
Power input	1ph/ 3ph	W	2600/2830	2740/2690	4200/4700	3570/3480	5310/5440	4460/4420	-/6490	-/4730
EER/COP	1ph/ 3ph		2,73/2,51	2,92/2,97	2,38/2,13	3,14/3,22	2,35/2,30	3,14/3,17	2,16	3,17
Energy class	1ph/ 3ph		D/E	D/D	-/-	D/C	-/-	-/-	-/-	-/-
Running amperes	1ph/ 3ph	A	13,1/na	13,9/na	21,2/na	18,0/na	26,8/na	22,5/na	-/na	-/na
Annual energy consumption (cooling)	1ph/ 3ph	kWh	1300/1415	-/-	2100/2350	-/-	-/-	-/-		
Indoor Unit			SPW-T255H		SPW-T365H		SPW-T485H		SPW-T605H	
Air-circulation	(H/M/L)	m³/h	1100/900/840		1650/1380/1200		1800/1560/1320		1800/1560/1320	
Moisture removal		Litres/h	3,0	-	3,9	-	5,6	-	na	-
Sound pressure level	(H/M/L)	dB(A)	38/36/33		41/38/35		43/40/37		43/40/37	
Dimensions	(HxWxD)	mm	210x1180x680		210/1595/680		210/1595/680		210/1595/680	
Net weight		kg	25		33		33		33	
Power supply		V, ph, Hz	220-240, 1, 50/60							
Outdoor Unit	1ph/ 3ph		SPW-C256VH/ SPW-C256VH8		SPW-C366VH/ SPW-C366VH8		SPW-C486VH/ SPW-C486VH8		-/SPW-C606VH	
Sound pressure level	(H) 1ph/ 3ph	dB(A)	49/47 / 51/49		50/51 / 52/52		51/51 / 54/54		-/52 / -/55	
Dimensions	(H/W/D)	mm	569x790x285		780x940x340		910x940x340		910x940x340	
Net weight	1ph/ 3ph	kg	41/58		58/65		71/76		71/76	
Power supply		V, ph, Hz	220-240, 1, 50/60 / 380-415, 3+N, 50							
Refrigerant Circuit			size 256		size 366		size 486		size 606	
Tube diameter	narrow/wide	Inches	9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)	
Max piping length		m	50		50		50		50	
Max elevation difference - O.U. above/below I.U.		m	30 / 15		30 / 15		30 / 15		30 / 15	
Chargeless piping length		m	20		30		30		30	
Amount of additional refrigerant		g/m	40		40		40		40	

Specifications subject to change without notice.
na: not available at time of publication

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-X...H

The award winning range of X type cassettes are smaller, shallower and lighter than previous models and feature a 950 x 950mm panel throughout. The DC fan motor and new air discharge louvre ensure quiet, optimum air distribution.

SPW-X...H

Panel

PNR-XD484GHAB

Air intake chamber

Air intake box
CMB-GS140AGB

Air intake plenum
CMB-FS140AGB

Both Air intake plenum and
Air intake box are necessary

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller
(Transmitter, common part)

RCS-SH80BG.WL

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- New compact design
- Twin rotary compressor dramatically reduces vibration and noise during operation
- Reduced sound levels
- DC fan motor for increased efficiency
- Powerful drain pump gives 850mm lift
- Fresh air knockout for improved air quality
- Twin, triple and quadruple split options

Easy installation

Elite												
			size 186		size 256		size 366		size 486		size 606	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	1,5/5,0/5,6	1,5/5,6/6,3	2,2/7,1/8,0	2,2/8,0/9,0	2,2/10,0/11,2	2,7/11,2/14,5	2,7/12,5/14,0	2,7/14,0/17,5	2,7/14,0/15,0	2,7/16,0/18,5
Power input	1ph/ 3ph	W	1290/-	1430/-	1950/2090	2150/2140	2500/2480	2800/2800	3570/3570	3660/3660	4370/4310	4540/4430
EER/COP	1ph/ 3ph		3,88	3,92	3,64	3,72	4,00	4,00	3,50	3,83	3,20	3,52
Energy class	1ph/ 3ph		A/-	A/-	A/A	A/A	A/A	A/A	-/-	-/-	-/-	-/-
Running amperes	1ph/ 3ph	A	6,52/-	7,22/-	9,80/3,43	10,9/3,51	11,9/4,07	13,3/4,61	17,4/5,86	17,7/6,11	22,3/7,08	23,2/7,27
Annual energy consumption (cooling)	1ph/ 3ph	kWh	645/-	-	975/1045	-	1250/1240	-	-	-	-	-
Indoor Unit			SPW-X185H		SPW-X255H		SPW-X365H		SPW-X485H		SPW-X605H	
Air-circulation	(H/M/L)	m³/h	960/840/780		1200/960/840		1680/1380/1260		1980/1500/1320		2040/1620/1380	
Moisture removal		Litres/h	2,2	-	2,8	-	3,9	-	4,6	-	4,8	-
Sound pressure level	(H/M/L)	dB(A)	31/29/27		34/31/28		39/36/33		42/38/34		44/40/36	
Dimensions	(HxWxD)	mm	256x840x840		256x840x840		319/840/840		319/840/840		319/840/840	
Dimensions Panel	(HxWxD)	mm	35x950x950		35x950x950		35x950x950		35x950x950		35x950x950	
Net weight		kg	21		21		26		26		26	
Panel weight		kg	4,5		4,5		4,5		4,5		4,5	
Power supply		V, ph, Hz	220-240, 1, 50/60									
Outdoor Unit	1ph/ 3ph		SPW-C186VEH/-		SPW-C256VEH / SPW-C256VEH8		SPW-C366VEHN / SPW-C366VEH8		SPW-C486VEHN / SPW-C486VEH8		SPW-C606VEHN / SPW-C606VEH8	
Sound pressure level	1ph/ 3ph (H)	dB(A)	46/-	47/-	46/51	48/52	52/48	53/49	53/49	54/50	54/50	56/51
Dimensions	(H/W/D)	mm	569x790x285		780x940x340		1330x940x410		1330x940x410		1330x940x410	
Net weight	1ph/ 3ph	kg	41/-		54/65		90/95		95/96		95/96	
Power supply		V, ph, Hz	220-240, 1, 50/60		220-240, 1, 50/60 / 315-400, 3 + N, 50							
Refrigerant Circuit			size 186		size 256		size 366		size 486		size 606	
Tube diameter	narrow/wide	mm (in)	6,35(1/4)/ 12,7(1/2)		9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)		9,52(3/8)/ 15,88(5/8)	
Max piping length		m	40		50		70		70		70	
Max elevation difference - O.U. above/below I.U.		m	30 / 15		30 / 15		30 / 15		30 / 15		30 / 15	
Chargeless piping length		m	30		30		30		30		30	
Amount of additional refrigerant		g/m	20		40		40		40		40	

Specifications subject to change without notice. na: not available at time of publication.

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Classic										
			size 256		size 366		size 486		size 606	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,2/7,1/8,0	2,2/8,0/9,0	2,2/10,0/11,2	2,2/11,2/12,5	2,7/12,5/14,0	2,7/14,0/16,0	14,0	15,0
Power input	1ph/ 3ph	W	2190/2380	23402290	3400/3800	3390/3310	4450/4450	4220/4220	-/5430	-/4520
EER/COP	1ph/ 3ph		3,24/2,98	3,42/2,94	3,94/2,63	3,30/3,38	2,81/2,81	3,32/3,32	-/2,58	-/3,22
Energy class	1ph/ 3ph	-	A/C	B/B	C/B	C/C	-/-	-/-	-/-	-/-
Running amperes	1ph/ 3ph	A	11,1/3,91	11,8/3,76	17,2/6,24	17,1/5,44	22,5/7,31	21,3/6,93	-/8,92	-/3,32
Annual energy consumption (cooling)	1ph/ 3ph	kWh	1095/1190	-	1700/1900	-	-	-	-	-
Indoor Unit			SPW-X255H		SPW-X365H		SPW-X485H		SPW-X606H	
Air-circulation	(H/M/L)	m³/h	1200/960/840		1680/1380/1260		1980/1500/1320		2040/1640/1380	
Moisture removal		Litres/h	2,8	-	3,9	-	4,6	-	4,8	-
Sound pressure level	(H/M/L)	dB(A)	34/31/28		39/36/33		42/38/34		44/40/36	
Dimensions	(HxWxD)	mm	256x840x840		319x840x840		319x840x840		319x840x840	
Dimensions Panel	(HxWxD)	mm	35x950x950		35x950x950		35x950x950		35x950x950	
Net weight		kg	22		26		26		26	
Panel weight		kg	4,5		4,5		4,5		4,5	
Power supply		V, ph, Hz	220-240, 1, 50/60							
Outdoor Unit	1ph/ 3ph		SPW-C256VH / SPW-C256VH8		SPW-C366VH / SPW-C366VH8		SPW-C486VH / SPW-C486VH		-/ SPW-C606VH8	
Sound pressure level	1ph/ 3ph (H)	dB(A)	49/47 / 51/49		50/51 / 51/52		51/51 / 54/54		-/52 / -/55	
Dimensions	(H/W/D)	mm	569x790x285 / 780x940x340		780x940x340		910x940x340		910x940x340	
Net weight	1ph/ 3ph	kg	41 / 58		58 / 65		71 / 76		- / 76	
Power supply		V, ph, Hz	220-240, 1, 50/60 / 315-400, 3 + N, 50							
Refrigerant Circuit			size 256		size 366		size 486		size 606	
Tube diameter	narrow/wide	mm(in)	9,52(3/8) / 15,88(5/8)		9,52(3/8) / 15,88(5/8)		9,52(3/8) / 15,88(5/8)		9,52(3/8) / 15,88(5/8)	
Max piping length		m	50		50		50		50	
Max elevation difference - O.U. above/below I.U.		m	30 / 15		30 / 15		30 / 15		30 / 15	
Chargeless piping length		m	20		30		30		30	
Amount of additional refrigerant		g/m	40		40		40		40	

Specifications subject to change without notice. na: not available at time of publication.

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-XM...H

Designed to fit exactly into a 600x600mm ceiling grid without the need to alter the bar configuration, the XM is ideal for small commercial and retro fit applications.

In addition, the improvements to efficiency make this one of the most advanced units in the industry.

SPW-XM...H

Panel

PNR-XM185

- Fresh air knock out
- Multidirectional air flow
- Integrated drain pump gives 250mm lift
- 3 speed centrifugal fan
- Anti-mould and anti-bacteria washable filters

Controller Options

Timerremotecontroller

RCS-TM80BG

Wireless remote controller (Transmitter, common part)

RCS-XM18BG.WL

Simplifiedremotecontroller

RCS-KR1EG

Lighter and slimmer, easier installation

Lightweight and very slim with makes installation possible even in narrow ceilings.

A drain height of approx. 850 mm from the ceiling surface

The drain height can be increased by approx. 350 mm over the conventional value by using a high-lift drain pump, and long horizontal piping is possible.

Significant reduction of power consumption by using highly developed DC fan motors with variable speed, special heat exchangers, etc.

Convenient cleaning

The flap can be removedeasilyfor washing.

Elite			
Inverter Heat Pump		size 186	
Performance		Cooling	Heating
Capacity	kW	1,5/5,0/5,6	1,5/5,6/6,3
Power input	W	1390	1490
EER/COP		3,60	3,76
Energy class	-	A	A
Running amperes	A	7,03	7,53
Annual Energy consumption (cooling)	kWh	695	-
Indoor Unit		SPW-XM185H	
Air-circulation (H/M/L)	m^3/h	750/630/540	
Moister removal	Liters/h	1,9	-
Sound Pressure Level (H/M/L)	dB-A	41/37/33	
Dimensions HxWxD (Unit)	mm	283x575x575	
Dimensions HxWxD (Panel)	mm	30x625x625	
Net weight (Unit)	kg	16	
Net weight (Panel)	kg	2,4	
Power supply	V, ph, Hz	220-240,1,50/60	
Outdoor Unit		SPW-C186VEH	
Sound Pressure Level (H)	dB-A	46	47
Dimensions H/W/D	mm	569/790/285	
Net weight	kg	41	
Power supply	V, ph, Hz	220-240,1,50/60	
Refrigerant circuit		size 186	
Tube diameter Narrow/Wide	mm(in)	6,35(1/4)/12,7(1/2)	
Max piping length	m	40	
Max elevation difference - O.U. above/below I.U.	m	30/15	
Chargeless piping lenght	m	30	
Amount of additional refrigerant	g/m	20	

Specifications subject to change without notice.

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-XMR...EH56B

Designed to fit exactly into a 600 x 600mm ceiling grid without the need to alter the bar configuration, the XMR is ideal for small commercial and retro fit applications.

SPW-XMR...EH56B

Panel

PNR-XM184EHAB

- New dimensions 600 x 600mm suitable for European ceiling standards
- Multi-directional air flow
- 3-speed centrifugal fan
- Fresh air knockout
- Anti-mould and anti-bacteria washable filters
- Low operating sound
- Integral drain pump gives 250mm lift

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller (Transmitter, common part)

RCS-SS80BG.WL

RCS-BH80BG.WL

Simplifiedremotecontroller

RCS-KR1EG

Elite			
Inverter Heat Pump		size 186	
Performance		Cooling	Heating
Capacity	kW	1,5/5,0/5,6	1,5/5,6/6,3
Power input	W	1590	1760
EER/COP		3,14	3,18
Energy class	-	B	-
Running amperes	A	7,9	8,8
Annual Energy consumption (cooling)	kWh	795	-
Indoor Unit		SPW-XMR184EH56B	
Air-circulation (H/M/L)	m^3/h	750/630/530	
Moister removal	Liters/h	2,0	-
Sound Pressure Level (H/M/L)	dB-A	44/40/37	
Dimensions HxWxD (Unit)	mm	296x575x575	
Dimensions HxWxD (Panel)	mm	41x730x730	
Net weight (Unit)	kg	18	
Net weight (Panel)	kg	2,5	
Power supply	V, ph, Hz	220-240,1,50/60	
Outdoor Unit		SPW-C186VEH	
Sound Pressure Level (H)	dB-A	46	47
Dimensions H/W/D	mm	569/790/285	
Net weight	kg	41	
Power supply	V, ph, Hz	220-240,1,50/60	
Refrigerant circuit		size 186	
Tube diameter Narrow/Wide	mm(in)	6,35(1/4)/12,7(1/2)	
Max piping length	m	40	
Max elevation difference - O.U. above/below I.U.	m	30/15	
Chargeless piping lenght	m	30	
Amount of additional refrigerant	g/m	20	

Specifications subject to change without notice.

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

US & UMR type
slim concealed duct & concealed duct

SPW-US...H

SPW-US...H

The depth of only 200mm provides greater flexibility and can be used in far more applications. Its high-efficiency and extremely quiet sound levels make it ideal for hotels and small offices.

- Reduced power consumption by 50%
- 40pa static pressure
- Extremely quiet: 26 dB(A) at low speed (class 7, 9,12)
- Anti-mould washable filters included
- Easy maintenance and service by an external electrical box
- 3 speed centrifugal fan through wired or wireless remote control
- DC fan motor reduces power consumption
- Ideal for applications with limited false ceiling space
- Built in drain pump

Elite				
Inverter Heat Pump			size 186	
Performance			Cooling	Heating
Capacity		kW	1,5/5,0/5,6	1,5/5,6/6,3
Power input		W	1490	1630
EER/COP			3,36	3,44
Energy class		-	A	B
Running amperes		A	7,62	8,24
Annual energy consumption (cooling)		kWh	745	-
Indoor Unit			SPW-US185H	
Air-circulation	(H/M/L)	m^3/h	750/690/600	
Moister removal		Liters/h	1,8	-
Sound Pressure Level	(H/M/L)	dB-A	35/33/31(37/35/33)	
Dimensions	HxWxD	mm	200x750x640	
Net weight		kg	19	
Power supply		V, ph, Hz	220-240,1,50/60	
Outdoor Unit			SPW-C186VEH	
Sound Pressure Level	(H)	dB-A	46	47
Dimensions	H/W/D	mm	569/790/285	
Net weight		kg	40	
Power supply		V, ph, Hz	220-240,1,50/60	
Refrigerant circuit			size 186	
Tube diameter	Narrow/Wide	mm(in)	6,35(1/2)/12,7(1/4)	
Max piping lenght		m	40	
Max elevation difference - O.U. above/below I.U.		m	30/15	
Chargeless piping lenght		m	30	
Amount of additional refrigerant		g/m	20	

Specifications subject to change without notice.

SPW-UMR...EH56B

SPW-UMR...EH56B

Suitable for areas where there is restricted ceiling void space and a demand for longer ductwork runs.

- Maximum depth 266mm
- Boost mode static pressure up to 70 pa
- Drain pump maximum lift 250mm
- Anti-mould and anti-bacteria washable filters
- Fresh air intake
- High static option

Elite				
Inverter Heat Pump			size 186	
Performance			Cooling	Heating
Capacity		kW	1,5/5,0/5,6	1,5/5,6/6,3
Power input		W	1670	1830
EER/COP			2,99	3,06
Energy class		-	Cooling	-
Running amperes		A	8,3	9,0
Annual energy consumption (cooling)		kWh	835	-
Indoor Unit			SPW-UMR184EH56B	
Air-circulation	(H/M/L)	m^3/h	875/600/400	
Moister removal		Liters/h	2,0	-
Sound Pressure Level	(H/M/L)	dB-A	45/38/33	
Dimensions	HxWxD	mm	266x571x1058	
Net weight		kg	35	
Power supply		V, ph, Hz	220-240,1,50/60	
Outdoor Unit			SPW-C186VEH	
Sound Pressure Level	(H)	dB-A	46	47
Dimensions	H/W/D	mm	569/790/285	
Net weight		kg	40	
Power supply		V, ph, Hz	220-240,1,50/60	
Refrigerant circuit			size 186	
Tube diameter	Narrow/Wide	mm(in)	6,35(1/2)/12,7(1/4)	
Max piping lenght		m	40	
Max elevation difference - O.U. above/below I.U.		m	30/15	
Chargeless piping lenght		m	30	
Amount of additional refrigerant		g/m	20	

Specifications subject to change without notice.

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

FTR type
floor/ceiling mounted

SPW-FTR...EH56B

SPW-FTR...EH56B

The FTR type units offer the flexibility of floor or ceiling application without the need for further modification at installation stage.

- 3 speed centrifugal fan
- Anti-mould and anti-bacterial washable filters
- Horizontal flap swinging or set on a fixed position
- Shallow design
- Easy to install

Elite				
Inverter Heat Pump			size 186	
Performance			Cooling	Heating
Capacity		kW	1,5/5,0/5,6	1,5/5,6/6,3
Power input		W	1620	1780
EER/COP			3,09	3,15
Energy class		-	B	-
Running amperes		A	8,10	8,90
Annual energy consumption (cooling)		kWh	810	-
Indoor Unit			SPW-FTR184EH56B	
Air-circulation	(H/M/L)	m^3/h	830/760/665	
Moister removal		Liters/h	2,1	-
Sound Pressure Level	(H/M/L)	dB-A	52/49/46	
Dimensions	HxWxD	mm	680x900x190	
Net weight		kg	23,5	
Power supply		V, ph, Hz	220-240,1,50/60	
Outdoor Unit			SPW-C186VEH	
Sound Pressure Level	(H)	dB-A	46	47
Dimensions	H/W/D	mm	569/790/285	
Net weight		kg	40	
Power supply		V, ph, Hz	220-240,1,50/60	
Refrigerant circuit			size 186	
Tube diameter	Narrow/Wide	mm(in)	6,35(1/2)/12,7(1/4)	
Max piping lenght		m	40	
Max elevation difference - O.U. above/below I.U.		m	30/15	
Chargeless piping lenght		m	30	
Amount of additional refrigerant		g/m	20	

Specifications subject to change without notice.

Controller Options (US/UMR/FTR type)

Timerremotecontroller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplifiedremotecontroller

RCS-KR1EG

SPW-U...H

The U type ducted systems are the ideal solution for flexible, concealed air conditioning and the standard 200mm spigots ensure simple, hassle-free connection to flexible ductwork.

SPW-U...H

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- Extremely quiet operation from 25dB(A)
- Auto restart after power failure
- Auto changeover
- Twin, triple and quadruple split options

The external static pressure can be increased by using the booster cable

Type	12	16,18	25	36	48,60
Standard	49	40	50	79	78
With booster cable	69	62	92	122	113

(Pa)

External electrical equipment box makes maintenance easy

The built-in drain pump has an improved lift of 785mm.

Comfortable space by using flexible air distribution ducts

Unified body height of approximately 310 mm for all models.

Even models with different capacities can be installed smoothly in the ceiling.

Elite											
Inverter Heat Pump			size 186		size 256		size 366		size 486		size 606	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	1,5/5,0/5,6	1,5/5,6/6,3	2,2/7,1/8,0	2,2/8,0/9,0	2,2/10,0/11,2	2,2/11,2/14,5	2,7/12,5/14,0	2,7/14,0/17,5	2,7/14,0/15,0	2,7/16,0/18,5
Power input	1ph/3ph	W	1610/-	1740/-	2450/2600	2560/2530	2890/2850	3070/3060	4100/4080	4130/4150	4960/4880	5080/4940
EER/COP	1ph/3ph		3,11/-	3,22/-	2,90/2,73	3,13/3,16	3,46/3,51	3,65/3,66	3,05/3,06	3,39/3,37	2,82/2,87	3,153,24
Energy class	1ph/3ph	-	B/-	C/-	C/-	-/-	A/A	A/A	-/-	-/-	-/-	-/-
Running amperes	1ph/3ph	A	7,95/-	8,6/-	12,1/na	12,8/na	13,5/na	14,3/na	19,2/na	19,7/na	24,9/na	25,5/na
Annual energy consumption (cooling)	1ph/3ph	kWh	805/-	-/-	1225/1300	-/-	1445/1425	-/-	-/-	-/-	-/-	-/-
Indoor Unit			SPW-U185H		SPW-U255H		SPW-U365H		SPW-U485H		SPW-U605H	
Air-circulation	(H/M/L)	m³/h	720/630/540		1080/900/780		1800/1560/1260		1980/1800/1500		1980/1800/1501	
Moister removal		Liters/h	3,0	-	3,5	-	4,2	-	6,6	-	6,6	-
External Static Pressure (booster)		Pa	40 (62)		50 (92)		79 (122)		78 (113)		78 (113)	
Sound Pressure Level	(H/M/L) (booster)	dB-A	30/28/25 (33/30/28)		34/30/27 (38/34/30)		38/33/31(42/38/33)		40/37/33 (44/40/37)		40/37/33 (44/40/37)	
Dimensions	HxWxD	mm	310x700x630		310x1000x630		310x1480x630		310x1480x630		310x1480x630	
Net weight		kg	25		32		47		47		47	
Power supply		V, ph, Hz	220-240, 1, 50/60									
Outdoor Unit 1ph/3ph			SPW-C186VEH/-		SPW-C256VEH/ VEH8		SPW-C366VEH/ VEH8		SPW-C486VEH/ VEH8		SPW-C606VEH/ VEH8	
Sound Pressure Level (H)	1ph/3ph	dB-A	46/-	47/-	46/51	48/52	52/48	53/49	53/50	54/51	54/49	56/51
Dimensions	H/W/D	mm	569/790/285		780x940x340		1330x940x340		1330x940x340		1330x940x340	
Net weight	1ph/3ph	kg	41/-		54/65		90/95		95/96		95/96	
Power supply		V, ph, Hz	220-240,1, 50/60		220-240,1, 50/60 / 380-415, 3+N, 50							
Refrigerant circuit			size 186		size 256		size 366		size 486		size 606	
Tube diameter	Narrow/Wide	mm(in)	6,35(1/2)/12,7(1/4)		9,52(3/8)/15,88(5/8)		9,52 (3/8) / 15,88 (5/8)		9,52 (3/8) / 15,88 (5/8)		9,52 (3/8) / 15,88 (5/8)	
Max piping lenght		m	40		50		70		70		70	
Max elevation difference - O.U. above/below I.U.		m	30/15		30/15		30/15		30/15		30/15	
Chargeless piping lenght		m	30		30		30		30		30	
Amount of additional refrigerant		g/m	20		40		40		40		40	

Specifications subject to change without notice.
na: at time of publication not available

Classic											
Inverter Heat Pump			size 256		size 336		size 486		size 606	
Performance			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity		kW	2,2/7,1/8,0	2,2/8,0/9,0	2,2/10,0/11,2	2,2/11,2/12,5	2,7/12,5/13,4	2,7/14,0/16,0	14,0	15,0
Power input	1ph/3ph	W	2900/3130	2770/2700	4120/4570	3930/3880	5160/5430	4850/4790	-/6220	-/5170
EER/COP	1ph/3ph		2,45/2,27	2,89/,96	2,43/2,19	2,81/2,89	2,42/2,30	2,89/2,92	-/2,25	-/2,90
Energy class	1ph/3ph	-	C/na	C/na	C/na	C/na	-/-	-/-	-/-	-/-
Running amperes	1ph/3ph	A	14,5/na	13,7/na	20,47na	19,7/na	25,57na	24,0/na	-/na	-/na
Indoor Unit			SPW-U255H		SPW-U365H		SPW-U485H		SPW-U605H	
Air-circulation	(H/M/L)	m³/h	1080/900/780		1800/1560/1260		1980/1800/1500		1980/1800/1500	
Moister removal		Liters/h	3,5	-	4,2	-	6,6	-	na	-
External Static Pressure (booster)		Pa	50 (92)		79 (122)		78 (113)		78 (113)	
Sound Pressure Level	(H/M/L) (booster)	dB-A	34/30/27 (38/34/30)		38/33/31 (42/38/33)		40/37/33 (44/40/37)		45/42/38 (44/40/37)	
Dimensions	HxWxD	mm	310x1000x630		310x1480x630		310x1480x630		310x1480x630	
Net weight		kg	32		47		47		47	
Power supply		V, ph, Hz	220-240,1,50/60							
Outdoor Unit 1ph/3ph			SPW-C256VH/ VH8		SPW-C366VH/ VH8		SPW-C486VH/ VH8		-/SPW-C606VH8	
Sound Pressure Level (H)	1ph/3ph	dB-A	49/47	51/49	50/51	52/52	51/51	54/54	-/52	-/55
Dimensions	H/W/D	mm	569x790x285		780x940x340		910x940x340		910x940x340	
Net weight	1ph/3ph	kg	41/58		58/65		71/76		-/76	
Power supply		V, ph, Hz	220-240,1,50/60 / 380-415/3+N,50							
Refrigerant circuit			size 256		size 366		size 486		size 606	
Tube diameter	Narrow/Wide	mm(in)	9,52(3/8) / 15,88(5/8)		9,52(3/8) / 15,88 (5,8)		9,52(3/8) / 15,88 (5,8)		9,52 (3/8) / 15,88 (5/8)	
Max piping lenght		m	50		50		50		50	
Max elevation difference - O.U. above/below I.U.		m	30/15		30 / 15		30 / 15		30/15	
Chargeless piping lenght		m	20		30		30		30	
Amount of additional refrigerant		g/m	40		40		40		40	

Specifications subject to change without notice.
na: at time of publication not available

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-C...VH8

Powerful performance in a compact space
SANYO's Big PACi breaks new ground in offering high-performance and power in a small space. The Big PACi is ideally suited for large retail applications and other large areas not needing the higher capacities of VRF systems. The new lightweight and compact design enables easier installation in any commercial space. The twin fan system saves valuable footprint compared to traditional 8-10HP systems which have a larger footprint design.

SPW-C...VH8

The high capacity range of condensing units utilises highly efficient twin scroll compressors and R410A refrigerant. The outdoor unit can be mounted up to 100 metres away from its associated indoor unit. The result is a very flexible cooling and heating solution for large commercial applications. The outdoor units are capable of providing heating and cooling down to -15°C, ensuring a comfortable environment all year round, and each can be matched with a single ducted unit or up to four indoor units of the same type.

- Compact twin fan design saving on valuable footprint
- Highly efficient inverter compressor
- Reduced weight
- Forward discharge fan - unique design for this size capacity unit

- High capacity 8-10 HP
- Maximum pipe length 100m (more than 40% longer than other split systems)
- 3 phase
- Simultaneous operation with multiple combinations (only with common indoor units)
- Twin, triple and quad systems available
- Now 8 different styles of indoor units to provide more flexibility for different applications

Inverter Heat Pump					
		size 706		size 906	
Performance		Cooling	Heating	Cooling	Heating
Capacity	kW	6,0/20,2/22,4	6,0/22,4/25,0	6,0/25,0/28,0	6,0/28,0/31,5
Power input	W	7,12	6,50	9,55	8,20
EER/COP	W/W	2,81	3,45	2,62	3,41
Running amperes	A	11,0	10,1	14,8	12,6
Indoor Unit		SPW-D705H		SPW-D905H	
Air-circulation (H/M/L)	m^3/h	3360/3190/2980		4320/4200/3960	
Moister removal	Liters/h	11,1	-	13,9	-
External Static Pressure (booster)	Pa	176		216 (235)	
Sound Power Level	dB-A	80		82	
Sound Pressure Level (H/M/L)	dB-A	48/47/46		51/50/49	
Dimensions (HxWxD)	mm	467/1428/1230		467/1428/1230	
Net weight	kg	110		120	
Power supply	V, ph, Hz	220-240,1,50/60			
Outdoor Unit		SPW-C706VH8		SPW-C906VH8	
Sound Power Level (H)	dB-A	71		72	
Sound Pressure Level (H)	dB-A	57	57	57	58
Dimensions (H/W/D)	mm	1526x940x340		1526x940x340	
Net weight	kg	118		128	
Power supply	V, ph, Hz	380-415,3+N,50/60			
Refrigerant circuit		size 706		size 906	
Tube diameter Narrow/Wide	mm(in)	9,52(3/8)/25,4(1)		12,7(1/2)/25,4(1)	
Max piping lenght	m	100		100	
Max elevation difference - O.U. above/below I.U.	m	30		30	
Chargeless piping lenght	m	30		30	
Amount of additional refrigerant	g/m	40		80	

Specifications subject to change without notice.

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-D...H

D type high static pressure concealed duct
The D type high static ducted units are the ideal solution for flexible, concealed air conditioning of large areas such as retail and entertainment projects.

SPW-D...H

- High static pressure available for optimum air distribution
- Low operating sound levels
- R410A refrigerant
- Highly efficient scroll compressor
- Piping length up to 100m
- Multifunctional wireless remote control with built-in temperature control
- Piping outlet in three directions
- Fresh air knockout for improved air quality

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

System example

An inspection port (450 x 450mm or more) is required at the lower side of the indoor unit body. Distributor (field supply)

INVERTER

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

The SPW DC inverter system is the ideal versatile solution for air conditioning irregularly shaped or open plan areas, as 2, 3 or 4 indoor units can operate in multi-split configuration from a single outdoor unit.

Any combination of indoor unit style with a common capacity can operate in a single mode to provide an economical solution where effective air distribution is required.

Outdoor unit					
	Performance		Combination		
	Cooling	Heating	TWIN	TRIPLE	QUAD
SPW-C256 - Inverter model	7,1	8,0	12 x 2	-	-
SPW-C366 - Inverter model	10,0	11,2	18 x 2	12 x 3	-
SPW-C486 - Inverter model	12,5	14,0	25 x 2	16 x 3	12 x 4
SPW-C606 - Inverter model	14,0	16,0	25 x 2	18 x 3	-
SPW-C706 - Inverter model	20,0	22,4	36 x 2	25 x 3	18 x 4
SPW-C906 - Inverter model	25,0	28,0	48 x 2	-	25 x 4

SPW-X...H

Semi concealed cassette			SPW-X125H	SPW-X165H	SPW-X185H	SPW-X255H	SPW-X365H	SPW-X485H	SPW-X605H
Air circulation	(H/M/L)	m³/h	930/840/780	930/840/780	960/840/780	1200/960/840	1680/1380/1260	1980/1500/1320	2040/1620/1380
Sound pressure level	(H/M/L)	dB(A)	31/29/27	31/29/27	31/29/27	34/31/28	39/36/33	42/38/34	44/40/36
Dimensions - unit	(HxWxD)	mm	256x840x840	256x840x840	256x840x840	256x840x840	319x840x840	319x840x840	319x840x840
Dimensions - panel	(HxWxD)	mm	35x950x950	35x950x950	35x950x950	35x950x950	35x950x950	35x950x950	35x950x950
Net weight - unit		kg	21	21	21	22	26	26	26
Net weight - panel		kg	4,5	4,5	4,5	4,5	4,5	4,5	4,5

SPW-XM...H

Mini semi concealed cassette			SPW-XM125H	SPW-XM165H	SPW-XM185H
Air circulation	(H/M/L)	m³/h	540/480/420	640/510/450	750/630/540
Sound pressure level	(H/M/L)	dB(A)	32/29/26	36/32/28	41/37/33
Dimensions - unit	(HxWxD)	mm	283/575/575	313/625/625	313/625/625
Dimensions - panel	(HxWxD)	mm	30x625x625	30x625x625	30x625x625
Net weight - unit		kg	16	16	16
Net weight - panel		kg	2,4	2,4	2,4

SPW-XMR...EH56B

Mini semi concealed cassette			SPW-XMR124EH56B	SPW-XMR164EH56B	SPW-XMR184EH56B
Air circulation	(H/M/L)	m³/h	700/600/500	750/630/530	750/630/530
Sound pressure level	(H/M/L)	dB(A)	43/40/37	44/40/37	44/40/37
Dimensions - unit	(HxWxD)	mm	296/575/575	296/575/575	296/575/575
Dimensions - panel	(HxWxD)	mm	41/730/730	41/730/730	41/730/730
Net weight - unit		kg	16,5	18	18
Net weight - panel		kg	2,5	2,5	2,5

SPW-KR...GH56B

Wall mounted unit			SPW-KR124GH56B	SPW-KR164GH56B	SPW-KR184GH56B	SPW-KR254GH56B
Air circulation	(H/M/L)	m³/h	720/600/420	720/600/420	780/660/480	1140/960/720
Sound pressure level	(H/M/L)	dB(A)	35/31/27	35/31/27	38/34/30	41/37/34
Dimensions	(HxWxD)	mm	285x995x203	285x995x203	285x995x203	330x1140x228
Net weight		kg	12	12	12	21

All specifications subject to change without notice.

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-FTR...EH56B

Floor/ Ceiling mounted unit			SPW-FTR124EH56B	SPW-SPW-FTR164EH56B	SPW-FTR184EH56B
Air circulation	(H/M/L)	m³/h	700/590/500	830/760/665	830/760/665
Sound pressure level	(quiet H/M/L)	dB(A)	47/43/38	52/49/46	52/49/46
Dimensions	(HxWxD)	mm	680x900x190	680x900x190	680x900x190
Net weight		kg	23,5	23,5	23,5

SPW-T...H

Ceiling mounted unit			SPW-T125H	SPW-T165H	SPW-T185H	SPW-T255H	SPW-T365H	SPW-T485H	SPW-T605H
Air circulation	(H/M/L)	m³/h	720/600/540	720/600/540	780/660/540	1100/900/840	1650/1380/1200	1800/1560/1320	1800/1560/1320
Sound pressure level	(H/M/L)	dB(A)	35/32/30	35/32/30	36/33/30	38/36/33	41/38/35	43/40/37	43/40/37
Dimensions	(HxWxD)	mm	210x910x680	210x910x680	210x910x680	210x1180x680	210x1595x680	210x1595x680	210x1595x680
Net weight		kg	21	21	21	25	33	33	33

SPW-UMR...EH56B

Concealed duct unit			SPW-UMR124EH56B	SPW-UMR164EH56B	SPW-UMR184EH56B
Air-circulation	(H/M/L)	m³/h	600/510/440	875/600/400	875/600/400
External static pressure std (booster)		Pa	49(65)	49(83)	49(83)
Sound pressure level	(H/M/L)	dB(A)	45/43/40	45/38/33	45/38/33
Dimensions	(HxWxD)	mm	266/571/852	266/571/1058	266/571/1058
Net weight		kg	30	35	35

SPW-U...H

Concealed duct unit			SPW-U125H	SPW-U165H	SPW-U185H	SPW-U255H	SPW-U365H	SPW-U485H	SPW-U605H
Air circulation	(H/M/L)	m³/h	600/510/420	720/630/540	720/630/540	1080/900/780	1800/1560/1260	1980/1800/1500	1980/1800/1500
External static pressure std (booster)		Pa	49 (65)	40 (62)	40 (62)	50 (92)	79 (122)	78 (113)	78 (113)
Sound pressure level	(H/M/L)	dB(A)	29/26/22 (32/29/26)	30/28/25 (33/30/28)	30/28/25 (33/30/28)	34/30/27 (38/34/30)	38/33/31(42/38/33)	40/37/33(44/40/37)	40/37/33(44/40/37)
Dimensions	(HxWxD)	mm	310x700x630	310x1000x630	310x700x630	310x1000x630	310x1480x630	310x1480x630	310x1480x630
Net weight		kg	24	25	25	32	47	47	47

SPW-US...H

Slim concealed duct unit			SPW-US125H	SPW-US165H	SPW-US185H
Air-circulation	(H/M/L)	m³/h	540/480/420	630/570/480	750/690/600
External static pressure	(short circuit connection)	Pa	15(40)	15(40)	15(40)
Sound pressure level	(H/M/L)	dB(A)	32/30/28(34/32/30)	34/32/30 (36/34/32)	35/33/31 (37/35/33)
Dimensions	(HxWxD)	mm	200x750x640	200x750x640	200x750x640
Net weight		kg	19	19	19

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Electric VRF, ECOi

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Electric VRF, ECOi

Mini ECOi
2 Way ECOi
3 Way ECOi

DC-inverter control technology for rapid and powerful cooling & heating.

Mini ECOi

2 Way ECOi

3 Way ECOi

Since its formation in 1958, SANYO Air Conditioners has been at the forefront of innovation with its market-leading research and development program. From the world's first heat pump air conditioner in 1960 to the first 3 pipe VRF system in 1989, SANYO continues to deliver leading technology combined with the reliability and customer service that you would expect from SANYO.

The ever-evolving SANYO ECOi series

The ECO-i series is designed for energy savings, easy installation, and high efficiency. Always continuing to evolve, SANYO uses advanced technologies to meet the requirements of diverse situations and contribute to the creation of comfort able living spaces.

Lower running and life cycle costs

SANYO ECOi VRF systems are amongst the most effi cient VRF systems on the market, offering COPs in excess of 4.0 at full load conditions. The system is also designed to make sure that we reduce the running cost of each system by using our unique road map control routine to ensure that the most effi cient combination of compressors are running at any one time. Improved defrost sequencing also reduces running cost by defrosting each outdoor coil in turn when conditions allow.

Mini ECOi Outdoor Units

Type for light commercial use

- Single phase or three phase power supply
- DC inverter technology combined with R410A for excellent efficiency
- Compact design for easy installation
- Top class COP 4.06 (In case of 4HP cooling)
- 9 indoor units can be connected to 1 outdoor unit. (In case of 6 HP)
- It is possible to perform cooling operation at outdoor temperatures down to -10˚C.

2 Way ECOi

Type with selection of cooling or heating operation

- DC inverter technology combined with R410A for excellent efficiency
- Extended operating range - better output at lower temperatures
- Extended pipe runs of up to 150m
- Connectability of 40 indoor units from 24HP upwards
- Top class COP
- Wide range of product for narrower installation space New 14 & 16 HP

3 Way ECOi

Type with simultaneous heating and cooling operation Heat Recovery Type

- Simultaneous cooling or heating operation for up to 40 indoor units
- Top Class COP
- Realization of the smallest installation space, top class in the industry
- Rotation operation function and back-up operation function provided

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-C....DXHN8

ECOi 2 Way is a high-performance multi system with excellent energy-saving features, designed for creating comfortable environment when either heating or cooling is required.

SPW-C....DXHN8

- Heat pump systems offer heating or cooling
- Single footprint size for all unit capacities
- DC inverter technology combined with R410A for excellent efficiency
- System configuration from 8HP to 48HP
- Diversity ratio 50-130%
- Industry low outdoor unit sound levels: from 54.5dB(A) Extended Compressor Life
- Quiet mode offers a further 3dB(A) reduction
- Extended pipe runs of up to 150m
- High COP
- Heating capacity to -20°C
- Connectability of 40 indoor units from 24HP upwards
- Units available from 8-16HP as single units
- Nominal ESP standard on all outdoor units

Extended operating range - better output at lower temperatures

The operating range of heating has been extended from 16˚ to 30°

Save on piping cost

R410A with low pressure loss enables smaller pipe sizes. This means reduced piping space, improved workability at the site and reduced piping material costs.

Longer piping means greater installation area

Reducing the refrigerant volume by reducing piping size has extended the piping actual length to 150m (175m equivalent piping length).

*1: 40m if the outdoor unit is below the indoor unit.
*2: Total length of pipe: no more than 300m

Higher COPs - lower running costs																						
HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
EER Cooling	3,74	3,54	3,50	3,45	3,38	3,63	3,54	3,51	3,49	3,44	3,43	3,41	3,38	3,50	3,47	3,47	3,45	3,42	3,43	3,40	3,38
COP Heating	4,05	4,10	3,91	3,91	3,79	4,06	4,06	3,97	3,96	3,88	3,84	3,85	3,79	4,00	3,94	3,89	3,91	3,86	3,83	3,83	3,79

Piping design
1. Main piping length LM = LA + LB···≤80 m
2. Main distribution pipes LC-LH are selected according to the capacity after the distribution joint.
3. Size of indoor unit connection piping 1-40 are determined by the connection piping size on the indoor units.

Symbol explanation
Distribution joint (APR, option)
Ball valve (BV, option)
Note: Do not use commercial T-pieces for the liquid pipes of and .

* Be sure to use R410A distribution joints for outdoor unit connections and piping branches.

Ranges that apply to refrigerant piping lengths and to differences in installation heights				
Items	Marks	Contents	Length (m)	
Allowable piping length	L1	Max. piping length	Actual piping length	≤150
			Equivalent piping length	≤175
	Δ L (L2–L4)	Difference between the max. length and the min. length from the No. 1 distribution		≤40
the No.1 distribution joint	LM	Max. length of main piping (at max. diameter)		≤80
	1, 2~40	Max. length of each distribution		≤30
	L1+1+2+~40+A+B+LF+LG+LH	Total max. piping length including length of each distribution (only narrow tubing)		≤300
	L5	Distance between PC and AD unit		≤10
Allowable elevation difference	H1	When outdoor unit is installed higher than indoor unit		≤50
		When outdoor unit is installed lower than indoor unit		≤40
	H2	Max. difference between indoor units		≤15
	H3	Max. difference between outdoor units		≤4

Note 1: The outdoor connection main piping (LO part) depends on the total capacity of the outdoor units connected to the end.
Note 2: When the main piping length (L1) (equivalent length) exceeds 90 m, increase the size of both the gas and liquid main piping (LM) by 1 step.

Specifications subject to change without notice.

Extended compressor life by uniform compressor operation times

The total operation time of the compressors is monitored by a microcomputer, so that there is no unbalance for the operation times of all compressors in the same refrigerant system, and compressors with a shorter operation time are operated with preference. System example: A, C: DC inverter compressor B, D: Constant speed compressor

INVERTER R410A

| | | |

SPW-C....DZH8

ECOi 3 Way is one of the most advanced VRF systems available. Not only offering high-efficiency and performance for simultaneous heating and cooling, its sophisticated design makes installation and maintenance much easier.

SPW-C....DZH8

- Simultaneous heating and cooling for total control
- Single footprint size for all unit capacities (8-16HP)
- DC inverter technology combined with R410A for excellent efficiency
- System configuration from 8HP to 48HP
- Diversity ratio 50-130%
- Increased outdoor fan's static pressure valve
- Sound levels: from 54,5dB(A)
- Quiet mode offers a further 3dB(A) reduction
- Extended pipe runs of up to 150m
- COPs to 4,09
- Provides cooling down to -10°C ambient
- Connectability of 40 indoor units from 24HP upwards
- Improvement of energy efficiency in part load condition operation
- Compatibility with 3 way ECOi 4-series

Extended operating range - better output at lower temperatures

The operating range for heating has been extended to -20°C. The remote controller temperature setting for heating operation has also been extended from 16°C to 30°C.

There is improved performance at lower ambient conditions due to SANYO's unique wrap-around outdoor unit coil design and active defrost management.

Ranges that apply to refrigerant piping lengths and to differences in installation heights				
Items	Marks	Contents	Length (m)	
Allowable piping length	L1	Max. piping length	Actual piping length	≤150
			Equivalent piping length	≤175
	Δ L (L2–L4)	Difference between the max. length and the min. length from the No. 1 distribution		≤40
the No.1 distribution joint	LM	Max. length of main piping (at max. diameter)		≤80
	1, 2~40	Max. length of each distribution		≤30
	L1+1+2+~40+A+B+LF+LG+LH	Total max. piping length including length of each distribution (only narrow tubing)		≤300
	L5	Distance between PC and AD unit		≤10
Allowable elevation difference	H1	When outdoor unit is installed higher than indoor unit		≤50
		When outdoor unit is installed lower than indoor unit		≤40
	H2	Max. difference between indoor units		≤15
	H3	Max. difference between outdoor units		≤4

Note 1: The outdoor connection main piping (LO part) depends on the total capacity of the outdoor units connected to the end.
Note 2: When the main piping length (L1) (equivalent length) exceeds 90 m, increase the size of both the gas and liquid main piping (LM) by 1 step.

Specifications subject to change without notice.

Industry's smallest changeover boxes - fewer siting problems

The SANYO solenoid valve kit is only 147mm high (without the removable bracket) and takes its power from the indoor unit, saving the cost of an additional supply.

- Individual indoor unit control in one SVK control box group
- No additional power supply required
- Single mounting fix point
- 2 sizes available

Fully-automatic simultaneous Cooling/Heating operation and heat recovery

- Any design and layout can be used in a single system.
- Cooling operation is possible up to an outdoor temperature of -10°C.

Extended compressor life by uniform compressor operation times

The total operation time of the compressors is monitored by a microcomputer, so that there is no unbalance for the operation times of all compressors in the same refrigerant system, and compressors with a shorter operation time are operated with preference. System example: A, C: DC inverter compressor B, D: Constant speed compressor

INVERTER R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Appearance																							
HP (Combined systems)		8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Model		C0705DZH8	C0905DZH8	C1155DZH8	C1305DZH8	C1405DZH8	8 C0705DZH8	10 C0905DZH8	10 C0905DZH8	10 C0905DZH8	10 C0905DZH8	12 C1155DZH8	14 C1305DZH8	16 C1405DZH8	10 C0905DZH8	10 C0905DZH8	10 C0905DZH8	10 C0905DZH8	10 C0905DZH8	12 C1155DZH8	14 C1305DZH8	16 C1405DZH8
							10 C0905DZH8	10 C0905DZH8	12 C1155DZH8	14 C1305DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8	10 C0905DZH8	10 C0905DZH8	12 C1155DZH8	14 C1305DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8
															14 C1305DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8	16 C1405DZH8
Power supply		380/400/415V-3phase/50Hz					380/400/415V-3phase/50Hz					380/400/415V-3phase/50Hz			380/400/415V-3phase/50Hz							
Cooling capacity	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00	61,50	68,00	73,00	78,50	85,00	90,00	96,00	101,00	107,00	113,00	118,00	124,00	130,00	135,00
Heating capacity	kW	25,00	31,50	37,50	45,00	50,00	56,50	63,00	69,00	76,50	81,50	87,50	95,00	100,00	108,00	113,00	119,00	127,00	132,00	138,00	145,00	150,00
EER Cooling	kW	3,78	3,45	3,41	3,45	3,38	3,57	3,46	3,44	3,45	3,41	3,40	3,41	3,38	3,45	3,41	3,42	3,42	3,40	3,41	3,40	3,38
COP Heating	kW	4,09	3,95	3,81	3,91	3,79	4,01	3,96	3,88	3,92	3,84	3,80	3,85	3,79	3,93	3,88	3,84	3,88	3,84	3,81	3,83	3,79
Electric ratings – Cooling – Running current/AMPs	A	10,0/9,5/9,2	13,7/13,0/12,6	16,6/15,7/15,2	20,0/19,0/18,3	23,0/21,8/21,0	23,8/22,6/21,8	27,3/26,0/25,0	30,2/28,7/27,7	33,6/31,9/30,8	36,5/34,7/33,5	39,4/37,5/36,1	43,0/40,8/39,4	45,9/43,6/42,1	47,5/45,1/43,5	50,5/48,0/46,3	53,0/51,0/49,0	57,0/54,0/52,0	60,0/57,0/55,0	63,0/60,0/58,0	66,0/63,0/60,0	69,0/65,0/63,0
Electric ratings – Cooling – Power input	kW	5,93	8,12	9,82	11,60	13,31	14,10	16,20	17,90	19,70	21,40	23,10	24,90	26,60	27,80	29,60	31,30	33,00	34,70	36,40	38,20	39,90
Electric ratings – Heating – Running current/AMPs	A	10,3/9,8/9,4	13,5/12,8/12,3	16,6/15,8/15,2	19,9/18,9/18,2	22,8/21,6/20,9	23,9/22,6/21,8	26,8/25,5/24,6	30,0/28,5/27,5	33,3/31,6/30,5	36,2/34,4/33,1	39,3/37,3/36,0	42,6/40,8/39,0	45,6/43,3/41,7	46,9/44,6/43,0	49,7/47,2/45,5	53,0/50,0/48,0	56,0/54,0/52,0	59,0/56,0/54,0	63,0/59,0/57,0	65,0/62,0/60,0	68,0/65,0/63,0
Electric ratings – Heating – Power input	kW	6,11	7,97	9,84	11,50	13,20	14,10	15,90	17,80	19,05	21,20	23,00	24,70	26,40	27,50	29,10	31,00	32,70	34,40	36,20	37,90	39,60
Recommended fuse sizes (motor rated)		32	32	32	40	40	32x2	32x2	32x2	1x40 1x32	1x40 1x32	1x40 1x32	2x40	2x40	2x32 1x40	2x32 1x40	2x32 2x40	1x32 2x40	1x32 2x40	1x32 2x40	1x40 1x32	1x40 1x32
Dimensions (H/W/D)	mm	1887x890x890 (+60)					1887x1880x890 (+60)					1887x1880x890 (+60)			1887x2870x890 (+60)							
Net weight	kg	290	290	290	350	350	580	580	580	640	640	640	700	700	930	930	930	990	990	990	1050	1050
Airflow	m³/min	150	160	180	200	220	150+160	160+160	160+180	160+200	160+220	180+220	200+220	220+220	160+160+200	160+160+220	160+180+220	160+200+220	160+220+220	180+220+220	200+220+220	220+220+220
Piping connection – Gas	Inches	3/4	7/8	1 1/8			1 1/8					1 3/8			1 3/8	1 5/8						
Piping connection – Discharge	Inches	5/8	3/4		7/8		7/8				7/8	1 1/8			1 1/8	1 3/8						
Piping connection – Liquid	Inches	3/8		1/2			5/8				3/4				3/4							
Piping connection – Balance	Inches	3/8					3/8				3/8				3/8							
Operating sound - normal mode	dB(A)	54,5	55,0	56,0	60,0	61,0	57,8	58,0	58,5	57,8	61,1	60,4	61,0	61,5	60,8	61,3	61,5	62,0	62,4	62,6	63,0	63,3
Operating sound - quiet mode	dB(A)	51,5	52,0	53,0	57,0	58,0	54,8	55,0	55,5	54,8	57,1	57,4	58,0	58,5	57,8	58,3	58,5	59,0	59,4	59,6	60,0	60,3
Maximum number of indoor units		13	16	19	23	26	29	33	36	40	40	40	40	40	40	40	40	40	40	40	40	40

System example

System limitations	
Maximum number of combined outdoor units	3
Maximum HP of combined outdoor units	48HP
Maximum number of connectable indoor units	40
Indoor/outdoor unit capacity ratio	50-130%
Maximum actual piping length	150m
Maximum level difference (when outdoor unit is lower)	50(40)m
Maximum total piping length in one direction	300m

If your indoor capacity load changes in the future, it's easy to add on both indoor and outdoor units using the same pipings.

If the additional installment of outdoor and indoor units is expected, the size of refrigerant piping should be decided according to the total capacity after the addition.

Dimensions ECOi

INVERTER R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-CR...GXH56B
SPW-CR...GXH8B

SANYO's ECOi Mini, the 2 pipe heat pump small VRF system, is specifically designed for the European market.

Offering between 11kW and 16kW cooling capacity in 3 sizes and up to 9 indoor units connected, the ECOi Mini sets standards of performance and flexibility.

Utilising R410A and DC inverter technology, SANYO offers VRF to a new and growing market.

Forming a new key part of the SANYO VRF line up, the ECOi Mini is compatible with the same indoor units and controls as the rest of the electric and gas-powered range.

SPW-CR...GXH56B
SPW-CR...GXH8B

Features at a glance

- Single phase or three phase power supply
- One AMP start current
- DC inverter technology combined with R410A for excellent efficiency
- COP of up to 4.34
- Diversity ratio 50-130%
- 150m pipe runs
- Cooling operation to -10°C
- Full range of indoor units and control options
- Compact outdoor unit 1230x940x340mm

Wide operating range

The operating range for heating operation is to -20°C, the cooling range is to -10°C. The remote controller temperature setting offers a range from 16°C to 30°C.

Highest COPs - lowest running costs			
HP	4	5	6
EER Cooling	4.06	3.66	3.39
COP Heating	4.34	4.10	3.84

Installation possible even in narrow space

Up to 9 indoor units per system

Note:Donotusecommercially availableT-jointsfortheliquid tubing.

Be sure to use special R410A distribution joints (APR: purchased separately) for outdoorunitconnectionsand tubing branches.

R410A distribution joint APR-P160BG(forindoorunit)

HP				4		5		6	
Model name				SPW-CR365GXH56B/SPW-CR365GXH8B		SPW-CR485GXH56B/SPW-CR485GXH8B		SPW-CR605GXH56B/SPW-CR605GXH8B	
Power supply				230V, 1 phase, 50/60Hz/400, 3 phase, 50/60Hz					
Cooling capacity			kW	11,20		14,00		15,50	
Heating capacity			kW	12,50		16,00		17,60	
EER cooling				4,06		3,66		3,39	
COP heating				4,34		4,10		3,84	
Electric rating	Cooling	Running current/AMPs	A	14,1/4,34		19,6/6,02		23,4/7,18	
		Power input	kW	2,76		3,83		4,57	
	Heating	Running current/AMPs	A	14,7/4,52		19,9/6,13		23,4/7,19	
		Power input	kW	2,88		3,90		4,58	
Recommended fuse size (motor rated)				16	16	16	16	16	16
Dimensions (H/W/D)			mm	1230x940x340					
Net weight			kg	104					
Air circulation			m³/min	100					
Refrigerant amount at shipment			kg	3,5					
Piping connection		Gas	Inches	5/8		5/8		3/4	
		Liquid	Inches	3/8		3/8		3/8	
Operating sound normal mode			dB(A)	51,0		51,0		52,0	
Quiet mode			dB(A)	48,0		48,0		49,0	
Maximum number of indoor units				6		8		9	

Specifications subject to change without notice.

Ranges that apply to refrigerant piping lengths and to differences in installation heights				
Items	Marks	Contents	Length (m)	
Allowable piping length	L1	Max. piping length	Actual piping length	≤150
			Equivalent piping length	≤175
	Δ L (L2–L3)	Difference between the max. length and the min. length from the No. 1 distribution joint		≤40
	ℓ1, ℓ2~ℓn	Max. length of each distribution tube		≤30
	ℓ1+ℓ2+~ℓn-1+L1	Total max. piping length including length of each distribution (only narrow tubing)		≤200
Allowable elevation difference	H1	When outdoor unit is installed higher than indoor unit		≤50
		When outdoor unit is installed lower than indoor unit		≤40
	H2	Max. difference between indoor units		≤15

L = Length, H = Height

Specifications subject to change without notice.

INVERTER R410A

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The Gas Heat Pump M Series

SANYO has been developing GHP VRF systems since 1980, during which time we have been committed to delivering ground-breaking technology. As a result, the commercial range of GHP VRF systems is leading the industry in the development of efficient and flexible systems, making them the natural choice for commercial projects, especially for those projects where power restrictions apply. As you would expect, all of our gas driven VRF systems have the highest reliability rates in the industry and a leading customer service program.

The GHP Motor's torque and rpm control functions are comparable with an inverter type electric air conditioner. Thus the GHP ensures individual and efficient control and regulation as you are used from an electric inverter airconditioner.

The advanced M Series of gas driven VRF systems offers increase efficiency and performance across the range. Now more powerful than ever before, it can connect to up to 48 indoor units.

Improvements include increased part load performance, reduced gas consumption with a Miller-cycle engine and reduced electrical consumption from using DC fan motors.

- Up to 71kW of cooling from a current consumption of 6.18 AMPs
- Single phase power supply across the range
- The option of natural gas or LPG as its main power source
- A water heat exchanger to connect to domestic hot water systems 13-25 HP (2-pipe units only)
- Option of DX or chilled water for indoor heat exchange
- Reduced CO_2 emissions

Power supply problems?

If you are short of electrical power, gas heat pump could be the perfect solution:

- Runs on gas and just needs single phase supply
- Enables the building's electrical power supply to be used for other critical electrical demands
- Reduces capital cost to upgrade power substations to run heating and cooling systems
- Reduces power loadings within a building especially during peak periods
- Electricity supply freed up for other uses such as IT servers, commercial refrigeration, manufacturing, lighting etc.

Benefits

High-efficiency operation

All models are equipped with a high-performance air exchanger and a newly developed refrigerant heat exchanger for high-efficiency operation, making them one of the most energy-efficient solutions on the market.

Lowest nitrogen oxide emissions

The GHP VRF systems have the lowest nitrogen oxide emissions, 66% below the standard. In a pioneering development, the SANYO GHP features a brand new lean-burn combustion system that utilises air fuel ratio feedback control to reduce NOx emissions to an all time low.

Excellent economy

The SANYO GHP provides quick and powerful cooling/heating and increases delivery of heat into the space by the efficient recovery of heat from the engine cooling water, which is injected into the refrigerant circuit by an highly efficient plate-heat-exchanger.

In addition, the use of engine waste heat ensures that our gas heat pump air conditioner requires no defrost cycle, therefore providing continuous 100% heating performance in severe weather conditions with an outside air temperature as low as -20°C. During cooling mode the rejected heat from the engine is available for use with in a DHW system and can supply up to 25 kW of hot water at 75 °C.

High performance

With its advanced heat exchanger design, this new GHP system offers improved efficiency and reduced running costs, which, coupled with improved engine management systems, have greatly improved the system COP rating.

Water chiller option

Our GHP system is also available with a water chiller option, which can be combined with individual outdoor units or as part of a DX chilled water mix of indoor units. The system can be operated via a BMS system or a SANYO supplied control panel, with chilled water set points from -15°C up to 15°C and heating set points up to 25°C to 55°C.

New electrical power generator model

The biggest breakthrough in recent GHP technology is the launch of the ECO G Power, which provides 4.0kW of power. That's enough electricity to power 8 PCs or 40 indoor units.

Comparison of heating capacity
Heating capacity (%)

Comparison of the start times for heating operation
Room temperature (˚C)

GHP Outdoor Heat Exchanger

- Integrated DX and hot water coil
- No defrost required
- Faster reaction to demand for heating

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SGP-EGW190M2G2W

The 2 Way Gas Driven VRF with an electrical power generator
SANYO's ECO G Power is a revolution in air conditioning design. Fitted with a permanent magnet, non-bearing type generator, it is the first VRF system that can supply heating, cooling, hot water and now also a supply of electrical power. Each ECO G Power unit has a 4.0kW generator, which provides enough power for 40 indoor units or the equivalent of 8 PCs.

SGP-EGW190M2G2W

- Innovative technology that reduces CO_2 emissions by more than 30%
- 2 way air conditioning system providing cooling or heating
- Can provide both electricity and hot water in heating and cooling mode
- Up to 4kW electricity generated
- Very efficient generator
- Electricity is output to line linkage converter
- Hot water provided when cooling and when heating above 7°C*
- 22kW hot water generation capacity
- 20HP model provides 56kW cooling or 63kW heating
- Can connect to up to 32 indoor units
- 200m maximum allowable piping length (L1)
- IU/OU capacity ratio 50 - 130%

* referring to outside temperature

Generate electricity during heating or cooling operation

Generate electricity and air conditioning (heating or cooling) at the same time by using remaining engine power. ECO G Power can generate from 2.3 to 3.95kW electricity at a generation efficiency of more than 40%.

Production of electricity

Generates from 2kW to 4kW depending on air conditioning load

HP				20	33	36	40	45
Model name				SGP-EGW190M2G2W	SGP-EW120M2G2W	SGP-EW150M2G2W	SGP-EGW190M2G2W	SGP-EGW190M2G2W
					SGP-EGW190M2G2W	SGP-EGW190M2G2W	SGP-EGW190M2G2W	SGP-EW240M2G2W
Capacity	Cooling		kW	56,0	91,5	101,0	112,0	127,0
	Heating	STD	kW	63,0	103,0	113,0	126,0	143,0
		Low temp*1	kW	67,0	109,5	120,0	134,0	142,0
	Hot water (cooling mode)		kW	22,0	34,0	37,5	44,0	52,0
Power generater capacity at rating			kW	DC 2,5 (Max 4,3)			DC 5,0 (Max 8,6)	DC 2,5 (Max 4,3)
Electricity	Cooling		kW	1,35	2,20	2,70	2,70	2,70
	Heating		kW	1,01	2,02	2,02	2,02	2,55
Gas consumption		Cooling	kW	44,0 (38,3)*	68,5	75,6	88,0	104,9
		Heating STD	kW	48,7 (43,0)*	76,8	84,8	97,4	101,0
		Heating LOW	kW	62,1 (56,4)*	98,9	109,4	124,2	121,3
C O P	Air conditioning only	Cooling		1,33 (1,41)*	1,29	1,29	1,23	1,18
		Heating		1,34 (1,43)*	1,31	1,30	1,27	1,38
		AVE		1,34 (1,42)*	1,30	1,30	1,25	1,28
Max COP (Inc generater, hot water)		Cooling		1,78	1,81	1,80	1,78	1,69
Size	Height		mm	2248				
	Width		mm	1800	1800 + 100 (Min distance) + 1800			
	Depth		mm	1000 (+60)				
Weight			kg	875	1660	1685	1740	1720
Starter amperes			A	30	30	30	30	30
Pipe	Gas			ø28,58	ø31,75	ø31,75	ø38,10	ø38,10
	Liquid			ø15,88	ø19,05	ø19,05	ø19,05	ø19,05
	Balance			ø9,52	ø9,52	ø9,52	ø9,52	ø9,52
	Fuel gas			R3/4 (bolt, thread)				
	Exhaust drain port		mm	ø25 rubber hose				
Operation sound			dB(A)	58	61	61	61	63
Indoor/outdoor capacity ratio				50-130%				
Number of connections indoor*				32	48			

* In case of not generater working. * 1 Low temp condition: outdoor temperture 2°C

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SGP-EW...M2G2W

ECO G W-Multi 2 Way for
Heat Pump Applications
The M Series 2 Way not only offers improved performance but also increased flexibility. Now available as multi-systems, many combinations are possible, from 13HP to 50HP, allowing for more power and enabling accurate matching of a system building load. Additional new features include part load engine management and compressor run hour equalisation.

SGP-EW...M2G2W

- Reduced gas consumption by Miller-cycle engine
- Reduced electrical power consumption by using DC motors
- New lightweight design by use of aluminium engine block reduces weight by 110kg
- Part load efficiencies increased
- Connectability increased - now up to 48 indoor units
- Multi-systems with combinations from 13HP up to 50HP
- 200m maximum allowable piping length (L1)
- Diversity ratio 50-200% (single models only; excluding ECO G Power)
- Extended pipe runs (total 780m)
- Equivalent sound levels to electric VRF systems
- Quiet mode offers a further 2dB(A) reduction
- Chiller option
  - 9HP (25kW cooling - 30kW heating)
  - 18HP (50kW cooling - 60kW heating)
- 10,000 run hours between engine service intervals (equivalent to one maintenance every 3.2 years*)
- Full heating capacity down to -20°C
- No defrost cycle

* Assuming 3120 running hrs per year - 12 hrs x 5 days x 52 weeks

HP				13	16		20	25	26	29	32	33*	36*	40*	45*	50
Model name				SGP-EW120M2G2W	SGP-EW150M2G2W		SGP-EW190M2G2W	SGP-EW240M2G2W	SGP-EW120M2G2W	SGP-EW120M2G2W	SGP-EW150M2G2W	SGP-EW120M2G2W	SGP-EW150M2G2W	SGP-EW190M2G2W	SGP-EW190M2G2W	SGP-EW240M2G2W
									SGP-EW120M2G2W	SGP-EW150M2G2W	SGP-EW150M2G2W	SGP-EW190M2G2W	SGP-EW190M2G2W	SGP-EW 190M2G2W	SGP-EW240M2G2W	SGP-EW240M2G2W
Capacity	Cooling		kW	35,5	45,0		56,0	71,0	71,0	80,5	90,0	91,5	101,0	112,0	127,0	142,0
	Heating	STD	kW	40,0	50,0		63,0	80,0	80,0	90,0	100,0	103,0	113,0	126,0	143,0	160,0
		Low temp*1	kW	42,5	53,0		67,0	75,0	85,0	95,5	106,0	109,5	120,0	134,0	142,0	150,0
	Hot water (cooling mode)		kW	12,0	16,0		20,0	25,0	24,0	28,0	32,0	32,0	36,0	40,0	45,0	50,0
Electricity	Cooling		kW	0,85	1,35		1,35	1,35	1,70	2,20	2,70	2,20	2,70	2,70	2,70	2,70
	Heating		kW	1,01	1,01		1,01	1,54	2,02	2,02	2,02	2,02	2,02	2,02	2,55	3,08
Gas consumption		Cooling	kW	24,5	31,6		38,3	60,9	49,0	56,1	63,2	62,8	69,9	76,6	99,2	121,8
		Heating STD	kW	28,1	36,1		43,0	58,0	56,2	64,2	72,2	71,1	79,1	86,0	101,0	116,0
		Heating LOW	kW	36,8	47,3		56,4	64,9	73,6	84,1	94,6	93,2	103,7	112,8	121,3	129,8
C O P		Cooling		1,40	1,37		1,41	1,14	1,40	1.38	1,37	1,41	1,39	1,41	1,25	1,14
		Heating		1,37	1,35		1,43	1,34	1,37	1,36	1,35	1,41	1,39	1,43	1,38	1,34
		AVE		1,39	1,36		1,42	1,24	1,39	1,37	1,36	1,41	1,39	1,42	1,31	1,24
Max COP (inc hot water)		Cooling		1,87	1,85		1,92	1,54	1,87	1,86	1,85	1,90	1,89	1,92	1,69	1,54
Size	Height		mm	2248												
	Width		mm	1800			1800		1800 + 100 (min distance) + 1800 (in a straight installation)							
	Depth		mm	1000 (+60)												
Weight			kg	790			820	850	1580	1580	1580	1610	1610	1640	1670	1700
Starter amperes			A	30												
Pipe	Gas			ø25,40	ø28,58		ø28,58		ø31,75	ø31,75	ø31,75	ø31,75	ø31,75	ø38,10	ø38,10	ø38,10
	Liquid			ø12,70	ø12,70		ø15,88	ø15,88		ø19,05	ø19,05	ø19,05	ø19,05	ø19,05	ø19,05	ø19,05
	Balance			ø9,52			ø9,52									
	Fuel gas			R3/4 (bolt thread)			R3/4 (bolt thread)									
	Exhaust drain			ø25 rubber hose			ø25 rubber hose									
Operation sound			dB(A)	57			58	62	60	60	60	61	61	61	63	65
Indoor/outdoor capacity ratio				50-200 %			50-200 %		50-130 %							
Number of indoor connections				32	36		36	36	48							

*In these combinations, EGW190M2G2W is able to connect to a W-multi system instead of a EW190M2G2W.
*1 Low temp condition: outdoor temperture 2˚C.

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Easy to add additional units in the future

Load can easily be increased in the future by the addition of indoor and outdoor units without having to plumb pipe shafts.

*When specifying plumbing, please choose the size according to the horsepower after the increase of units.

Example of a system

Maximum possible number of outdoor units to be combined: 2 units
Maximum horsepower of combined outdoor units: 50hp
Maximum possible number of indoor units to be connected: 48 units *1
Indoor/outdoor units capacity ratio: 50%~130% *2

*1 Maximum possible number of outdoor units to be connected is 24.
*2 Capacity of indoor units connection is
Minimum) 50% of the capacity of the smallest outdoor unit within the system.
Maximum) 130%: total capacity of the system outdoor units.

Indoor units are same as multi series for buildings.
*There exist some indoor units which are un connectable.

System chain diagram

Introducing the oil/refrigerant balance control system

The amounts of oil and refrigerant between compressors are kept in balance by a signal from an oil-surface sensor or a refrigerant gas controller mounted on the oil separator, allowing the exchange of oil and refrigerant through a balance pipe.

Saving Energy

- Energy savings achieved by the Appropriate Load Divider Function

Energy savings are achieved by the Appropriate Load Divider Function, which enables efficient operation by concentrating the cooling/heating capacity to one outdoor unit and stopping the other. Compared to conventional machines with a similar COP, this function allows an achievement of energy savings and thus reduces the running costs, especially in part-load-seasons like spring and autumn.

Example: 40hp (approximately 20hp x 2), load of around 20hp, 8 operating hours.

Non-stop operation, even during maintainance

- System will not stop even during maintenance, due to Manual Backup Operating Function

Maintenance is possible during weekdays because it can continue operating during maintenance.

- Automatic Backup Operating Function enables continuous operation, even during trouble

If one outdoor unit stops due to unexpected trouble, backup function in operational outdoor units will automatically kick in and continue operating. Even when a necessity for a service arises, one can cut off the system being served with the closing valve in the outdoor unit, enabling continuous operation with functional outdoor units.

Long lifetime

- Energy savings achieved by the Appropriate Load Divider Function

Due to the appropriate load divider, up to 30% of operating hours can be reduced. During the period, such as spring and autumn, when the load is low, appropriate load divider will stop excess outdoor units. When comparing the total of operating hours, maximum of up to 30%* reduction is possible.

- Renewal period prolonged due to rotation function

Rotation function, which is run from outdoor units with low operating time, will average the operating hours of each outdoor unit. This will result in prolongation of maintanance or replacement period.

Example of the rotation function

Ease of construction

- Ease of construction is improved by introducing large capacity common pipe

By combining all pipes, which were needed for each indoor unit, into a common pipe in each system, the number of pipes are reduced by half* which leads to ease of construction. Furthermore, space of pipes within pipe shafts can be reduced by 2/3.*

*System with approximately 40hp (20hp x 2 units)

Combining all pipes, which were needed for each outdoor unit, into a pipe in each system. (Number of pipes is reduced by half)

Example of a system with approximately 40hp

Hot Water Supply Function

*Hot water capacity is approximately 50% of gas consumption at partial load.

- System Advantage

The engine waste heat, which is normally exhausted into the atmosphere, is recovered via the heat exchanger and effectively used as hot water, so the GHP Chiller acts as a sub system that alleviates the load on the client's main hot water system, and therefore offers 'free' hot water.

Capacity at cooling standard point			Outlet temp 75˚C
Outdoor unit	SGP-EW120M2G2W	kW	12.0
	SGP-EW150M2G2W		16.0
	SGP-EW190M2G2W		20.0
	SGP-EGW190M2G2W		22.0
	SGP-EW240M2G2W		25.0
Hot water piping allowable pressure		MPa	0.7
Hot water circulation rate		m^3/h	3.9
Hot water tube size			Rp 3/4

- All the items illustrated in this draw (exception outdoor unit) are not SANYO's supply.
- During start up, set temperature value of the water in the outdoor unit's parameter.

R410A

SGP-EZ...M2G2

Still the only 3 way GHP system in Europe, the M Series ECO G 3 Way offers even more performance and outstanding features when you need simultaneous heating and cooling. Now with capacities available from 16HP to 25HP, SANYO offers the greatest choice and flexibility to solve any power problem or site requirement.

SGP-EZ...M2G2

- Simultaneous heating and cooling for total control
- Reduced gas consumption by Miller-cycle engine
- Reduced electrical power consumption by using DC motors
- New use of aluminium engine block reduces weight by 110kg
- Part load efficiencies increased
- Connectability increased to up to 36 indoor units
- Now available in 16, 20 and 25HP
- 200m maximum allowable piping length
- Diversity ratio 50-200%
- Extended pipe runs (total 780m)

- Quiet mode offers a further 2dB(A) reduction
- 10 000 run hours between engine service intervals (equivalent to one maintenance every 3.2 years*)
- Full heating capacity down to -20°C
- No defrost cycle * Assuming 3120 running hrs per year - 12 hrs x 5 days x 52 weeks
- Ideal for all bulding types
- Full heating capacity down to -20°C
- Option of using LPG as a power supply (increases flexibility and avoids problems of potential site restrictions in the future. The purer fuel is also excellent for further reductions in CO_2 emissions)

HP				16	20	25
Model name				SGP-EZ150M2G2	SGP-EZ190M2G2	SGP-EZ240M2G2
Capacity	Cooling		kW	45,0	56,0	71,0
	Heating	STD	kW	50,0	63,0	80,0
		Low temp*	kW	53,0	67,0	75,0
Electricity	Cooling		kW	1,35	1,35	1,35
	Heating		kW	1,01	1,01	1,54
Gas consumption	Cooling		kW	31,6	38,3	60,9
	Heating STD		kW	36,1	43,0	58,0
	Heating LOW		kW	47,3	56,4	64,9
C O P	Cooling			1,37	1,41	1,14
	Heating			1,35	1,43	1,34
	AVE			1,36	1,42	1,24
Size	Height		mm	2248		
	Width		mm	1800		
	Depth		mm	1000 (+60)		
Weight			kg	845	845	875
Starter amperes			A	30		
Pipe	Gas			ø28,58		
	Discharge			ø22,22	ø25,40	
	Liquid			ø19,05		
	Fuel gas			R3/4 (bolt thread)		
	Exhaust drain		mm	ø 25 rubber hose		
Operation sound			dB(A)	57	58	62
Indoor/outdoor capacity ratio				50-200% *1		
Number of indoor connections				36	36	36

*Low temp condition: outdoor temperture 2˚C *1 Indoor unit can be connected to up to 16kW model (model size 60)

Specifications subject to change without notice.

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Additional parts

Solenoid valve controller

ACC-3WAY-AGB

Solenoid valve kit

ATK-RZP56BGWB (For 74 to 254 indoor unit)
ATK-RZP160BGWB (For 364 to 604 indoor unit)

* For conference rooms and other locations where low noise is required, pay attention to the installation location and install on a corridor etc.

Distribution joint kits

APR-RZP224BGB (16.0 kW or less)
APR-RZP680BGB (28.0 kW or less)
APR-RZP1350BGB (More than 35 kW)

Max. 36 indoor units

3 WAY GHP MULTI enables simultaneous heating and cooling operation through each solenoid valve kit.

Excellent performance

SANYO 3 WAY multi system is capable of simultaneous heating/cooling and individual operation of each indoor unit by only one outdoor unit. As a result, efficient individual air conditioning is possible in buildings having diverse room temperatures.

Improved maintenance intervals
The unit only needs to be serviced every 10,000 hours. This is the best in the industry.

Up to 35% energy saving (SANYO estimate)

Effective heat recovery system enables up to 35% energy saving
The waste heat removed from the cooled room is effectively used as a heat source for the room to be heated. As a result, the load on the compressor and heat exchanger on the outdoor unit can be reduced, enabling excellent heat recovery.

Solenoid Valve Kit ATK-RZP56BGWB, ATK-RZP160BGWB

120m piping allows effective system designs
Allowable piping length is a max. of 120m (actual length of 145m). This allows flexible installation and system designs.
Up to 36 indoor units are capable of simultaneous heating/cooling operation.

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SGP-WE...M1

The SANYO ECO G Water Heat Exchanger can provide water at a wide range of temperatures suitable for a wide variety of commercial applications ranging from comfort air conditioning to food processing or the replacement of boilers and other systems.

SGP-WE...M1

- New 25 kW and 50 kW capacity models
- In cooling (chiller) mode provides water from -15°C to 15°C
- In heating mode can provide hot water up to 55°C, for example for under floor heating applications
- Includes water flow protection to prevent freezing
- S-Link communication
- All controllers and optional PCBs can be used for control
- High flexibility
- Lighter and smaller
- Range of new water terminal/fan coil units
- Split system means reduced installation cost and the use of a less powerful circulation pump
- One touch changeover between cooling and heating operation
- The system can accommodate up to 120m (actual length) of piping between the outdoor unit and the water heat exchanger, allowing flexibility of installation location
- The system can use antifreeze coolant, so it can produce cold water even at -15°C, thereby complying with "brine specifications"

Operating condition	Cooling	Heating
Water temperature of water heat exchanger unit	Outlet 7°C	Outlet 45°C
Outdoor side intake air temperature	35°C DB	7°C DB, 6°C WB

Mixed System Application

(System example)

Note: The mode of running of outdoor unit depends on the water heat exchanger's mode. The water pump is not included in the water heat exchanger unit. For simultaneous operation, however, the maximum capacity is 130%. Please inquire details of this system design of SANYO.

- Combined with a water heat exchanger unit, the SANYO GHP can create a flexible system--the ideal replacement for existing chiller and boiler systems.
- The GHP Multi System can have an indoor unit plus a GHP chiller. When the two systems are operated independently, an outdoor unit with 130% capacity can be connected.

EGO G Water Heat Exchanger				
Model No.			SGP-WE80M1	SGP-WE170M1
SGP-EW120M2G2W	Cooling capacity	kW	25	30
	Heating capacity	kW	30	35,5
SGP-EW150M2G2W	Cooling capacity	kW	25	37,5
	Heating capacity	kW	30	45
SGP-EW190M2G2W and SGP-EGW190M2G2W	Cooling capacity	kW	25	50
	Heating capacity	kW	30	60
SGP-EW240M2G2W	Cooling capacity	kW	25	56
	Heating capacity	kW	30	67
Electrical rating	Cooling power input	kW	0,01	0,01
	Heating power input	kW	0,01	0,01
Power supply			220/230/240V Single Phase 50Hz	
Size	Height	mm	1000	
	Width	mm	550	
	Depth	mm	965	
Weight		kg	125	160
Standard cold/hot water flow rate		m3/h	4,3	8,6
Hydrostatic loss		kPa	8,5	11,3
Holding water quantity inside the unit		m3	0,01	0,02
Minimum holding water quantity outside the unit		m3	0,28	0,50
Piping refrigerant	Gas pipe	mm	ø22,22	ø28,58
	Liquid pipe	mm	ø9,52	ø15,88
Heat exchanger			hot/cold heat exchanger	
Water circuit limit pressure		MPa	0,686	
Anti-freezing protection system			Protective thermostat	

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Wide choice of models depending on the indoor requirements

Model size		7	9	12	16	18	22	25		30	36	48	60	76	96	Wireless remote control		
Capacity kW	Cooling	2,2	2,8	3,6	4,5	5,6	6,4	7,3		9,0	10,6	14,0	16,0	22,4	28,0	Type with built-in reception part	Type with separately installed reception part	Functions
	Heating	2,5	3,2	4,2	5,0	6,3	7,0	8,0		10,0	11,4	16,0	18,0	25,0	31,5			
Capacity BTU/h	Cooling	7500	9600	12000	15000	19000	22000	25000		30000	36000	47800	54600	76400	95500			
	Heating	8500	11000	14000	17000	21000	24000	27000		34000	39000	54600	61500	85300	107500			
X type Semi-Concealed Cassette		SPW-X075XH Panel PNR-XD484GHAB	SPW-X095XH Panel PNR-XD484GHAB	SPW-X125XH Panel PNR-XD484GHAB	SPW-X165XH Panel PNR-XD484GHAB	SPW-X185XH Panel PNR-XD484GHAB		SPW-X255XH Panel PNR-XD484GHAB			SPW-X365XH Panel PNR-XD484GHAB	SPW-X485XH Panel PNR-XD484GHAB	SPW-X605XH Panel PNR-XD484GHAB			✓		WIDE OPERATION, AUTO, DRY, DP
XM type Semi-Concealed		SPW-XM075XH Panel PNR-XM185	SPW-XM095XH Panel PNR-XM185	SPW-XM125XH Panel PNR-XM185	SPW-XM165XH Panel PNR-XM185	SPW-XM185XH Panel PNR-XM185										✓	✓	WIDE OPERATION, AUTO, DRY, DP
ADR type Semi-Concealed Cassette 1-Way Air Discharge		SPW-ADR74GXH56B Panel PNR-AD124GHB	SPW-ADR94GXH56B Panel PNR-AD124GHB	SPW-ADR124GXH56B Panel PNR-AD124GHB												✓	✓	WIDE OPERATION, AUTO, DRY, DP
SR type Semi-Concealed Cassette 2-Way Air Discharge		SPW-SR74GXH56B Panel PNR-S124GHB	SR94GXH56B Panel PNR-S124GHB	SR124GXH56B Panel PNR-S124GHB	SR164GXH56B Panel PNR-S124GHB	SR184GXH56B Panel PNR-S124GHB		SPW-SR254GXH56B Panel PNR-S253GHANB								✓	✓	WIDE OPERATION, AUTO, DRY, DP
LDR type Semi-Concealed Slim Cassette			SPW-LDR94GXH56B Panel PNR-LD254GHAB	SPW-LDR124GXH56B Panel PNR-LD254GHAB	SPW-LDR164GXH56B Panel PNR-LD254GHAB	SPW-LDR184GXH56B Panel PNR-LD254GHAB		SPW-LDR254GXH56B Panel PNR-LD254GHAB								✓	✓	WIDE OPERATION, AUTO, DRY, DP
DR type Concealed Duct								SPW-DR254GXH56B			SPW-DR364GXH56B	SPW-DR484GXH56B		SPW-DR764GXH56B	SPW-DR964GXH56B		✓	WIDE OPERATION, DRY
US type Concealed Duct		SPW-US075XH	SPW-US095XH	SPW-US125XH	SPW-US165XH	SPW-US185XH											✓	WIDE OPERATION, DRY, DP
U type Concealed Duct		SPW-U075XH	SPW-U095XH	SPW-U125XH	SPW-U165XH	SPW-U185XH		SPW-U255XH			SPW-U365XH	SPW-U485XH	SPW-U605XH				✓	WIDE OPERATION, DRY, DP
FTR type Floor/Ceiling Mounted Units		SPW-FTR74EXH56B	SPW-FTR94EXH56B	SPW-FTR124EXH56B	SPW-FTR164EXH56B	SPW-FTR184EXH56B	SPW-FTR224EXH56B									✓	✓	WIDE OPERATION, AUTO, DRY
T type Ceiling-Mounted Unit				SPW-T125XH	SPW-T165XH	SPW-T185XH		SPW-T225XH			SPW-T365XH	SPW-T485XH				✓	✓	WIDE OPERATION, AUTO, DRY
K type Wall Mounted Unit		SPW-K075XH	SPW-K095XH	SPW-K125XH												✓	✓	WIDE OPERATION, AUTO, DRY
KR type Wall Mounted Unit		SPW-KR74GXH56B	SPW-KR94GXH56B	SPW-KR124GXH56B	SPW-KR164GXH56B	SPW-KR184GXH56B		SPW-KR254GXH56B								✓	✓	WIDE OPERATION, AUTO, DRY
FR type Floor Standing Unit		SPW-FR74GXH56B	SPW-FR94GXH56B	SPW-FR124GXH56B	SPW-FR164GXH56B	SPW-FR184GXH56B		SPW-FR254GXH56B									✓	WIDE OPERATION, DRY
FMR type Concealed Floor Standing Unit		SPW-FMR74GXH56B	SPW-FMR94GXH56B	SPW-FMR124GXH56B	SPW-FMR164GXH56B	SPW-FMR184GXH56B		SPW-FMR254GXH56B									✓	WIDE OPERATION, DRY
GU type Total Heat Exchanger			SPW-GU055XH		SPW-GU075XH	SPW-GU105XH											✓	WIDE OPERATION, DRY

WIDE OPERATION Wideoperation
AUTO Comfortable auto-flap control
Self-diagnosing function
Automaticrestartfunctionfor power failure
Automatic fan operation
Air Sweep
DRY Milddry
DP Built-in drain pump

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-X...XH

The award winning range of X type cassettes are smaller, shallower and lighter than previous models and feature a 950 x 950mm panel throughout. The DC fan motor and air discharge louvre ensure quiet, optimum air distribution.

SPW-X...XH

- Compact design
- Reduced sound levels (from previous models)
- DC fan motor for increased efficiency
- Powerful drain pump gives 850mm lift
- Lightweight design
- Fresh air knockout
- Branch duct connection

Drain Pump of about 850 mm from the ceiling surface

The flap can be removed easily for washing with water.

Lighter and thinner, easier installation!
The top class lightest weight with 26 kg (for type36~60), body height only 256mm (7~25), so that installation is possible even in narrow ceilings.

Easy fine adjustment of the body suspension height!
The four corners of the ceiling panel have adopted removable corner pockets.

← Even after installation, fine adjustment of the suspension height is possible easily by removing the corner pockets.

Light, thin, and attractive design with easy installation
The direction of the air intake grille can be changed. A wireless remote control light receiver can be installed by changing the corner cover. The installation can be done in a short time.

Easy servicing of the drain pan
A large-diameter (45mm) drain pan inspection port has been provided, and drain pan and drain pump can be cleaned easily.

Air intake chamber

CMB-FS140AGB
Air intake plenum

CMB-GS140AG
Air intake box

Both Air intake plenum and Air intake box is necessary

Panel

PNR-XD484GHAB

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-SH80BG.WL

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

Indoor unit specifications

Model Name			SPW-X075XH	SPW-X095XH	SPW-X125XH	SPW-X165XH	SPW-X185XH	SPW-X255XH	SPW-X365XH	SPW-X485XH	SPW-X605XH
Power source			220/230/240V, 1 phase - 50, 60 Hz								
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	7,3	10,6	14	16
		BTU/h	7500	9600	12000	15000	19000	25000	36000	47800	54600
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	8,0	11,4	16,0	18,0
		BTU/h	8500	11000	14000	17000	21000	27000	39000	54600	61400
Power input	Cooling	kW	0,033/0,032/0,032			0,033/0,032/0,032	0,035/0,034/0,034	0,042/0,041/0,041	0,070/0,069/0,069	0,099/0,097/0,097	0,107/0,105/0,105
	Heating	kW	0,023/0,022/0,022			0,023/0,022/0,022	0,023/0,023/0,023	0,031/0,031/0,031	0,062/0,060/0,060	0,095/0,093/0,093	0,100/0,098/0,098
Running amperes	Cooling	A	0,22/0,21/0,20			0,22/0,21/0,20	0,23/0,22/0,21	0,29/0,27/0,26	0,49/0,46/0,44	0,67/0,63/0,60	0,72/0,68/0,65
	Heating	A	0,19/0,18/0,17			0,19/0,18/0,17	0,20/0,19/0,18	0,26/0,25/0,24	0,48/0,45/0,43	0,67/0,63/0,60	0,76/0,71/0,68
Fan motor	Type		Turbo fan								
	Airflow rate (H/M/L)	m^3/min	15,5/14/13				16/14/13	20/16/14	28/23/21	33/25/22	34/27/23
	Output	kW	0,05						0,09		
Power sound level (H/M/L)		dB(A)	42/40/38					45/42/39	50/47/44	53/49/45	55/51/47
Sound pressure sound (H/M/L)		dB(A)	31/29/27					34/31/28	39/36/33	42/38/34	44/40/36
Dimensions	Height	mm	256 + <35>						319 + <35>		
	Width	mm	840 <950>								
	Depth	mm	840 <950>								
Piping connections	Liquid (flare)	mm	6,35				9,52				
	Gas (flare)	mm	12,7				15,88				
	Drain piping		VP-25								
Net weight		kg	21+ <4,5>						26 + <4,5>		

The values in < > for external dimensions and Net weight are the values for the optional ceiling panel.

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-XM...XH

Designed to fit exactly into a 600x600mm ceiling grid without the need to alter the bar configuration, the XM is ideal for small commercial and retro fit applications. In addition, the improvements to efficiency make this one of the most advanced units in the industry.

SPW-XM...XH

Controller Options

Panel

PNR-XM185

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-XM18BG.WL

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- Fresh air knock out
- Multidirectional air flow
- Anti-mould and anti-bacteria washable filters
- Powerful drain pump gives 850mm lift
- Turbo fans and heat exchanger fins with improved design
- DC fan motors with variable speed, new heat exchangers, etc. ensure an efficient power consumption

Special designed flap

The flap can be removed easily for washing.

Lighter and slimmer, easier installation

A lightweight unit at 26 kg (for type 36-60), the unit is also very slim with a height of only 281 mm, making installation possible even in narrow ceilings.

A drain height of approx. 850 mm from the ceiling surface

The drain height can be increased by approximately 350 mm over the conventional value by using a high-lift drain pump, and long horizontal piping is possible.

Indoor unit specifications

Model Name			SPW-XM075XH	SPW-XM095XH	SPW-XM125XH	SPW-XM165XH	SPW-XM185XH
Power source			220/230/240V, 1 phase - 50, 60Hz				
Cooling capacity		kW	2,2	2,8	3,6	4,7	5,6
		BTU/h	7500	9600	12000	15000	19000
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3
		BTU/h	8500	11000	14000	17000	21000
Power input	Cooling	kW	0,034/0,031/0,030		0,037/0,034/0,031	0,044/0,040/0,037	0,055/0,049/0,040
	Heating	kW	0,024/0,021/0,020		0,027/0,024/0,021	0,034/0,030/0,027	0,045/0,039/0,030
Running amperes	Cooling	A	0,26/0,23/0,21		0,29/0,26/0,23	0,37/0,33/0,29	0,47/0,42/0,33
	Heating	A	0,24/0,21/0,19		0,27/0,24/0,21	0,35/0,31/0,27	0,45/0,40/0,31
Fan motor	Type		Centrifugal fan				
	Airflow rate (H/M/L)	m^3/min	9/8/7		10/9/8	12/11/10	14/13/11
	Output	kW	0.030				
Power sound level (H/M/L)		dB(A)	41/38/36		43/40/37	47/43/39	52/48/44
Pressure sound level (H/M/L)		dB(A)	30/27/25		32/29/26	36/32/28	41/37/33
Dimensions	Height	mm	283				
	Width	mm	575 <625>				
	Depth	mm	575 <625>				
Piping connections	Liquid (flare)	mm (inches)	6,35 (1/4)				
	Gas (flare)	mm (inches)	12,7 (1/2)				
	Drain piping		VP-20				
Net weight		kg	19 + <2,7>				

Heating: Indoor air temperature 20°C DB, outdoor air temperature 7°C DB/6°C WB.

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-ADR...GXH56B

The ADR unit features reduced sound levels, compact design and improved airflow distribution.

SPW-ADR...GXH56B

Panel

PNR-AD124GHB

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller (Transmitter, common part)

RCS-TRP80BG.WL

RCS-BH80AG.WL

Simplified remote controller

RCS-KR1EG

- Low sound, lightweight and compact
- Ideal for hotel bedroom applications
- Ease of service access in restricted locations
- Built-in drain pump provides 850mm lift
- Ultra light design: only 17kg
- Auto-flap and auto-swing functions to remotely control air direction

Compact Size in the top class of the industry

The compact design keeps unit width and height to a minimum and delivers the industry's smallest panel width, giving you plenty of leeway in selecting an installation space.

Airflow and distribution is automatically altered depending on the operational mode of the unit.

Indoor unit specifications					
Model Name			SPW-ADR74GXH56B	SPW-ADR94GXH56B	SPW-ADR124GXH56B
Power source			220/230/240V, 1 phase - 50, 60 Hz		
Cooling capacity		kW	2,2	2,8	3,6
		BTU/h	7500	9600	12000
Heating capacity		kW	2,5	3,2	4,2
		BTU/h	8500	11000	14000
Power input	Cooling	kW	0,064/0,064/0,067		
	Heating	kW	0,039/0,039/0,040		
Runningamperes	Cooling	A	0,25/0,24/0,24		
	Heating	A	0,17/0,17/0,17		
Fan motor	Type		Sirocco fan		
	Airflow rate (H/M/L)	m^3/min	8/7/6		9/8/7
	Output	kW	0,02		
Power sound level (H/M/L)		dB(A)	44/42/40		47/45/42
Pressure sound level (H/M/L)		dB(A)	33/31/29		36/34/31
Dimensions	Height	mm	300 + <30>		
	Width	mm	600 <760>		
	Depth	mm	560 <620>		
Pipingconnections	Liquid (flare)	mm	6,35		
	Gas (flare)	mm	12,7		
	Drain piping		VP-25		
Net weight		kg	17 + <2,5>		

The values in < > for external dimensions and Net weight are the values for the optional ceiling panel.

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-SR...GXH56B

Realisation of thin, compact and light units
Remarkable size and weight reductions have been achieved by improvement of the design around the fan. In addition, compared to the previous model the size and weight for the type 18 has been reduced by approximately 30% body volume and to 30kg weight.

SPW-SR...GXH56B

Airflow and distribution is automatically altered depending on the operational mode of the unit.

Drain up is possible up to 500mm from the drain port.

Simple maintenance

The drain pan is equipped with site wiring and can be removed. The fan case has a split construction, and the fan motor can be removed easily when the lower case is removed.

Panel

PNR-S253GHANB (For 254 type)
PNR-S124GHB (For 74-184 type)

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller (Transmitter, common part)

RCS-SS80BG.WL

RCS-BH80G.WL

Simplified remote controller

RCS-KR1EG

Indoor unit specifications

Model Name			SPW-SR74GXH56B	SPW-SR94GXH56B	SPW-SR124GXH56B	SPW-SR164GXH56B	SPW-SR184GXH56B	SPW-SR254GXH56B
Power source			220/230/240V, 1 phase - 50, 60Hz					
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	7,3
		BTU/h	7500	9600	12000	15000	19000	25000
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	8,0
		BTU/h	8500	11000	14000	17000	21000	27000
Power input	Cooling	kW	0,095	0,086/0,092/0,097	0,088/0,093/0,099	0,103/0,097/0,091	0,091/0,097/0,103	0,135/0,145/0,154
	Heating	kW	0,062	0,055/0,060/0,064	0,057/0,061/0,066	0,070/0,065/0,060	0,060/0,065/0,070	0,100/0,109/0,117
Running amperes	Cooling	A	0,45	0,44/0,45/0,45	0,44/0,45/0,45	0,45/0,45/0,45	0,45/0,45/0,45	0,64/0,65/0,66
	Heating	A	0,30	0,28/0,29/0,30	0,28/0,29/0,30	0,29/0,29/0,30	0,29/0,29/0,30	0,46/0,48/0,49
Fan motor	Type		Sirocco					
	Airflow rate (H/M/L)	m^3/min	8,0/7,0/6,0	9,0/8,0/7,0	9,6/8,6/7,6	11,0/9,0/8,0		19,0/16,0/14,0
	Output	kW	0,03					0,05
Power sound level (H/M/L)		dB(A)	40/38/35	44/40/37	45/42/39	46/44/40		49/46/44
Pressure sound level (H/M/L)		dB(A)	30/27/24	33/29/26	34/31/28	35/33/29		38/35/33
Dimensions	Height	mm	358	350 + <8>				
	Width	mm	840 <1060>					1140 <1360>
	Depth	mm	600 <680>					
Piping connections	Liquid (flare)	mm	6,35					9,52
	Gas (flare)	mm	12,7					15,88
	Drain piping		VP-25					
Net weight		kg	23 + <7>					30 + <9>

The values in < > for external dimensions and Net weight are the values for the optional ceiling panel.

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-LDR...GXH56B

Designed for installation within the ceiling void, the LDR range of slimline 1 Way blow cassettes feature powerful yet quiet fans for up to 4.2 metres.

SPW-LDR...GXH56B

Panel

PNR-LD254GHAB

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller (Transmitter, common part)

RCS-TRP80BG.WL

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- Ultra-Slim
- Suitable for standard and high ceilings
- Built-in drain pump provides 747mm lift
- Easy to install and maintain
- Hanging height can be easily adjusted
- Uses a DC fan motor to improve energy-efficiency

Drain height

With 3 types of air-blow systems, the units can be used in various ways.

(1) One-direction down-blow system

Powerful one-direction "down-blow" system reaches the floor even from high ceilings (up to 4.2m).

(2) Two-direction ceiling-mounted system

"Down-blow" and "front-blow" systems are combined in a ceiling-mounted unit to blow air over a wide area.

(3) One-direction ceiling-mounted system

This powerful ceiling-mounted "front-blow" system efficiently air-conditions the space in front of the unit.

Indoor unit specifications

Model Name			SPW-LDR94GXH56B	SPW-LDR124GXH56B	SPW-LDR164GXH56B	SPW-LDR184GXH56B	SPW-LDR254GXH56B
Power source			220/230/240V, 1 phase - 50, 60 Hz				
Cooling capacity		kW	2,8	3,6	4,5	5,6	7,3
		BTU/h	9600	12000	15000	19000	25000
Heating capacity		kW	3,2	4,2	5,0	6,3	8,0
		BTU/h	11000	14000	17000	21000	27000
Power input	Cooling	kW	0,105/0,110/0,115	0,105/0,110/0,115	0,105/0,110/0,115	0,110/0,115/0,120	0,115/0,120/0,125
	Heating	kW	0,075/0,080/0,085	0,075/0,080/0,085	0,075/0,080/0,085	0,080/0,085/0,090	0,085/0,090/0,095
Running amperes	Cooling	A	0,50/0,50/0,51	0,50/0,50/0,51	0,50/0,50/0,51	0,53/0,53/0,54	0,55/0,55/0,56
	Heating	A	0,36/0,37/0,38	0,36/0,37/0,38	0,36/0,37/0,38	0,38/0,39/0,40	0,40/0,41/0,42
Fan motor	Type		Sirocco fan				
	Airflow rate (H/M/L)	m^3min	12/10/9		12/11/10	13/11,5/10	18/15/13
	Output	kW	0,05				
Power sound level (H/M/L)		dB(A)	47/45/44		47/46/45	49/47/45	56/51/47
Pressure sound level (H/M/L)		dB(A)	36/34/33		36/35/34	38/36/34	45/40/36
Dimensions	Height	mm	200 + <20>				
	Width	mm	1000 <1230>				
	Depth	mm	710 <800>				
Piping connections	Liquid (flare)	mm	6,35				9,52
	Gas (flare)	mm	12,7				15,88
	Drain piping		VP-25				
Net weight		kg	21 + <5,5>				22 + <5,5>

The values in < > for external dimensions and Net weight are the values for the optional ceiling panel.

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-DR...GXH56B

The DR range of ducted units offers improved design flexibility for extended duct layouts as a result of their increased external static pressures.

SPW-DR...GXH56B

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- Can be used as 1:1 split system if required
- Complete flexibility for ductwork design
- Can be located into a weatherproof housing for external siting
- Air off sensor avoids cold air dumping
- Configurable air temperature control

System example

An inspection port (450 x 450mm or more) is required at the lower side of the indoor unit body. Distributor (field supply).

Rap valve kit

The types 76 and 96 require two rap valve kits for each unit.

ATK-RX160AGB

Indoor unit specifications

Model Name			SPW-DR254GXH56B	SPW-DR364GXH56B	SPW-DR484GXH56B	SPW-DR764GXH56B	SPW-DR964GXH56B
Power source			220/230/240V, 1 phase - 50, 60 Hz				
Cooling capacity		kW	7,3	10,6	14,0	22,4	28,0
		BTU/h	25000	36000	47800	76400	95500
Heating capacity		kW	8,0	11,4	16,0	25,0	31,5
		BTU/h	27000	39000	54600	85300	107500
Power input	Cooling	kW	0,480/0,505/0,530	0,520/0,545/0,570	0,600/0,660/0,710	0,870/0,900/0,930	1,270/1,330/1,390
	Heating	kW	0,480/0,505/0,530	0,520/0,545/0,570	0,600/0,660/0,710	0,870/0,900/0,930	1,270/1,330/1,390
Running amperes	Cooling	A	2,29/2,30/2,31	2,46/2,46/2,47	2,80/2,90/3,00	4,05/4,06/4,07	6,04/6,06/6,07
	Heating	A	2,29/2,30/2,31	2,46/2,46/2,47	2,80/2,90/3,00	4,05/4,06/4,07	6,04/6,06/6,07
Fan motor	Type		Sirocco fan				
	Airflow rate (H/M/L)	m^3/min	23/22/21	30/28/25	36/35/33	56/53,1/49,6	72/70/66
	Output	kW	0,2		0,35	0,2*2	0,4*2
	External static pressure	Pa	186	176	167	176	216
Power sound level (H/M/L)		dB(A)	55/54/53	56/55/53	58/57/55	59/58/57	62/61/60
Pressure sound level (H/M/L)		dB(A)	44/43/42	45/44/42	47/46/44	48/47/46	51/50/49
Dimensions	Height	mm	420		450	467	
	Width	mm	1065			1428	
	Depth	mm	620			1230	
Piping connections	Liquid (flare)	mm	9,52				
	Gas (flare)	mm	15,88			19,05	22,22
	Drain piping		VP-25				
Net weight		kg	47	50	54	110	120

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-US...XH

The ultra slim US type is one of the leading products of its type in the industry. With a depth of only 200mm it provides greater flexibility and can be used in far more applications.

In addition, its high-efficiency and extremely quiet sound levels make it very popular with many users, including hotels and small offices.

SPW-US...XH

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- Ultra-slim profile: 200 mm for all models
- DC fan motor greatly reduces power consumption
- Ideal for hotel application with very narrow false ceilings
- Anti-mould washable filters included
- Easy maintenance and service by external electrical box
- 40 pa static pressure enables ductwork to be fitted.
- Includes drain pump

Ultra-slim profile for all models

Drain pump with increased power!

By adoption of a high-lift drain pump, the drain piping rise height can be increased to 785mm from the lower surface of the body.

Indoor unit specifications

Model Name			SPW-US075XH	SPW-US095XH	SPW-US125XH	SPW-US165XH	SPW-US185XH
Power source			220/230/240V, 1 phase - 50, 60Hz				
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6
		BTU/h	7500	9600	12000	15000	19000
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3
		BTU/h	8500	11000	14000	17000	21000
Power input	Cooling	kW	0,036/0,036/0,036	0,040/0,040/0,040	0,042/0,042/0,042	0,049/0,049/0,049	0,064/0,064/0,064
	Heating	kW	0,026/0,026/0,026	0,030/0,030/0,030	0,032/0,032/0,032	0,039/0,039/0,039	0,054/0,054/0,054
Running amperes	Cooling	A	0,26/0,26/0,26	0,30/0,30/0,30	0,31/0,31/0,31	0,37/0,37/0,37	0,48/0,48/0,48
	Heating	A	0,23/0,23/0,23	0,27/0,27/0,27	0,28/0,28/0,28	0,34/0,34/0,34	0,45/0,45/0,45
Fan motor	Type		Sirocco fan				
	Airflow rate (H/M/L)	m^3/min	8/7/6	8,5/7,5/6,5	9/8/7	10,5/9,5/8	12,5/11,5/10
	Output	kW	0.05				
	External static pressure	Pa	10-30	15-30	15-40		
Power sound level (H/M/L)		dB(A)	43/42/40	45/44/42	47/45/43	49/47/45	52/50/48
Pressure sound level (H/M/L)		dB(A)	28/27/25	30/29/27	32/30/28	34/32/30	35/33/31
Dimensions	Height	mm	200				
	Width	mm	750				
	Depth	mm	640				
Piping connections	Liquid (flare)	mm (inches)	6,35 (1/4)				
	Gas (flare)	mm (inches)	12,7 (1/2)				
	Drain piping		VP-20				
Net weight		kg	19				

Specifications subject to change without notice.

WIDE OPERATION DRY DP R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-U...XH

The U type ducted systems are the ideal solution for flexible, concealed air conditioning and the standard 200mm spigots ensure simple, hassle-free connection to spiral ductwork. The external static pressure can be increased via an optional booster cable to provide increased design flexibility.

SPW-U...XH

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- Industry-leading low sound levels from 22 dB(A)
- Built-in drain pump provides 785mm lift
- Easy to install and maintain
- Air off sensor avoids cold air dumping
- Configurable air temperature control

Lowest noise levels in the industry
The static pressure outside the unit can be increased

By using the booster cable, the static pressure outside the unit can be increased.

type	7-9-12	16-18	25	36	48-60
standard	49	40	50	79	78
with booster cable use	69	62	92	122	113

(Pa)

More powerful drain pump

By adoption of a high-lift drain pump, the drain piping rise height can be increased to 785mm from the lower surface of the body.

Unified body height of approximately 310 mm for all models

Even models with different capacities can be installed smoothly in the ceiling.

External electrical equipment box makes maintenance easy

Flexible air distribution is achieved by discharge grilles

System examples

An inspection port (450 x 450mm or more) is required at the lower side of the indoor unit body.

7-22°C Air off temperature control as standard

- Able to control air off temperature
- Reduces cold drafts
- Accurate room temperature controls

Indoor unit specifications

Model Name			SPW-U075XH	SPW-U 095XH	SPW-U125XH	SPW-U165XH	SPW-U185XH	SPW-U255XH	SPW-U365XH	SPW-U485XH	SPW-U605XH
Power source			220/230/240V, 1 phase - 50, 60 Hz								
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	7,3	10,6	14,0	16,0
		BTU/h	7500	9600	12000	15000	19000	25000	36000	47800	54600
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	8,0	11,4	16,0	18,0
		BTU/h	8500	11000	14000	17000	21000	27000	39000	54600	61500
Power input	Cooling	kW	0,094/0,100/0,106			0,096/0,102/0,109		0,180/0,195/0,210	0,312/0,327/0,342	0,308/0,325/0,341	
	Heating	kW	0,082/0,088/0,094			0,084/0,090/0,097		0,168/0,183/0,198	0,300/0,315/0,330	0,296/0,313/0,329	
Running amperes	Cooling	A	0,45/0,46/0,47			0,44/0,45/0,46		0,83/0,86/0,89	1,44/1,45/1,46	1,42/1,43/1,44	
	Heating	A	0,40/0,41/0,42			0,39/0,40/0,41		0,78/0,81/0,84	1,39/1,40/1,41	1,36/1,37/1,38	
Fanmotor	Type		Sirocco fan								
	Airflow rate (H/M/L)	m^3/min	10/8,5/7			12/10,5/9		18/15/13	30/26/21	33/30/25	
	Output	kW	0,05					0,07	0,14		
	External static pressure	Pa	49(69)			40(62)		50(92)	79(122)	78(113)	
Power sound level (H/M/L)		dB(A)	40/37/33			41/39/36		45/41/38	49/44/42	51/48/44	
Pressure sound level (H/M/L)		dB(A)	(32)/29/26/22			(33)/30/28/25		(38)/34/30/27	(42)/38/33/31	(44)/40/37/33	
Dimensions	Height	mm	310								
	Width	mm	700					1000	1480		
	Depth	mm	630								
Piping connections	Liquid (flare)	mm	6,35					9,52			
	Gas (flare)	mm	12,7					15,88			
	Drain piping		VP-25								
Net weight		kg	24			25		32	47		

The values in ( ) for the external static pressure and operating sound are for use of booster cable.

Specifications subject to change without notice.

WIDE OPERATION DRY DP R410A

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

SPW-FTR...EXH56B

The FTR type units offer the flexibility of floor or ceiling application without the need for further modification at installation stage.

SPW-FTR...EXH56B

SPW-FTR...EXH56B

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller (Transmitter, common part)

RCS-TH80AG.WLB

RCS-BH80AG.WLB

Simplified remote controller

RCS-KR1EG

- 3 speed centrifugal fan
- Anti-mould and anti-bacterial washable filters
- Horizontal flap swinging or set on a fixed position
- Shallow design
- Easy to install

Further comfort improvement with airflow distribution.

floor or ceiling application

Indoor unit specifications								
Model Name			SPW-FTR74EXH56B	SPW-FTR94EXH56B	SPW-FTR124EXH56B	SPW-FTR164EXH56B	SPW-FTR184EXH56B	SPW-FTR224EXH56B
Power source			220/230/240V, 1 phase-50 Hz					
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	6,4
		BTU/h	7500	9600	12000	15000	19000	22000
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	7,0
		BTU/h	8500	11000	14000	17000	21000	24000
Power input	Cooling	kW	0,65/0,65/0,65			0,88/0,88/0,88		
	Heating	kW	0,65/0,65/0,65			0,88/0,88/0,88		
Running amperes	Cooling	A	0,29/0,29/0,29			0,41/0,41/0,41		
	Heating	A	0,29/0,29/0,29			0,41/0,41/0,41		
Fan motor	Type		Sirocco fan					
	Airflow rate (H/M/L)	m^3/min	10,5/9/7,5			12/10,8/9,7		15/13,5/12
	Output	kW	0,07			0,09		
Power sound level (H/M/L)		dB(A)	60/54/49			62/58/54		63/60/57
Pressure sound level (H/M/L)		dB(A)	49/43/38			51/47/43		52/49/46
Dimensions	Height	mm	680					
	Width	mm	900					
	Depth	mm	190					
Piping connections	Liquid (flare)	mm (inches)	6,35 (1/4)					
	Gas (flare)	mm (inches)	12,7 (1/2)					
	Drain piping		VP-26					
Net weight		kg	23,5					

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-T...XH

The range of ceiling mounted systems feature a DC fan motor for increased efficiency and reduced operating sound levels. All the units are the same height and depth for a uniform appearance in mixed installations and feature a fresh air knockout for improved air quality.

SPW-T...XH

- Low sound levels
- New design all units just 210mm high
- Large and wide air distribution
- Easy to install and maintain
- Fresh air knockout

Further comfort improvement

The wide air discharge opening widens the air flow to the left and the right, so that a comfortable temperature is obtained in the entire room. The unpleasant feeling caused when the air flow directly hits the human body is prevented by the "Draft prevention position", which changes the swing width, so that the degree of comfort is increased.

Correspondence to ceiling heights up to 4 m

Air distribution is automatically altered depending on the operational mode of the unit.

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-TRP80BG.WL

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

Indoor unit specifications

Model Name			SPW-T125XH	SPW-T165XH	SPW-T185XH	SPW-T255XH	SPW-T365XH	SPW-T485XH
Power source			220/230/240V, 1 phase - 50, 60 Hz					
Cooling capacity		kW	3,6	4,5	5,6	7,3	10,6	14,0
		BTU/h	12000	15000	19000	25000	36000	47800
Heating capacity		kW	4,2	5,0	6,3	8,0	11,4	16,0
		BTU/h	14000	17000	21000	27000	39000	54600
Power input	Cooling	kW	0,028/0,029/0,029	0,039/0,029/0,028	0,031/0,032/0,032	0,043/0,043/0,044	0,073/0,074/0,075	0,085/0,086/0,088
	Heating	kW	0,028/0,029/0,029	0,029/0,029/0,028	0,031/0,032/0,032	0,042/0,042/0,043	0,072/0,073/0,074	0,084/0,085/0,086
Running amperes	Cooling	A	0,26/0,24/0,23	0,26/0,24/0,23	0,28/0,26/0,24	0,38/0,35/0,33	0,62/0,57/0,53	0,69/0,63/0,60
	Heating	A	0,26/0,24/0,23	0,26/0,24/0,23	0,28/0,26/0,25	0,38/0,35/0,34	0,62/0,57/0,55	0,69/0,63/0,62
Fan motor	Type		Sirocco fan					
	Airflow rate (H/M/L)	m^3/min	12/10/9,0	13/11/9,0		18,5/15/14	27,5/23/20	30/26/22
	Output	kW	0,03			0,04	0,08	
Power sound level (H/M/L)		dB(A)	46/43/41	47/44/41		49/47/44	52/49/46	54/51/48
Pressure sound level (H/M/L)		dB(A)	35/32/30	36/33/30		38/36/33	41/38/35	43/40/37
Dimensions	Height	mm	210					
	Width	mm	910			1180	1595	
	Depth	mm	680					
Piping connections	Liquid (flare)	mm	6,35			9,52		
	Gas (flare)	mm	12,7			15,88		
	Drain piping		VP-20					
Net weight		kg	21			25	33	

Specifications subject to change without notice.

WIDE OPERATION · A.U.I.F.O · DRY · AUTO · R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-K...XH

The K Type wall mounted unit has a stylish smooth panel which not only looks good but is even easier to clean.

The unit is also smaller, lighter and substantially quieter than previous models making it ideal for small offices and other commercial applications.

SPW-K...XH

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-SH1BG RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

Closed discharge port

When the unit is turned off, the flap closes completely to prevent entry of dust into the unit and to keep the equipment clean.

Lighter and smaller units make the installation easy

The width has been decreased by 17% and the units are lighter.

Quiet operation

These units are among the quietest in the industry, making them ideal for hotels and hospitals.

Smooth and hardwaring design

The smooth cover means these units match most modern interiors. Their compact size enables them to blend in, even in small spaces.

Piping outlet in three directions

Piping outlet is possible in the three directions of rear, right, and left, making the installation work easier.

Washable front panel

The indoor unit's front panel can be easily removed and washed for trouble-free cleaning.

Air distribution is automatically altered depending on the operational mode of the unit

Anti-mould filters are standard

Important
When an indoor unit is installed in a quiet place such as a hotel meeting room, bedroom or VIP room, the Electronic Expansion Valve may be noisy during cooling and heating operation. In order to prevent the noise, an optional External Electronic Expansion Valve Kit (ATK-SVRK160AGB) can be installed in a narrow tube 5 to 15m away from the indoor unit.

Indoor unit specifications

Indoor Unit			SPW-K075XH	SPW-K095XH	SPW-K125XH
Power Source			220/230/240V, 1 phase - 50, 60Hz		
Cooling capacity		kW	2,20	2,80	3,60
		BTU/h	7500	9600	12000
Heating capacity		kW	2,50	3,20	4,20
		BTU/h	8500	11000	14000
Power input	Cooling	kW	0,018/0,019/0,019		0,020/0,021/0,022
	Heating	kW	0,019/0,019/0,020		0,021/0,022/0,022
Running amperes	Cooling	A	0,16/0,16/0,16		0,19/0,19/0,20
	Heating	A	0,17/0,17/0,18		0,20/0,20/0,20
Power sound level (H/M/L)		dB(A)	46/43/39		48/44/40
Sound pressure level (H/M/L)		dB(A)	35/32/28		37/33/29
Fan motor	Type		Sirocco fan		
	Airflow rate (H/M/L)	m^3/min	9/7,5/6		10/8,5/6,5
	Output	kW	0,047		
Air circulation (H/M/L)		m^3/hr	540/450/360	540/450/360	600/510/390
Dimensions (HxWxD)		mm	285x825x217	285x825x217	285x825x217
Piping connections	Liquid (flare)	mm (inches)	6,35 (1/4)		
	Gas (flare)	mm (inches)	12,7 (1/2)		
	Drain piping		VP-13		
Net weight		kg	10		

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-KR...GXH56B

The slim line designed KR type Wall Mounted is small and light, making it ideal for commercial applications. It is also available in a wide variety of capacities.

SPW-KR...GXH56B

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-SH1BG

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

- Smart colour and round-shape design with horizontal stripes
- Piping outlet in 3 directions
- Anti-mould filters are standard equipment
- Optional external electronic expansion valve kit ATK-SURK160AGB prevent noise in quiet rooms and bed rooms

Closed discharge port

When the unit is turned off, the flap closes completely to prevent entry of dust into the unit and to keep the equipment clean.

Lighter and smaller units make the installation easy

The width has been decreased by 17% and the units are lighter.

Quiet operation

These units are among the quietest in the industry, making them ideal for hotels and hospitals.

Washable front panel

The indoor unit's front panel can be easily removed and washed for trouble-free cleaning.

Piping outlet in three directions

Piping outlet is possible in the three directions of rear, right, and left, making the installation work easier.

Anti-mould filters are standard

Important
When an indoor unit is installed in a quiet place such as a hotel meeting room, bedroom or VIP room, the Electronic Expansion Valve may be noisy during cooling and heating operation. In order to prevent the noise, an optional External Electronic Expansion Valve Kit (ATK-SVRK160AGB) can be installed in a narrow tube 5 to 15m away from the indoor unit.

Indoor unit specifications

Model Name			SPW-KR74GXH56B	SPW-KR94GXH56B	SPW-KR124GXH56B	SPW-KR164GXH56B	SPW-KR184GXH56B	SPW-KR254GXH56B
Power source			220/230/240V, 1 phase - 50, 60 Hz					
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	7,3
		BTU/h	7500	9600	12000	15000	19000	25000
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	8,0
		BTU/h	8500	11000	14000	17000	21000	27000
Powerinput	Cooling	kW	0,031/0,033/0,035					0,049/0,052/0,055
	Heating	kW	0,031/0,033/0,035					0,049/0,052/0,055
Running amperes	Cooling	A	0,15/0,15/0,15					0,23/0,23/0,24
	Heating	A	0,15/0,15/0,15					0,23/0,23/0,24
Fan motor	Type		Cross flow fan					
	Airflow rate (H/M/L)	m^3/min	10/8/6,0			12/10/8,0		16/14/10
	Output	kW	0,011			0,015		0,023
Power sound level (H/M/L)		dB(A)	47/43/39					53/49/46
Pressure sound level (H/M/L)		dB(A)	36/32/28					42/35/38
Dimensions	Height	mm	285					330
	Width	mm	995					1140
	Depth	mm	203					228
Piping connections	Liquid (flare)	mm	6,35					9,52
	Gas (flare)	mm	12,7					15,88
	Drain piping		VP-13					
Net weight		kg	14					21

Specifications subject to change without notice.

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-FR...GXH56B

The compact floor standing FR units are the ideal solution for providing perimeter air conditioning. The standard wired controller can be incorporated into the body of the unit.

SPW-FR...GXH56B

- Pipes can be connected to either side of the unit from the bottom or rear
- Easy to install
- Front panel opens fully for easy maintenance
- Removable air discharge grille gives flexible air flow
- Room for condensate pump

Effective perimeter handling

A standard wired remote control can be installed in the body.

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

Indoor unit specifications

Model Name				SPW-FR74GXH56B	SPW-FR94GXH56B	SPW-FR124GXH56B	SPW-FR164GXH56B	SPW-FR184GXH56B	SPW-FR254GXH56B
Power source				220/230/240 1 phase - 50, 60 Hz					
Cooling capacity			kW	2,2	2,8	3,6	4,5	5,6	7,1
			BTU/h	7500	9800	12000	15000	19000	24000
Heating capacity			kW	2,5	3,2	4,2	5,0	6,3	8,0
			BTU/h	8500	11000	14000	17000	21000	27000
Power input	Cooling		kW	0,051/0,056/0,061		0,079/0,085/0,091	0,116/0,126/0,136	0,116/0,126/0,136	0,150/0,160/0,170
	Heating		kW	0,036/0,040/0,045		0,064/0,070/0,076	0,079/0,091/0,101	0,079/0,091/0,101	0,110/0,120/0,130
Running amperes	Cooling		A	0,24/0,25/0,26		0,37/0,38/0,39	0,54/0,56/0,58	0,54/0,56/0,58	0,70/0,72/0,73
	Heating		A	0,17/0,18/0,19		0,30/0,31/0,32	0,37/0,41/0,43	0,37/0,41/0,43	0,52/0,54/0,56
Fan motor	Type			Sirocco fan					
	Airflow rate (H/M/L)		m^3/min	7/6/5		9/7/6	12/9/8	15/13/11	17/14/12
	Output		kW	0,01		0,02	0,02	0,03	0,06
Power sound level (H/M/L)			dB(A)	44/41/39		50/46/40	49/46/42	50/47/42	52/49/46
Pressure sound level (H/M/L)			dB(A)	33/30/28		39/35/29	38/35/31	39/36/31	41/38/35
Dimensions	(HxWxD)		mm	615x1065x230			615x1380x230		
Piping con-nections	Liquid (flare)		mm	6,35					9,52
	Gas (flare)		mm	12,7					15,88
	Drain piping			VP-20					
Net weight			kg	29			39		

Specifications subject to change without notice.

WIDE OPERATION DRY

R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-FMR...GXH56B

At just 229mm deep, the FMR unit can be easily concealed in perimeter areas to provide powerful and effective air conditioning.

SPW-FMR...GXH56B

- Chassis unit for discrete installation
- Complete with removable filters
- Pipes can be connected to either side of the unit from the bottom or rear
- Easy to install

Perimeter air conditioning with high interior quality

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

Indoor unit specifications

Model Name			SPW-FMR74GXH56B	SPW-FMR94GXH56B	SPW-FMR124GXH56B	SPW-FMR164GXH56B	SPW-FMR184GXH56B	SPW-FMR254GXH56B
Power source			220/230/240 1 phase - 50, 60 Hz					
Cooling capacity		kW	2,2	2,8	3,6	4,5	5,6	7,1
		BTU/h	7500	9800	12000	15000	19000	24000
Heating capacity		kW	2,5	3,2	4,2	5,0	6,3	8,0
		BTU/h	8500	11000	14000	17000	21000	27000
Power input	Cooling	kW	0,051/0,056/0,061		0,079/0,085/0,091	0,116/0,126/0,136	0,116/0,126/0,136	0,150/0,160/0,170
	Heating	kW	0,036/0,040/0,045		0,064/0,070/0,076	0,079/0,091/0,101	0,079/0,091/0,101	0,110/0,120/0,130
Running amperes	Cooling	A	0,24/0,25/0,26		0,37/0,38/0,39	0,54/0,56/0,58	0,54/0,56/0,58	0,70/0,72/0,73
	Heating	A	0,17/0,18/0,19		0,30/031/0,32	0,37/0,41/0,43	0,37/0,41/0,43	0,52/0,54/0,56
Fan motor	Type		Sirocco fan					
	Airflow rate (H/M/L)	m^3/min	7/6/5		9/7/6	12/9/8	15/13/11	17/14/12
	Output	kW	0,01		0,02	0,02	0,03	0,06
Power sound level (H/M/L)		dB(A)	44/41/39		50/46/40	49/46/42	49/46/42	52/49/46
Pressure sound level (H/M/L)		dB(A)	33/30/28		39/35/29	38/35/31	39/36/31	41/38/35
Dimensions	(HxWxD)	mm	616x904x229			616x1219x229		
Pipingcon-nections	Liquid (flare)	mm	6,35					9,52
	Gas (flare)	mm	12,7					15,88
	Drain piping		VP-20					
Net weight		kg	21			28		

Specifications subject to change without notice.

WIDE OPERATION DRY R410A

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

Rating Conditions: Cooling Indoor 27˚C DB 19˚C WB Outdoor 35˚C DB 24˚C WB Heating Indoor 20˚C DB Outdoor 7˚C DB 6˚C WB

SPW-GU...XH

SANYO's new heat recovery ventilation system allows total control via a system network whilst modulating the temperature and humidity of incoming air supply.

SPW-GU...XH

- Integration of heat recovery ventilation and DX coil technology for optimum air temperature control
- The DX coil can be connected to all ECO & GHP outdoor units
- Humidifying function available as an option
- Easy to clean filter
- Compact design
- Humidifier & filter option
- 3 Way: Solenoid valve kit is required for each unit
- 2 Way: RAP kit is required for each unit

ATK-RX160AGB

*These valves and line is necessary only when humidification is used.

Controller Options

Timer remote controller

RCS-TM80BG

Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller

RCS-KR1EG

Indoor unit specifications					
Model Name			SPW-GU055XH	SPW-GU075XH	SPW-GU105XH
Air circulation (H) m^3/h			500	750	1000
Power source			220/230/240V, 1 phase - 50 Hz		
Fresh air load treatment capacity	Cooling	kW	5,3 (1,7)*1	8,2 (2,6)*1	10,7 (3,4)*1
	Heating	kW	6,5 (2,3)*1	9,8 (3,5)*1	12,6 (4,6)*1
Enthalpy Exchange Efficiency	Cooling	%	59		
	Heating	%	67		
Temp exchange efficiency			75		
Equivalent cooling capacity		kW	3,6	5,6	7,3
		BTU/h	12000	19000	25000
Power input	Cooling	kW	0,532/0,532/0,532	0,737/0,737/0,737	0,798/0,798/0,798
	Heating	kW	0,532/0,532/0,532	0,737/0,737/0,737	0,798/0,798/0,798
Running amperes	Cooling	A	2,5/2,4/2,3	3,4/3,2/3,1	3,7/3,5/3,4
	Heating	A	2,5/2,4/2,3	3,4/3,2/3,1	3,7/3,5/3,4
Fan motor	Type		Sirocco fan		
	External static pressure-return air	Pa	183 (170)	221 (188)	135 (88)
	External static pressure-supply air	Pa	205 (182)	264 (218)	176 (137)
	Output	kW	0,28 (4P)x2	0,35 (4P)x2	
Power sound level (C/H)		dB(A)	57 (Cooling), 58 (Heating)	58 (Cooling), 59 (Heating)	59 (Cooling), 60 (Heating)
Pressure sound level (C/H)		dB(A)	46 (Cooling), 47 (Heating)	47 (Cooling), 48 (Heating)	48 (Cooling), 49 (Heating)
Dimensions	Height mm		425	450	
	Width mm		1785	1903	
	Depth mm		1000	1120	1220
Piping connections	Liquid (flare)	mm (inches)	6,35 (1/4)		
	Gas (flare)	mm (inches)	12,7 (1/2)		
	Drain piping		VP-25		
Connection duct diameter		mm	250		300
Net weight		kg	134	153	168

The values in ( ) for the external static pressure and operating sound are for use of booster cable.
*1: Heat recovery capacity by heat exchanger.

Specifications subject to change without notice.

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

Rating Conditions: Cooling Indoor 27°C DB 19°C WB Outdoor 35°C DB 24°C WB Heating Indoor 20°C DB Outdoor 7°C DB 6°C WB

A wide variety of control options

Operation system	Individual control systems			Timer operation
Requirements	Normal operation	Operation from each seat	Simple operation	Daily and weekly program
External appearance				
Type, model name	Timer wired remote controller RCS-TM80BG	Wireless remote controller RCS-SH80BG.WL RCS-SS80BG.WL RCS-BH80BG.WL RCS-TRP80BG.WL RCS-SH1BG RCS-XM18BG.WL	Simplified remote controller RCS-KR1EG	Schedule timer SHA-TM64AGB
Number of indoor units which can be controlled	1 group, 8 units	1 group, 8 units	1 group, 8 units	64 groups, max. 64 units
Use limitations	Up to 2 units can be connected per group.	Up to 2 units can be connected per group.	Up to 2 units can be connected per group.	Power supply from the system controller. When there is no system controller, connection is possible to the T10 terminal of an indoor unit.
Connectable indoor unit	4/5 series indoor unit	4/5 series indoor unit	4/5 series indoor unit	4/5 series indoor unit
Function				
ON/OFF	✓	✓	✓	—
Mode setting	✓	✓	✓	—
Fan speed setting	✓	✓	✓	—
Temperature setting	✓	✓	✓	—
Air flow direction	✓ *1	✓ *1	✓ *1	—
Permit/Prohibit switching	—	—	—	—
Weekly program	✓	—	—	✓

*1 Setting is not possible when a remote control unit is present. (Use the remote control for setting.)

Operation system	Centralised control systems			
Requirements	Operation with various function from central station	Only ON/OFF operation from central station	Simplified charge ratio for each tenant	
			Touch screen panel	Personal computer (field supply)
External appearance			Web application	
Type, model name	System controller SHA-KC64AGB	ON/OFF controller SHA-KC16KAGB	Intelligent controller SHA-KT256EG	Communication adaptor SHA-KA128AGB
Number of indoor units which can be controlled	64 groups, max. 64 units	16 groups, max. 64 units	64 units x 4 networks, max. 256 units	2 systems, max. 128 units
Use limitations	Up to 10 units can be connected to one system. Main unit/sub unit (1 main unit + 1 sub unit) connection is possible. Use without remote controller is possible.	Up to 8 units (4 main units + 4 sub units) can be connected to one system. Use without remote controller is impossible.	A communication adaptor (SHA-KA128AGB) must be installed for three or more networks.	
Connectable indoor unit	4/5 series indoor unit	4/5 series indoor unit	4/5 series indoor unit	4/5 series indoor unit
Function				
ON/OFF	✓	✓	✓	✓
Mode setting	✓	—	✓	✓
Fan speed setting	✓	—	✓	✓
Temperature setting	✓	—	✓	✓
Air flow direction	✓	—	✓	✓
Permit/Prohibit switching	✓ *1	✓	✓ *1	✓ *1
Weekly program	—	—	✓	✓

All specifications subject to change without notice.

Control contents	Part name, model No.	Quantity
Standard Control • Control of the various operations of the indoor unit by wired or wireless remote controller. • Cooling or heating mode of the outdoor unit is decided by the first priority of the remote controller. • Switching between remote controller sensor and body sensor is possible.	Timer remote controller RCS-TM80BG Wireless remote controller RCS-XM18BG.WL RCS-SH80BG.WL RCS-SS80BG.WL RCS-BH80BG.WL RCS-TRP80BG.WL RCS-SH1BG RCS-KR1EG	1 unit each
(1) Group control • Batch remote control on all indoor units. • Operation of all indoor cells in the same mode. • Up to 8 units can be connected. • The sensor is the body sensor, and thermostat ON/OFF setting in regard to the temperature set by the remote controller is possible for each indoor unit.	Timer remote controller RCS-TM80BG RCS-KR1EG	1 unit
(2) Main/sub remote control • Max 2 remote controllers per indoor unit. (Main remote controller can be connected) • The button pressed last has priority. • Timer setting is possible even with the sub remote controller.	Main or sub Timer remote controller RCS-TM80BG Wireless remote controller RCS-XM18BG.WL RCS-SH80BG.WL RCS-SS80BG.WL RCS-BH80BG.WL RCS-TRP80BG.WL RCS-SH1BG RCS-KR1EG	As required

Timer remote controller (RCS-TM80BG)

Dimensions
H 120 x W 120 x D 16mm

Basic remote controller ON/OFF

- Operation mode changeover (Cooling, Heating, Dry, Auto, Fan)
- Temperature setting (Cooling/Dry: 18-30 deg Heating: 16-30 deg)
- Air volume adjustment (HH, H, LL, Auto).
- Air flow direction adjustment

Time Function 24 hours real time clock

- Day of the week indicator

Weekly Programme Function

- A maximum of 6 actions can be programmed for each day

Outing Function

- This function can prevent the room temperature from dropping or rising when the occupants are out for a long time

Sleeping Function

- This function controls the room temperature for comfortable sleeping.

Max. 8 indoor units can be controlled from one remote controller.

Remote control by main remote controller and sub controller is possible

Max. 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit

Wireless remote controller

RCS-BH80BG.WL

XM type
RCS-XM18BG.WL

RCS-BH80BG.WL

X type
RCS-SH80BG.WL

RCS-BH80BG.WL

XMR, SR, FTR types
RCS-SS80BG.WL

RCS-BH80BG.WL

ADR, T, LDR types
RCS-TRP90BG.WL

K type
RCS-SH1BG

RCS-BH80BG.WL

For all indoor units
RCS-BH80BG.WL

Ventilation independent operation is possible

When commercial ventilation fans or heat-exchange ventilation fans have been installed, they can be operated with this remote control (interlocked operation with the indoor unit or independent ventilation ON/OFF)

Easy installation for the 4-way cassette type simply by replacing the corner part

24 hour timer function

Remote control by main remote controller and sub controller is possible

- Max. 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit
- Do not perform group control for 3 Series indoor units and 4 Series indoor units together

When RCS-BH80BG.WL is used, wireless control becomes possible for all indoor units

- When a separate receiver is set up in a different room, control from that room also becomes possible
- Automatic operation by means of the emergency operation button is possible even when the remote controller has been lost or the batteries have been exhausted

In addition, there are other functions such as temperature setting, operation switching, wind direction/fan speed setting, etc.

Simplified remote controller (RCS-KR1EG)

Dimensions H 120 x W 70 x D 16 mm

A remote controller with simple functions and basic operation.

- Suitable for open rooms or hotels where detailed functions are not required.
- ON/OFF, operation mode switching, temperature setting, wind velocity switching, wind direction setting, alarm display, and remote controller self-diagnosis can be performed.
- Batch group control for up to 8 indoor units.
- Remote control by main remote controller and sub controller is possible with a simplified remote controller or a wired remote controller (up to two units).

Remote sensor (ART-K45AGB)

- This is a remote sensor which can be used with 4 series indoor units. Please use it to detect the room temperature when no remote controller sensor or body sensor is used. (Correspondence to a system without a remote controller is possible.)
- For joint use with a remote control switch, use the remote control switch as main remote controller

Schedule timer (RCS-TM64AGB)

Dimensions
H 120 x W 120 x D 16 mm

The power supply for the schedule timer is taken from one of the following

1 Control circuit board (T10) of a nearby indoor unit (power supply wiring length: within 200 m from the indoor unit)
2 System controller (power supply wiring length: within 100 m from the indoor unit)

When the power supply for the schedule timer is taken from the control circuit board of the indoor unit, that indoor unit cannot be used with other control devices using the T10 terminal.

As operation mode and temperature settings are not possible with the schedule timer, it must be used together with a remote controller, a system controller, an intelligent controller, etc. Also, as it does not have an address setting function, the control function of a system controller etc. must be used for address setting

Up to 64 groups (max. 64 indoor units) can be controlled divided into 8 timer groups

Six program operations (Operation/Stop/Local permission/ Local prohibition) per day can be set in a program for one week

- Only operation or stop, remote controller local permission or remote controller local prohibition, and their respective combinations are possible. (Operation + local permission, stop + local prohibition, only local permission, etc.)
- Local prohibition and the combination of the three items of temperature setting, mode change, and operation/stop can be set at the time of installation

A function for pausing the timer in case of national holidays has been added, and timer operation also can be stopped for a long time

- By setting holidays or operation stop within one week, the timer can be paused just for that week.
- All timer settings can be stopped with the timer "ON/OFF effective" button. (Return to timer operation is made by pressing the button again.)

Connection example 1
(power supply from the indoor unit)

Connection example 2
(power supply from the central controller)

ON/OFF controller (SHA-KC16KAGB)

Dimensions	H 121 x W 122 x D 14 + 52 (embedding dimension mm)
Power supply	AC 220 to 240 V
I/O part	Remote input (effective voltage: within DC 240V): All ON/OFF Remote output (allowable voltage: within DC 30V): All ON, All alarm

- 16 groups of indoor units can be controlled
- Collective control and individual group (unit) control can also be performed
- Up to 8 ON/OFF controller (4 main, 4 sub) can be installed in one link system
- The operation status can be determined immediately

Note: As operation mode and temperature settings are not possible with the ON/OFF controller, it must be used together with a remote controller a system controller etc

System controller (SHA-KC64AGB)

Dimensions	160 x W 160 x D 21 + 69 (embedding dimension) mm
Power supply	AC 220 to 240 V
I/O part	Remote input (effective voltage: DC 24 V): All ON/All OFF Remote output (voltage-free contact): All ON/All OFF (external Power supply within DC 30 V)
Total wiring length	1km

Individual control is possible for max. 64 groups, 64 indoor units.

Control of 64 indoor units divided into 4 zones. (One zone can have up to 16 groups, and one group can have up to 8 units.)

Control is possible for ON/OFF, operation mode, fan speed, air flow direction (only when used without a remote controller), operation monitoring, alarm monitoring, ventilation, remote controller local operation prohibition, etc

Individual	All operations are possible also from the remote controller. However, the contents will be changed to the contents of the controller operated last
Central 1	The remote controller cannot be used for ON/OFF. (All other operations are possible from the remote controller.)
Central 3	The remote controller cannot be used for mode change or temperature setting change. (All other operations are possible from the remote controller.)
Central 4	The remote controller cannot be used for operation mode change. (All other operations are possible from the remote controller.)

Joint use with a remote controller, an intelligent controller, a schedule timer, etc. is possible

(The maximum number of connectable system controllers is 10, including other central controllers on the same circuit.)

(In case of joint use with a wireless remote controller, there are limitations for the control mode. Please use only with "Individual" and "Central 1".)

Control of systems without a remote controller and of main/sub systems (a total of up to 2 units) is possible

A control mode corresponding to the use condition can be selected from 10 patterns

A Operation mode: Central control mode or remote control mode can be selected
Central control mode: The system controller is used as centralised control device. (Setting from a remote controller can be prohibited by prohibiting local operation from the system controller.)
Remote control mode: The system controller is used as a remote controller. (Setting from the system controller can be prohibited by prohibiting local operation from another central control unit.)

B Controlled unit number mode: All mode or zone 1, 2, 3, 4 mode can be selected
All mode: All, zone, or group unit can be selected.
Zone 1, 2, 3, 4 mode: Setting is possible only for the indoor units of zone 1, 2, 3, or 4.

Connection example

		A Operation mode	
		Central control mode	Remote control mode
B Controlled unit number mode	All mode	All central control Example 1	All remote control
	Zone 1 mode	Zone 1 central control Example 2	Zone 1 remote control
	Zone 2 mode	Zone 2 central control	Zone 2 remote control Example 3
	Zone 3 mode	Zone 3 central control Example 4	Zone 3 remote control
	Zone 4 mode	Zone 4 central control	Zone 4 remote control Example 5

Intelligent controller (SHA-KT256EG)

Dimensions	H 240 x W 280 x D 138 mm
Power supply	AC 100 to 240 V (50 Hz), 20 W (separate power supply)
I/O part	Remote in put (voltage-free contact): All ON/OFF Remote output (voltage-free contact): All ON, All alarm (external power supply within DC 30 V)
Total wiring length	1 km for each system
Only for embedding in the panel	

Limitation contents for prohibited operation

Prohibition means limitation of the operation contents from the remote controller. It is also possible to change the prohibition items.

Limitation contents

Individual	There is no limitation for the operation of the remote controller. However, the contents will be changed to the contents of the controller operated last. (Last-pressed priority.)
Prohibition 1	The remote controller cannot be used for ON/OFF. (All other operations are possible from the remote controller.)
Prohibition 2	The remote controller cannot be used for ON/OFF, operation mode change and temperature setting. (All other operations are possible from the remote controller.)
Prohibition 3	The remote controller cannot be used for operation mode change and temperature setting. (All other operations are possible from the remote controller.)
Prohibition 4	The remote controller cannot be used for operation mode change. (All other operations are possible from the remote controller.)

Note: Avoid joint use of the AMY system and the intelligent controller on the same indoor/outdoor operation line

Max. 256 indoor units (4 systems x 64 units) can be controlled. In case of three or more systems, a communication adapter SHA-KA128AG must be installed on the outside

Operation is possible as batch, in zone units, in tenant units and in group units

ON/OFF, operation mode setting, temperature setting, for fan speed setting, air flow direction setting (when used without a remote controller), and remote controller local operation prohibition (prohibition 1, 2, 3, 4) can be done

A system without a remote controller is possible. Joint use with a remote controller or a system controller is also possible

Use of a schedule timer and holiday setting also can be done

Proportional distribution of the air-conditioning energy is possible

NEW function: Pulse signal input from electric/gas consumption meter

In case of joint use with a wireless remote control system, there are limitations for the control mode. Please use only with "Permission" and "Prohibition 1"

Display sample

Communication adaptor (SHA-KA128AGB)

For more information on how to connect please see installation manual.

Dimensions	H 260 x W 200 x D 68 mm
Power supply	AC 100 to 240 V (50 Hz), 3 W (separate power supply)

Required to connect three or more linked wiring systems (indoor/outdoor operation lines) to the intelligent controller

Also required for connection of the AMY software

Two linked wiring systems can be connected to one SHA-KA128AG, but max. 4 systems can be connected for the entire intelligent controllers

*As this is not a splash-proof design, it must be installed indoors or in the control panel etc

Seri-Para I/O unit (ACC-SP16TAGB)

- This is the interface for connecting signals from the central control device with the SANYO air conditioner unit control network
- This unit can control and monitor the status up to 16 groups of indoor units (max 64 indoor units)
- Up to 4 seri-para units can be connected in one system
- From the central control device, it is possible to set the temperature and to monitor the room temperature or intake air temperature

Input	ON/OFF (Pulse DC24V) Local prohibit (Continuous DC24V) Temp setting (Analog DC1~5V) All ON/OFF (Pulse DC24V) All local prohibit & emergency stop (Continuous DC24V)
Output	On/Alarm/Answer back/Filter sign Room temp (Analog DC4-20mA) All ON/OFF

Seri-Para I /O unit for outdoor unit (ACC-XSP4U1GB)

Dimensions	H 80 x W 290 x D 260 mm
Power supply	Single phase 100/200V, 50/60 Hz), 18W
Input	Batch operation/Batch stop (non-voltage contact/DC24V, pulse signal) Cooling/Heating (non-voltage contact/static signal) Demand 1/2 (non-voltage contact/static signal)(Local stop by switching)
Output	Operation output (non-voltage contact) Alarm output (non-voltage contact)
Wiring length	Indoor/Outdoor operation lines Total length 1km Digital signal: 100m or shorter

- This unit can control up to 4 outdoor units.
- From the centre control device, mode changing and batch operation/batch stop are possible
- Required for demand control.

Local adaptor for ON/OFF control (SHA-KL4UGB)

- Control and status monitoring is possible for individual indoor unit by contact signal.

MINI Seri-Para I/O Unit (ACC-SP1AGB)

- Control and status monitoring is possible for individual indoor unit (1 group)
- In addition to operation and stop, there is a digital input function for air speed and operation mode
- Temperature setting and measuring of the indoor suction temperature can be performed from central monitoring
- The analog input for temperature setting is 0 to 10 V

- Power is supplied from the T10 terminal of the indoor units
- Separate power supply also is possible (in case of suction temperature measuring)

LonWorks interface (SHA-LN16UGB)

- This interface is a communications converter for connecting LonWorks to the SANYO air conditioner unit (PAC, ECOi, GHP) control network
- From the host connected to LonWorks, basic settings and status monitoring is possible for up to 16 groups of A/C units

Functions		System example
A/C unit settings from the LonWorks communicator	Settings for each group of indoor units	Start/stop
		Temp. setting
		Operation mode
		Option 1 settings*
		Option 2 settings*
	Settings for all units	Emergency stop
A/C unit status notifications made to the LonWorks communicator		Start/stop
		Temp setting
		Operation mode
		Option 1 settings*
		Option 2 settings*
		Alarm status
		Indoor units with active alarms
		Room temperature
		A/C unit status
Configuration properties		Transmission intervals settings
		Minimum time secured for transmission

* Select two of the following: remote controller prohibit, fan speed setting, air direction setting, filter sign reset.

Signal output board (ACC-SG-AGB)

- Defrost, heating, cooling and thermostat ON signal can be put out to the outside.
- Signal type (2 types): Voltage specification, non-voltage specification

AMY Software
An air conditioner central control system for buildings

Functions	
A/C unit settings	Unit ON/OFF
	Mode-change
	Room temperature setting
	Fan speed setting
	Flap setting
	Central control setting
	Filter-sign clear
	Alarm reset
A/C unit status	Unit ON/OFF status
	Operation mode
	Setting temperature
	Fan speed status
	Flap status
	Central control setting
	Filter-sign situation
	Correct/incorrect status
	Alarm code
	Charge calculation rate

Software environment
OS Windows 2000, WindowsNT4.0Service Pack 6 or above
Browser Internet Explorer 4.0 or above

STAIMS Basic software TECS-5000

SANYO Total Air conditioning Intelligent Management System

Up to 1024 indoor units can be controlled by 1 PC

Functions for basic software

- Standard remote control for all indoor units.
- Multiple timer schedule programs can be set on the calendar.
- Detail information display for alarm happening.
- CSV file output with alarm history, operating status.
- Automatic data backup to HDD.

communication adapter
SHA-KA128AG

By using up to 4 optional software modules a more extensive control is possible.

TECS-5000A for Load distribution

Load distribution calculation for each tenant

- Air-con load distribution ratio is calculated for each unit (tenant) with used energy consumption data (m3, kWh).
- Calculated data is stored with CSV type file.
- Data of last 365 days will be stored.

TECS-5000B for BACnet interface

Connectable to BMS system

- Communicate with other equipments by BACnet protocol.
- SANYO airconditioners system can be controled by both BMS and STAIMS.
- Up to 256 indoor units can be connected to 1 PC (that has STAIMS basic & BACnet software).

TECS-5000G for Object layout display

Whole system can be controlled visually

- Operating status monitor is available on the layout display.
- Object's layout and indoor unit's location can be checked at once.
- Each unit can be controled by virtual remote-controller on the display.
- Up to 4 layout screens are shown at once.

TECS-5000W for Web application

Web access & control from remote station

- Accessing STAIMS software from remote PC.
- You can monitor/operate SANYO system by using Web browser (Internet Explorer).

STAIMS is suitable for large shopping centers or Universities that have large areas/many buildings.

1 STAIMS PC can have 4 independent systems at once. Each system can have up to 8 C/A units, and control up to 512 units.

In total, 1024 indoor units can be controlled by 1 STAIMS PC.

- Wiring length (PC~C/A) up to 1 km
- Up to 8 C/A for 1 system
- Wiring length for each link from C/A up to 1 km

PAC2 System Design Software

System designing for VRF (ECOi and GHP) and PACi Commercial Split Systems has never been easier

SANYO has identified the importance of ever-increasing demands for fast and accurate responses to customer requests in our industry. More and more emphasis is being placed upon energy-efficiency in our marketplace. The ability to calculate cooling/heating loads and produce information of actual design conditions is a major advantage to any architect, consultant, contractor or end user.

SANYO understands the ever-changing and demanding industry we are in and we are pleased to announce the launch of the next generation of our system design software program. The advanced PAC2 system design software has been customised to make any selection and design process as quick and easy as possible. The software features a version of AC Calc Lite (produced by Click Software). This allows small building loadings to be accurately calculated and directly imported into the PAC2 software.

The design package utilises system wizards and import tools to enable both simple and complex systems to be created. In addition, the system will allow outdoor and indoor units to be dragged and dropped on an interactive desktop. This allows users to create everything from realistic floor plans with detailed piping and wiring schematics to send out with quotations, through to installation guidance drawings.

The PAC2 system software can be used for all SANYO ECOi, GHP and PACi systems.

The PAC2 system software can be used for all SANYO ECOi, GHP and PACi systems.

Features include

- AC Calc Lite (included in the package)
- Easy to use system wizards
- Auto piping and wiring features
- Converted duties for conditions and pipework
- Auto CAD (DXF) export
- Detailed wiring and pipework diagram

CO_2 ECO Heating System

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CO_2 ECO Heating System
Energy efficient air to water heat pump technology

Key features

- Environmentally friendly R744 (CO2) refrigerant
- Free Energy from a renewable source thus a good alternative to gas and oil
- Choice of 4.5kW and 9.0kW capacity
- Can provide hot water and central heating via radiators or under floor heating (Sanitary hot water up to 65°C)
- Performs even in temperatures as low as -25°C
- Easy to install and minimum maintanance
- High performance DC rotary compressor
- Inverter control and 3-phase 400V or single phase 230V power supply
- High efficiency split cycle (in case of 9kW outdoor unit)
- Reliable and rugged design
- Freeze protection circuit
- Highly efficient refrigerant-to-water heat exchanger

SHP-C45DEN

SHP-C90GDN/ GEN

	System power supply	3ph400V-50Hz	1ph-230V-50Hz	3ph-230V-50Hz
Model No.	HP unit		SHP-C45DEN	
	Tank unit	SHP-TH45GDN-SW	SHP-TH45GEN-SW	SHP-TH45GHN-SW
Performance				
*1 Heating capacity/input (Out door temp. 25°C)		4,5kW/1,1kW		
*1 COP (Out door temp. 25°C)		4,1		
*1 Heating capacity/input (Out door temp. 7°C)		4,5kW/1,45kW		
*1 COP (Out door temp. 7°C)		3,1		
*1 Heating capacity/input (Out door temp. -15°C)		4,5kW/2,48kW		
*1 COP (Out door temp. -15°C)		1,8		
*1 Heating capacity/input (Out door temp. -20°C)		4,0kW/2,5kW		
*1 COP (Out door temp. -20°C)		1,6		
Electrical Ratings				
Power supply	HP unit	1ph-230V-50Hz		
	Tank unit	3ph-400V-50Hz	1ph-230V-50Hz	3ph-230V-50Hz
Maximum current	HP unit	16A		
	Tank unit	22,5A	52A	35,4A
Tank unit				
Tank capacity		223L		
Maximum working pressure		2,5bar		
Maximum working pressure tap water (safety valve)		10bar (9bar)		
Auxiliary electric heater capacity		9,0kW + 6,0kW	6,0kW + 6,0kW	7,05kW + 7,05kW
Dimensions	Net H/W/D	1574mm/596mm/630mm		
	Shipment H/W/D	1736mm/700mm/767mm		
Weight	Net/Shipping	155,0kg/200,0kg		
Heat pump unit				
Refrigerant/amount		R744 (CO2)/0,86kg		
*2 Sound pressure level		45,0 dB-A		
Compressor		DC Rotary two stage compression		
Dimensions	Net H/W/D	690mm/840mm/290mm		
	Shipment H/W/D	765mm/943mm/433mm		
Weight	Net/Shipping	65,0kg/72,0kg		

* 1 Inlet water temperature 30°C, Outlet water temperature 50°C
* 2 Outdoor temperature 7°C Inlet water temperature 30°C, Outlet water temperature 50°C
capacity ratings do not include any defrost operation data

Specifications subject to change without notice.

	System power supply	3ph-400V-50Hz	1ph-230V-50Hz	3ph-230V-50Hz
Model No.	HP unit	SHP-C90GDN	SHP-C90GEN	
	Tank unit	SHP-TH90GDN-SW	SHP-TH90GEN-SW	SHP-TH90GHN-SW
Performance				
*1 Heating capacity/input (Out door temp. 25°C)		9,0kW/2,2kW	9,0kW/2,2kW	
*1 COP (Out door temp. 25°C)		4,1	4,1	
*1 Heating capacity/input (Out door temp. 7°C)		9,0kW/2,9kW	9,0kW/2,7kW	
*1 COP (Out door temp. 7°C)		3,1	3,3	
*2 Heating capacity/input (Out door temp. -15°C)		9,0kW/5,0kW	8,0kW/4,45kW	
*2 COP (Out door temp. -15°C)		1,8	1,8	
*2 Heating capacity/input (Out door temp. -20°C)		8,0kW/5,0kW	7,0kW/4,35kW	
*2 COP (Out door temp. -20°C)		1,6	1,6	
Electrical Ratings				
Power supply	HP unit	3ph-400V-50Hz	1ph-230V-50Hz	
	Tank unit	3ph-400V-50Hz	1ph-230V-50Hz	3ph-230V-50Hz
Maximum current	HP unit	10A	20A	
	Tank unit	22,5A	52A	35,4A
Tank unit				
Tank capacity		223L		
Maximum working pressure		2.5bar		
Maximum working pressure tap water (Safety valve)		10bar (9bar)		
Auxiliary electric heater capacity		9,0kW + 6,0kW	6,0kW + 6,0kW	7,05kW + 7,05kW
Dimensions	Net H/W/D	1574mm/596mm/630mm		
	Shipment H/W/D	1736mm/700mm/767mm		
Weight	Net/Shipping	155,0kg/200,0kg		
Heat pump unit				
Refrigerant/amount		R744 (CO2)/1,6kg	R744 (CO2)/1,7kg	
*3 Sound pressure level		49,0 dB-A		
Type of Compressor		DC Rotary 2 Stage		
Dimensions	Net H/W/D	1235mm/930mm/340mm		
	Shipment H/W/D	1330mm/1044mm/420mm		
Weight	Net/Shipping	105,0kg/115,0kg	109,0kg/119,0kg	

* 1 Inlet water temperature 30°C, Outlet water temperature 50°C
* 2 Inlet water temperature 40°C, Outlet water temperature 60°C
* 3 Outdoor temperature 7°C Inlet water temperature 30°C, Outlet water temperature 50°C
* capacity ratings do not include any defrost operation data

Specifications subject to change without notice.

INVERTER R744

Energy efficient air to water heat pump technology

The SANYO Advantage

Unlike other heat pump systems which use a group of environmentally harmful gases called Hydrofluorocarbons (HFCs and HCFCs), SANYO's solution is to use R744 as its refrigerant, which is carbon dioxide (CO2), an entirely natural and non-toxic gas that is sealed within the system.

Characteristics of Natural Refrigerant R744 (CO_2)			
		ODP*	GWP**
R744	CO_2 Natural Refrigerant	0	1
R410A	HFC	0	1900
R407C	HFC	0	1600

* Ozone Depletion Potential
** Global Warming Potential

Sanitary hot water to 65ºC

CO_2 refrigerant also allows higher working temperatures compared to HFC heat pumps. Whereas other manufacturers heat pumps can provide warm water to 45-50ºC they require an electric booster heater to increase the temperature to meet hot water needs.

Maximum working temperature

SANYO's CO_2 heat pump can achieve temperatures of 65ºC, ideal for domestic hot water.

Performs even in temperatures as low as -25ºC

An outdoor unit with HFC refrigerant normally operates in temperatures of down to around -10ºC. Below this temperature range they mostly rely on a built-in electric heater to take over. Since electric heaters have a low COP of around 1, the result is a significant drop in overall system efficiency. The CO_2 ECO Heating System heat pump with its CO_2 refrigerant can operate even in temperatures as low as -25ºC.

Easy to control

The CO_2 ECO Heating System controls are intuitive and easy to operate. They allow you to determine your preferred hot water temperature and create your ideal indoor environment. The 7-day week program means you can adapt your space heating to reflect whether you are out at work or relaxing at home.

Low installation & running costs

The CO_2 ECO Heating System is simple to install and increased efficiency means investment payback can be realised within the following years. It is compatible with all standard radiators and under floor heating systems so there is no need to replace anything but your existing boiler.

Around three quarters of an average household's power consumption is taken by water and space heating. Because the CO_2 ECO Heating System heat pump boiler is highly efficient and takes high proportion of its energy consumption free from the air, you can look forward to greatly reduced fuel bills.

Low maintenance

The CO_2 ECO Heating System Heat Pump does not require any of the annual safety inspections and regular maintenance required for gas and oil boilers making this an extremely convenient and low cost option.

Uniquely flexible

CO_2 ECO Heating System only uses water and electricity to operate so it is ideal for properties that are not connected to the mains gas supply. With a choice between 4.5 and 9.0kW capacity models and a single or 3-phase power supply, it is uniquely flexible to meet the needs of homes and small commercial properties alike.

The CO2 ECO extracts free energy from the outside air

INVERTER R744

Energy efficient air to water heat pump technology

Simple Installation

The CO_2 ECO Heating Domestic System is easy to install consisting of a single 4.5kW or 9.0kW capacity outdoor heat pump unit and an indoor unit tank.

The system connects to all standard radiators and under floor heating systems.

The units are self-contained and require only water and electricity connections. To fit the CO_2 ECO Heating System the installer needs to be trained in the design and installation of domestic hot water systems.

Training and advice for installers is available from all SANYO distributors.

Because the system is sealed there is no handling of refrigerant so no refrigerant handling certificate is required.

The SANYO CO_2 Eco is easy to service with easy access to electrical components, and good fault tracing functions in the operating program.

The world's first CO_2 rotary two-stage compressor

At the heart of the CO_2 ECO Heating System is SANYO's innovative rotary two-stage compressor system, a world first in compressor design. The compressor is resistant to high working pressure differentials, has high reliability through load dispersion, low leakage and low vibration. The compressor is very compact and operates at a quiet sound level.

INVERTER R744

SANYO CO_2 ECO Tank Unit

The SANYO CO_2 ECO Tank Unit is specifically designed to work with the CO_2 ECO Heat Pump. It is a highly sophisticated hot water management system that simultaneously provides water at different temperatures for domestic hot water, radiator heating and under floor heating whilst at the same time working with other hot water sources.

SHP-TH90GEN-SW/ GDN-SW/ GHN-SW
SHP-TH45GEN-SW/ GDN-SW/ GHN-SW

Tank Unit Options						
Power supply	1ph-230V	3ph-400V	3ph-230V	1ph-230V	3ph-400V	3ph-230V
HP unit	SHP-C45DEN	SHP-C45DEN	SHP-C45DEN	SHP-C90GEN	SHP-C90GDN	SHP-C90GEN
Tank unit	SHP-TH45GEN-SW	SHP-TH45GDN-SW	SHP-TH45GHN-SW	SHP-TH90GEN-SW	SHP-TH90GDN-SW	SHP-TH90GHN-SW

Specifications subject to change without notice.

- The HP provides abundant hot water up to 65ºC
- For best performance the integrated motorised mixing valve automatically adjusts to the temperature required by the radiators / under floor heating.
- Micro chip operation monitors all functions, makes specific adjustments and simplifies fault locating.
- Polyurethane insulated tank for increased efficiency and reduced temperature loss
- Electric back up heaters provide hot water in case of emergency or higher demand.

Optional Connector & Control Kit

A connector is available so that the CO_2 ECO Heat Pump Unit can be used with other hot water systems.

- Complete control system for the CO_2 ECO Heat Pump
- Designed to connect CO_2 ECO to existing heating systems / boilers
- Suitable for most hot water systems including those with and without mixing valve regulation

- Wall mounted with easy to use temperature controls
- For more details about the ACC-CO_2 Kit contact your SANYO representative.

Sophisticated Controls

The SANYO CO_2 Eco's digital control panel is extremely user friendly with an easy to understand menu system that makes it easy to personalise settings for maximum comfort. Built-in day by day controls allow you to vary temperatures throughout the day e.g. reducing temperature at night or whilst you are away working. Sophisticated room sensors continuously send information to the control system to allow for fast adjustment to the correct temperature.

1 Status diode
Green light: The product is in normal operation.
Red flashing light: The product needs attention. See message in the display.

2 Step back button
You step back to the former menu or exit a setting.

3 Reset button
This button lights up red when the product needs attention. Press the button for resetting the alarm.

4 Display
Graphic display, back ground lighted. Gives 8 rows of information.

5 OK button
With this button you confirm a value or a choice.

6 Step up/down buttons
With this buttons you step up/ down in menus or increase/ decrease values.

* sample image of SHP-TH90GDN-SW

Automatic temperature adjustment

The controls automatically adjust the water temperature depending on the outside temperature. Therefore as the external temperature drops the heating inside the house increases to ensure year round comfort.

CO_2 ECO Heating Domestic System
An Overview

Outdoor Unit

The heart of SANYO's CO_2 ECO Heating System lies in the compact heat pump unit. Situated on an exterior wall it is extremely simple to install and benefits from quiet operation. Using only a small amount of electric power it takes around two thirds of its energy from the atmosphere. Even at ambient temperatures as low as -25ºC enough heat is absorbed by the liquid CO_2 refrigerant to cause it to evaporate. The CO_2 gas is then pressurised in a compressor causing it's temperature to rise. This heat then transfers to water from the main supply and the CO_2 cools and condenses back to its liquid state then passes through an expansion valve and regains normal pressure ready to pass through the system again.

Indoor unit

The CO_2 Eco Tank Unit is a highly sophisticated hot water management system that simultaneously provides water at different temperatures for domestic hot water, radiator heating, and under floor heating. It houses two electrical heaters of which one is for standard use and one for emergency cases (outdoor temperature drops below -25 degrees or there is an unusually high demand for hot water. In emergency situations, this heater can even operate independently from the Heat Pump)

Radiators and under floor heating

Just like any other water heating system, CO_2 ECO Heating System connects to standard radiator fittings and under floor heating pipes to provide space heating. You can enjoy superb comfort all year round.

Hot water

The SANYO CO_2 ECO Heating System provides you with abundant hot water and, unlike heat pump systems from other manufacturers that use HFC refrigerants, it has a high working temperature of 65ºC. This is sufficient to achieve the temperatures you need for showers and baths.

Control system

The room sensor continually sends information back to the control system on the tank unit. The 7-day timer allows you to adapt your hot water and space heating to suit the rhythm of your life, while simple override functions allow you to turn it on or off and make it warmer or cooler so you can always enjoy maximum comfort.

Hydronic Products

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Ducted Units	166

SCP-AR...

- 2 new mini-chiller sizes launched in 2008
- High COP (Coefficient of Performance)
- Incorporated hydronic module that includes circulation pump with expansion tank
- Installation of a buffer tank is not necessary
- Anti-vibration supports included
- R410A refrigerant

SCP-AR...

Air-to-water heat pumps																	
Model number		SCP-AR061EH5		SCP-AR071EH5		SCP-AR091EH5		SCP-AR091EH8		SCP-AR121EH5		SCP-AR121EH8		SCP-AR161EH8		SCP-AR181EH8	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	5,1	6,1	5,9	7,3	7,1	9,0	7,2	9,1	8,5	10,65	9,0	12,7	11,4	15,2	15,7	19,6
Absorbed power	kW	2,12	2,18	2,61	2,56	3,14	3,16	3,09	3,11	3,31	3,48	3,73	3,94	4,98	4,82	6,88	6,32
Absorbed current	A			12,2	12,8	11,4	15,0	6,1	6,1	16,1	16,7	7,2	7,5	10,2	9,9	15,2	14,6
E.E.R/COP	W/W	2,41	2,80	2,26	2,85	2,26	2,85	2,33	2,92	2,57	3,06	2,41	3,22	2,29	3,15	2,28	3,1
ESEER	W/W	2,85	-	2,59	-	2,53	-	na	-	2,82	-	2,47	-	2,51	-	2,66	-
Water flow	l/sec	0,24	0,29	0,28	0,34	0,34	0,44	0,34	0,43	0,41	0,5	0,42	0,6	0,55	0,75	0,75	0,94
Available pump head	kPa	60	55	64	57	59	47	59	47	82	66	80	53	84	68	78	59
Main power supply	V/Ph/Hz	230/1+N/50						400/3+N/50		230/1+N/50		400/3+N/50					
Expansion tank volume	l	2		2		2		2		2		2		2		2	
Hydraulic connection diameter	inch	3/4" Male								1" Male							
Sound levels																	
Sound power level	dB(A)	65								67						73	
Sound pressure level	dB(A)	37								39						45	
System water content																	
Minimum water content	l	45		30		40		40		50		50		60		60	
Dimensions & weights																	
HxWxD	mm	735x1190x340								1235x1190x340				1235x1190x340		1235x1190x340	
Weight net	kg	82		90		98				128				133		138	

Water chillers							
Model number		SCP-AR051E5	SCP-AR081E5	SCP-AR081E8	SCP-AR111E8	SCP-AR151E8	SCP-AR171E8
Performance		Cooling	Cooling	Cooling	Cooling	Cooling	Cooling
Capacity	kW	5,2	8,0	8,0	11,0	13,7	16,3
Absorbed power	kW	2,02	3,63	3,56	4,42	5,27	6,27
Absorbed current	A	-	15,2	7,2	10,5	11,2	14,9
E.E.R/COP	W/W	2,77	2,23	2,28	2,49	2,6	2,60
ESEER	W/W	3,23	2,44	2,50	2,76	2,90	2,86
Water flow	l/sec	0,27	0,39	0,39	0,53	0,65	0,8
Available pump head	kPa	58	42		55	68	75
Main power supply	V/Ph/Hz	230/1+N/50		400/3+N/50			
Expansion tank volume	l	-	2		2		
Hydraulic connection diameter	inch	3/4" Male			1" Male		
Sound levels							
Sound power level	dB(A)	63	65			67	
Sound pressure level	dB(A)	37	37			39	
System water content							
Minimum water content	l	40	30		40	50	60
Dimensions & weights							
HxWxD	mm	735 x 1190 x 340			1235 x 1190 x 340	1235 x 1190 x 340	1235 x 1190 x 340
Weight net	kg	87			110	122	135
ESEER: European Seasonal Energy Efficient Ratio published by Eurovent							

Nominal conditions Cooling	Nominal conditions Heating	Sound pressure level
Outdoor air temperature 35°C	7/6°C	Unit installed outdoor (free field)
Inlet water temperature 12°C	40°C	Measuring distance 10m
Outlet water temp 7°C	45°C	Outdoor air temperature 35°C

Operating Range	Cooling	Heating
Outdoor max. air temperature	43°C	18°C
Outdoor min. air temperature	-10°C	-15°C
Outlet water min. temp	5°C	30°C
Outlet water max. temp	20°C	55°C

R410A

All specifications subject to change without notice.

SCP-AR...

- High COP
- Incorporated hydronic module that includes circulation pump with expansion tank
- Installation of a buffer tank is not necessary
- Anti-vibration supports included
- 150 litre buffer tank available as an accessory
- R407C refrigerant

SCP-AR...

Air-to-water heat pumps									
Model number		SCP-AR241EH8		SCP-AR271EH8		SCP-AR351EH8		SCP-AR401EH8	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	20,8	24,0	25,8	27,3	30,3	35,5	33,5	38,4
Absorbed power	kW	8,85	9,0	9,77	10,4	13,55	13,55	14,55	14,75
Absorbed current	A	18,6	19,9	20,0	20,9	27,3	25,0	29,3	28,7
E.E.R/COP	W/W	2,35	2,67	2,66	2,63	2,24	2,62	2,30	2,60
ESEER	W/W	2,78	-	2,49	-	2,45	-	2,72	-
Water flow	l/sec	0,97	1,17	1,25	1,30	1,45	1,65	1,68	2,0
Available pump head	kPa	215	185	160	145	200	140	165	95
Main power supply	V/Ph/Hz	400/3+N/50							
Hydraulic connection diameter	inch	1 1/4" Male							
Sound levels									
Sound power level	dB(A)	79		78		80		82	
Sound pressure level	dB(A)	51		50		52		54	
System water content									
Minimum water content	l	80		90		120		130	
Dimensions & weights									
HxWxD	mm	1175x975x1050		1175x975x1050		1175x975x1050		1425x975x1050	
Weight net	kg	303		305		327		363	

Water chillers					
Model number		SCP-AR201E8	SCP-AR251E8	SCP-AR301E8	SCP-AR401E8
Performance		Cooling	Cooling	Cooling	Cooling
Capacity	kW	20,7	23,8	31,0	39,0
Absorbed power	kW	8,3	10,4	13,4	14,8
Absorbed current	A	18,0	20,7	24,7	28,3
E.E.R/COP	W/W	2,49	2,29	2,31	2,64
ESEER	W/W	2,97	2,73	2,62	2,81
Water flow	l/sec	0,99	1,16	1,48	1,87
Available pump head	kPa	210	170	200	135
Main power supply	V/Ph/Hz	400/3+N/50			
Hydraulic connection diameter	inch	1 1/4" Male			
Sound levels					
Sound power level	dB(A)	79	78	80	82
Sound pressure level	dB(A)	51	50	52	54
System water content					
Minimum water content	l	70	70	95	120
Dimensions & weights					
HxWxD	mm	1175x975x1050	1175x975x1050	1175x975x1050	1425x975x1050
Weight net	kg	292	295	317	353
ESEER: European Seasonal Energy Efficient Ratio published by Eurovent					

Nominal conditions Cooling	Nominal conditions Heating	Sound pressure level
Outdoor air temperature 35°C	7/6°C	Unit installed outdoor (free field)
Inlet water temperature 12°C	40°C	Measuring distance 10m
Outlet water temp 7°C	45°C	Outdoor air temperature 35°C

Operation Range	Cooling	Heating
Outdoor max. air temperature	43°C	18°C
Outdoor min. air temperature	-10°C	-10°C
Outlet water min. temp	5°C	30°C
Outlet water max. temp	20°C	50°C

R407C

All specifications subject to change without notice.

SCP-AR...

- High COP
- Incorporated hydronic module that includes circulation pump with expansion tank
- 300 litre buffer tank is available as an accessory
- Low noise level
- R410A refrigerant

SCP-AR...

Air-to-water heat pumps									
Model number		SCP-AR502EH8		SCP-AR602EH8		SCP-AR702EH8		SCP-AR802EH8	
Performance		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Capacity	kW	40,6	49,0	52,6	54,0	60,6	69,3	65,0	76,0
Absorbed power	kW	17,7	17,8	21,2	19,0	27,1	27,0	29,0	30,5
Absorbed current	A	35,0	37,2	41,1	39,2	53,5	48,8	58,0	58,2
E.E.R/COP	W/W	2,29	2,75	2,48	2,84	2,24	2,57	2,24	2,49
ESEER	W/W	2,76	-	2,34	-	2,45	-	2,66	-
Water flow	l/sec	1,94	2,34	2,51	2,58	2,90	3,31	3,06	3,58
Available pump head	kPa	260	215	200	180	210	150	200	120
Main power supply	V/Ph/Hz	400/3+N/50							
Hydraulic connection diameter	inch	1"1/2 Male							
Sound levels									
Sound power level	dB(A)	78		76		80		85	
Sound pressure level	dB(A)	50		48		52		57	
System water content									
Minimum water content	l	130		150		200		200	
Dimensions & weights									
HxWxD	mm	1175x1955x1050		1175x1955x1050		1175x1955x1050		1425x1955x1050	
Weight net	kg	589		593		627		699	

Water chillers					
Model number		SCP-AR502E8	SCP-AR602E8	SCP-AR702E8	SCP-AR802E8
Performance		Cooling	Cooling	Cooling	Cooling
Capacity	kW	47,6	62,0	67,0	78,0
Absorbed power	kW	20,6	26,4	28,8	29,4
Absorbed current	A	38,7	47,7	54,0	55,5
E.E.R/COP	W/W	2,31	2,35	2,33	2,65
ESEER	W/W	2,74	2,65	2,56	2,94
Water flow	l/sec	2,28	2,96	3,2	3,73
Available pump head	kPa	220	160	180	90
Main power supply	V/Ph/Hz	400/3+N/50			
Hydraulic connection diameter	inch	1"1/2 Male			
Sound levels					
Sound power level	dB(A)	78	82	87	
Sound pressure level	dB(A)	50	54	59	
System water content					
Minimum water content	l	120	160	170	200
Dimensions & weights					
HxWxD	mm	1175x1955x1050	1175x1955x1050	1175x1955x1050	1425x1955x1050
Weight net	kg	573	607	629	679
ESEER: European Seasonal Energy Efficient Ratio published by Eurovent					

Nominal conditions Cooling	Nominal conditions Heating	Sound pressure level
Outdoor air temperature 35°C	7/6°C	Unit installed outdoor (free field)
Inlet water temperature 12°C	40°C	Measuring distance 10m
Outlet water temp 7°C	45°C	Outdoor air temperature 35°C

Operating Range	Cooling	Heating
Outdoor max. air temperature	43°C	18°C
Outdoor min. air temperature	-10°C	-10°C
Outlet water min. temp	5°C	30°C
Outlet water max. temp	20°C	50°C

R407C

All specifications subject to change without notice.

Controller Options

Remote control EKW200

RS485 ModBus Interface

Remote control

The functions and display are exactly the same as those on built-in controller. The controller is designed to be installed inside sheltered rooms.

The link can be extended up to 100 metres using a twisted pair shielded cable.

- 70250055 for 051-401 models
- 70250057 for 502-802 models

RS485 ModBus Interface

- 70250056

For connection of the electronic control to a BMS system with ModBus standard.

Accessories

Buffer tank

To be used when water content of the system is below the minimum quantity as in the specification table.

- 70600118 capacity of 35lt for 051-181 models
- 70600110 capacity of 150lt with 400W anti-freeze electric heater for 201-401 models
- 70600120 capacity of 300lt with 800W anti-freeze electric heater for 502-802 models

Set of two water hoses

- 70600054 length 1m Ø 3/4" for 051-091 models
- 70600055 length 1m Ø 1" for 111-181 models
- 70600027 length 1m Ø 1" 1/4 for 201-401 models
- 70600034 length 1.5m Ø 1" 1/2 for 502-802 models

Start-up kit

This kit is used to lower the start-up current of the single-phase compressors.

- 70550004 for 051E5, 061EH5, 071EH5, 091EH5, 121EH5 models

HP and LP gauges

These elements, mounted on the vertical members of the unit's front face, display the high and low pressure values for each refrigeration circuit.

- 70970006 x1pc for 201-351 models
- 70970007 x1pc for 401 model
- 70970006 x2pcs for 502-702 models
- 70970007 x2pcs for 802 model

Set of anti-vibration pads

To be located under girders.

- Included, 2pcs thickness 12.5mm, for 051-181 models
- 70600035, 4pcs thickness 25mm, for 201-802 models

Condensate tank heating cord

Length 1.5m, to be placed in the bottom of the condensate tank, close to the fin tube exchanger.

- 70200055 for 061-181EH heat pump models

FW-...

- Wide model range for 2-pipe and 4-pipe design system (X type size 031 and 051)
- Suitable for any commercial buildings and even for hotels and residential applications
- X, K and FT also available with infrared remote controller
- Quiet operation ensures maximum comfort
- 3-way valve kit features precise temperature control in the room
- Cleanable air filter included as standard

FW-K
Wall Mounted Unit

FW-X
Ceiling Cassette 60x60

FW-X
Ceiling Cassette

PNR-X031EHA for models X031, X051
PNR-X051EHA for model X061
PNR-X101EHA for models X081, X101
PNR-X032EHA for models X032, X052
PNR-X062EHA for model X062
PNR-X102EHA for models X082, X102

Table Of Performances						
UNIT SIZE (with wired Product code remote controller)			FW-K011EH5FP	FW-K021EH5FP	FW-K031EH5FP	FW-K041EH5FP
Product code			34360274	34360275	34360276	34360277
UNIT SIZE (with infrared remote controller)			FW-K012EH5FP	FW-K022EH5FP	FW-K032EH5FP	FW-K042EH5FP
Product code			34360278	34360279	34360280	34360281
Fan speed			230V-1 -50Hz			
Total cooling capacity	kW	max	1,24	1,67	3,17	3,67
		med	-	-	2,53	3,14
		min	0,80	0,96	1,91	2,62
Sensible cooling capacity	kW	max	0,94	1,30	2,56	3,01
		med	-	-	1,89	2,50
		min	0,58	0,74	1,53	2,12
Heating capacity	kW	max	1,72	2,38	4,50	5,50
		med	-	-	3,50	4,50
		min	1,11	1,49	2,70	3,70
Air flow	m^3/h	max	220	270	510	710
		med	-	-	400	580
		min	150	180	320	470
Absorbed power	W	max	24	24	73	80
		med	-	-	66	68
		min	19	19	58	61
Water flow	l/h	max	215	290	545	630
		med	-	-	435	540
		min	135	165	330	450
Water pressure drop at cooling mode	kPa	max	16,1	27,2	29,4	35,1
		med	-	-	19,1	26,0
		min	5,8	9,7	10,3	18,2
Water pressure drop at heating mode	kPa	max	15,3	26,2	27,5	31,8
		med	-	-	17,4	23,2
		min	6,1	9,5	10,1	15,9
Sound power level (Lw)	dBA	max	44	45	58	62
		med	-	-	52	56
		min	37	35	46	50
Sound pressure level (Lp)	dBA	max	35	36	49	53
		med	-	-	43	47
		min	28	26	37	41
Water connections	inch		1/2" female			
Coil water content	Lt		0,3	0,39	0,8	0,8
Weight	kg		8,0	8,0	12	12
Dimensions	mm	width	805	805	995	995
		height	270	270	285	285
		depth	177	177	206	206

FW-X Type Ceiling Cassette - 2 pipe								
			FW-X031EH5	FW-X041EH5	FW-X051EH5	FWX061EH5	FW-X081EH5	FW-X0101EH5
			FW-X032EH5	FW-X042EH5	FW-X052EH5	FWX062EH5	FW-X082EH5	FW-X0102EH5
Main power supply		V/Ph/Hz	230/1+N/50					
Total cooling capacity	Max/med/min*	kW	2,60/2,35/2,15	4,1/3,6/1,7	4,70/4,10/3,60	6,00/5,00/4,20	7,60/6,00/5,00	9,92/8,09/6,23
Sensible cooling capacity	Max/med/min*	kW	2,31/2,09/1,91	3,21/2,81/1,33	3,72/3,21/2,80	4,70/3,80/3,20	6,00/4,70/3,80	7,60/6,22/4,62
Heating capacity	Max/med/min*	kW	3,49/3,11/2,83	4,85/4,35/2,1	5,70/4,85/4,35	7,70/6,40/5,40	9,00/7,70/6,40	13,00/10,60/8,16
Air flow	Max/med/min*	m^3/h	520/400/600	630/530/250	750/630/530	1300/1060/850	1470/1300/1060	2300/1700/1200
Absorbed power	Max/med/min*	W	60/50/40	na	90/70/50	120/90/80	150/120/90	180/130/110
Water flow	Max/med/min*	l/h	430/395/360	na	790/690/600	1030/860/720	1300/1030/860	1700/1400/1070
Sound power level (Lw)	Max/med/min*	dB(A)	46/44/41	51/48/39	56/51/48	51/44/40	55/51/44	57/49/43
Sound pressure level (Lp)	Max/med/min*	dB(A)	37/35/32	42/39/30	47/42/39	42/35/31	46/42/35	48/40/34
Water connections		inch	1/2"female			3/4" female		
Dimensions & Weights								
Dimensions (H/W/D)	body	mm	296x575x575	296x575x575	296x575x575	310x760x760	310x760x1050	310x760x1050
	grille panel	mm	41x730x730	41x730x730	41x730x730	30x860x860	30x860x1150	30x860x1150
Weight (with grille panel)		kg	21	23	23	28	32	36

(*) Fan speed

FW-X Type Ceiling Cassette - 4 pipe				
			FW-X031EH5-4	FW-X051EH5-4
Total cooling capacity	Max/med/min*	kW	2,08/1,88/1,72	3,76/3,28/2,88
Sensible cooling capacity	Max/med/min*	kW	1,85/1,67/1,53	2,98/2,56/2,24
Heating capacity	Max/med/min*	kW	1,51/1,34/1,22	2,33/1,98/1,78
Air flow	Max/med/min*	m^3/h	520/400/600	750/630/530
Sound power level (Lw)	Max/med/min*	dB(A)	46/44/42	56/51/48
Sound pressure level (Lp)	Max/med/min*	dB(A)	37/36/33	47/42/39
Water connections		inch	1/2"female	
Dimensions & Weights				
Dimensions (H/W/D)	body	mm	296x575x575	296x575x575
	grille panel	mm	41x730x730	41x730x730
Weight (with grille panel)		kg	21	23

(*) Fan speed

All specifications subject to change without notice.

Nominal conditions			
	Cooling	Heating	Sound pressure level
Entering air temperature	27°C (db) 19°C (wb)	20°C	At 2m distance in closed environment
Entering water temperature	7°C	50°C (at same water flow as for cooling)	100m^3 volume with 0.5 sec reverberation time
Leaving water temperature	12°C	60°C (maximum water entering temperature)	

All specifications subject to change without notice.

FW-...

FW-FT
Floor/Ceiling Unit

FW-FT Type Floor/Ceiling Units - 2 pipe					
Performance			FW-FT021EH5 FW-FT022EH5	FW-FT031EH5 FW-FT032EH5	FW-FT041EH5 FW-FT042EH5
Main power supply		V/Ph/Hz	230/1+N/50		
Total cooling capacity	Max/med/min*	kW	2,10/1,20/0,90	3,19/2,10/0,90	3,90/3,10/1,65
Sensible cooling capacity	Max/med/min*	kW	1,50/1,00/0,70	2,47/1,50/0,70	3,00/2,50/1,25
Heating capacity	Max/med/min*	kW	3,10/2,00/1,60	4,07/3,00/1,60	5,00/4,40/2,10
Air flow	Max/med/min*	m^3/h	430/300/210	520/430/210	675/570/327
Absorbed power	Max/med/min*	W	40/30/26	46/37/26	70/53/35
Water flow	Max/med/min*	l/h	360/206/160	550/360/160	670/530/285
Sound power level (Lw)	Max/med/min*	dB(A)	48/43/35	50/45/35	54/51/40
Sound pressure level (Lp)	Max/med/min*	dB(A)	40/35/27	42/37/27	46/43/32
Water connections		(inches)	1/2" female		
Dimensions & Weights					
Dimensions (H/W/D)		mm	680x900x190		
Weight		kg	23,5		

(*) Fan speed

Nominal conditions			
	Cooling	Heating	Sound pressure level
Entering air temperature	27°C (db) 19°C (wb)	20°C	At 2m distance in closed environment
Entering water temperature	7°C	50°C (at same water flow as for cooling)	$100m^3$ volume with 0,5 sec reverberation time
Leaving water temperature	12°C	70°C (maximum water entering temperature)	

All specifications subject to change without notice.

Control accessories				
Model	CH 15-25	ASB	ASE	SEL-O
Code N°	9053049	70250053	70250054	9060137
Description	Automatic changeover sensor for 2-pipe system	Air temperature sensor (bare)	Air temperature sensor (with box)	Speed selector receiver
Use with	RCC 10	RCC 10 & RCC 20	RCC 10 & RCC 20	RAB 30, RCC 10 & RCC 20

Accessories			
Model	KVX1	KVX2	KVX3
Code N°	70600088	70600089	70600071
Description	Kit 3-way valve 1/2" male - Kvs 1,6	Kit 3-way valve 3/4" male - Kvs 2.5	Kit 3-way valve 1/2" male - Kvs 1,6
Use with	FW-X: models 03 & 05 2 & 4 pipe	FW-X: models 06, 08, 10	FW-FT & FW-Kv

All specifications subject to change without notice.

Controls & Accessories

Electronic controller with infrared wireless remote control

- Suitable for control of 2-pipe water terminals only
- Functions (manual selection)
  - Cooling
  - Dehumidification
  - Heating
  - Automatic
  - Fan only
- Operating range: from 10°C to 32°C room temperature
- Fan speed selection: manual (High/Med/Low) or automatic
- Automatic flap
- Room temperature sensor on remote control or unit
- Address switches on remote control (up to 4 different addresses)
- Minimum water temperature sensor
- Control of room temperature:
  - Fan ON-OFF
  - Automatic valve ON-OFF (if used)
- 24 hours timer
- Night set-back/energy saving (SLEEP)

NOTE - The control does not allow centralised Heat-Cool changeover, nor automatic changeover by external temperature sensor.

Wired wall mounted controls

RAB 30 - 70250076
For 2&4-pipe systems with manual Heat-cool changeover

- Two-positions ON-OFF control
- Fan speed selector - 3 speeds
- Control output 230V AC
- 2-pipe control on fan
- 2-pipe control on valve:
  - permanent ventilation
  - fan and valves operated at the same time
- 4-pipe control on two valves:
  - permanent ventilation
  - fan and valves operated at the same time
- Operating range: 8-30°C
- Switching differential 1K

RCC 10 - 70250051
For2-pipesystemswithremoteHeat-Cool changeover

- Two-positions ON-OFF control
- Fan speed selector - 3 speeds
- Control output 230V AC
- 2-pipe control on fan
- 2-pipe control on valve:
  - permanent ventilation
  - fan and valves operated at the same time
- Room temperature control from thermostat or external sensor (separately ordered)
- Heat-cool changeover:
  - automatic changeover by temperature sensor (to be ordered separately)
  - manual changeover by remote contact (not supplied)
- Operating modes:
  - comfort
  - economy
  - frost protection
- Operating range: 8-30°C
- Switching differential: adjustable
- Operating LED lights

RCC 20 - 70250052
For4-pipesystemswithHeat-Cool automatic changeover

- Two-positions ON-OFF control
- Fan speed selector - 3 speeds
- Control output 230V AC
- 4-pipe control on two valves:
  - permanent ventilation
  - fan and valves operated at the same time
- Room temperature control from thermostat or external sensor (separately ordered)
- Automatic heat-cool changeover, with dead zone adjustable at 2K or 5K
- Operating modes:
  - comfort
  - economy
  - frost protection
- Operating range: 8-30°C
- Switching differential: adjustable
- Operating LED lights

S-VM
Floor Standing Unit

- Very wide and complete range: centrifugal or Cross Flow Fan, 2-pipe or 4-pipe design
- Stylish units can match any kind of interior decor

S-HM
Ceiling Unit

- Cleanable air filter included
- Easy to install and very simple to maintain

S-VH
Concealed Unit

- Electronic controllers available for unit mounting and remote installation ensure precise control of the room temperature
- Large choice of accessories, either separately supplied or factory mounted

Cross Flow fan S-VMT/HMT/VHT 151-251-351					
Performance			151	251	351
Main power supply		V/Ph/Hz	230/1+N/50		
Total cooling capacity	Max/med/min*	kW	1,40/1,20/1,04	2,40/2,08/1,70	3,40/2,80/2,30
Sensible cooling capacity	Max/med/min*	kW	1,17/0,92/0,78	2,02/1,62/1,31	2,87/2,30/1,89
Heating capacity (standard coil)	Max/med/min*	kW	2,08/1,66/1,46	3,10/2,70/2,30	4,30/3,60/2,90
Heating capacity (add. 1 row coil)	Max/med/min*	kW	1,65/1,35/1,20	2,60/2,25/1,95	3,50/3,00/2,45
Air flow	Max/med/min*	m^3/h	300/240/190	450/360/290	600/480/380
Absorbed power	Max/med/min*	W	40/30/27	50/45/37	65/50/42
Water flow cooling	Max/med/min*	l/h	240/210/180	240/210/180	585/485/400
Water pressure drop heating	Max/med/min*	kPa	4,0/3,2/2,4	14,7/11,8/8,5	13,2/10,0/7,0
Water flow heating	Max/med/min*	l/h	145/120/105	225/195/170	300/260/210
Water pressure drop heating	Max/med/min*	kPa	2,5/1,9/1,5	8,9/6,9/5,4	2,9/2,3/1,7
Sound power level (Lw)	Max/med/min*	dB(A)	48/40/34	47/42/36	48/43/39
Sound pressure level (Lp)	Max/med/min*	dB(A)	39/31/25	38/33/27	39/34/30
Dimensions & Weights					
Dimensions (H/W/D)	S-VMT	mm	530x775x225	530x990x225	530x1205x225
Dimensions (H/W/D)	S-HMT	mm	225x775x530	225x990x530	225x1205x530
Dimensions (H/W/D)	S-VHT	mm	530x567x218	530x782x218	530x1007x218
Weight	S-VMT	kg	18	26	29
Weight	S-HMT	kg	18	26	29
Weight	S-VHT	kg	17	25	28

Centrifugal fan S-VMC/HMC/VHC 151-251-351-401-501-601-701									
Performance			151	251	351	401	501	601	701
Main power supply		V/Ph/Hz	230/1+N/50						
Total cooling capacity	Max/med/min*	kW	1,50/1,30/1,10	2,50/2,15/1,80	3,50/2,90/2,47	4,00/3,44/2,90	4,80/4,15/3,60	5,95/5,08/4,30	6,60/5,50/4,60
Sensible cooling capacity	Max/med/min*	kW	1,25/1,00/0,83	2,10/1,68/1,39	2,95/2,35/1,95	3,35/2,68/2,21	4,05/3,24/2,67	5,00/4,00/3,30	5,50/4,40/3,64
Heating capacity (standard coil)	Max/med/min*	kW	2,06/1,70/1,40	3,30/2,70/2,30	4,45/3,70/3,00	5,20/4,35/3,65	6,60/5,50/4,70	8,00/6,70/5,50	8,80/7,30/6,00
Heating capacity (add. 1 row coil)	Max/med/min*	kW	1,75/1,35/1,25	2,70/2,35/2,05	3,60/3,10/2,65	3,69/3,31/2,65	5,30/4,50/3,90	5,50/5,00/4,20	5,50/5,00/4,20
Air flow	Max/med/min*	m^3/h	300/240/190	450/360/290	600/480/380	750/600/480	1000/800/650	1200/950/750	1200/950/750
Absorbed power	Max/med/min*	W	50/37/25	60/50/45	87/80/60	95/80/65	130/85/65	180/145/120	180/145/120
Water flow cooling	Max/med/min*	l/h	260/225/190	430/370/310	600/500/425	690/590/500	825/715/620	1020/875/740	1135/950/795
Water pressure drop heating	Max/med/min*	kPa	5,7/4,3/3,2	14,1/10,6/7,9	12,3/9,2/7,0	17,9/13,5/10,0	27,8/20,5/16,8	21,1/16,0/12,0	4,5/3,3/2,4
Water flow heating	Max/med/min*	l/h	150/120/110	235/205/180	310/270/230	315/285/250	460/390/340	475/435/365	475/435/365
Water pressure drop heating	Max/med/min*	kPa	3,7/2,8/2,2	8,6/6,7/5,3	2,8/2,3/1,7	3,7/2,9/2,3	7,3/5,7/4,3	6,9/5,8/4,3	6,9/5,8/4,3
Sound power level (Lw)	Max/med/min*	dB(A)	51/45/40	54/50/42	51/42/37	54/48/45	59/54/48	60/55/48	60/55/48
Sound pressure level (Lp)	Max/med/min*	dB(A)	42/36/31	45/41/33	42/33/28	45/39/36	50/45/39	51/46/39	51/46/39
Dimensions & Weights									
Dimensions (H/W/D)	S-VMC	mm	530x775x225	530x990x225	530x1205x225	530x1205x225	530x1420x225	530x1420x255	530x1420x255
Dimensions (H/W/D)	S-HMC	mm	225x775x530	225x990x530	225x1205x530	225x1205x530	225x1420x530	255x1420x530	255x1420x530
Dimensions (H/W/D)	S-VHC	mm	530x510x218	530x725x218	530x940x218	530x940x218	530x1155x218	530x1155x248	530x1155x248
Weight	S-VMC	kg	17	24	27	28	33	43	48
Weight	S-HMC	kg	17	24	27	28	33	43	48
Weight	S-VHC	kg	16	23	26	27	31	40	45

(*) Fan speed

Fan Coil Unit Controls						
Unit Mounted Controls						
Model	MV-3V	TMV-M	TMV-T	TMV-C	TMV-AU	TMV-AU-C
Code N°	9060130	9060131	9060132	9060133	9060134	9060135
Function						
On/Off	yes	yes	yes	yes	yes	yes
Fan speed	3-manual	3-manual	3-manual	3-manual	3-auto	3-auto
Thermostat	—	fan only	fan or valve/es	fan or valve/es	fan or valve/es	fan or valve/es
S/W Changeover	—	yes	yes	no-remote	yes	no-remote

Wall Mounted Controls				
Model	MO-3V	RAB30	RCC10	RCC20
Code N°	9060516	70250076	70250051	70250052
Function				
On/Off	yes	yes	yes	yes
Fan speed	3-manual	3-manual	3-manual	3-manual
Thermostat	—	fan and/or valve/es	fan and/or 1 valve	fan and/or 2 valves
S/W Changeover	—	yes	auto or remote	auto or remote

Control Accessories			
Code N°	Model	Description	Use with
3021091	TME	Minimum water temperature sensor	TMV-T TMV-C TMV-AU TMV-AU-C
9053049	CH 15-25	Automatic change over sensor for 2 pipe system	TMV-C TMV-AU-C RCC 10
70250053	ASB	Air temperature sensor (bare)	RCC10 RCC20
70250054	ASE	Air temperature sensor (with box)	RCC 10 RCC 20
9060136	SELV	Speed selector receiver for VMC and VMT units	RAB 30 RCC 10 RCC 20
9060137	SEL-O	Speed selector receiver for HMC, HMT, VHC, VHT units	RAB 30 RCC 10 RCC 20
9060103	AMU	Terminal block adaptor for remote control	—

Accessories

Control Accessories			
Code N°	Model	Description	Use with
9060150	PAP 1-5	Feet (pair) for unit size from 151 to 501	VMC/VMT/VHC/VHT
9060151	PAP 6-7	Feet (pair) for unit size from 601 e 701	VMC/VMT/VHC/VHT
6060400	BSV	Auxiliary drain pan for vertical units	VMC/VMT/VHC/VHT/HMC/HMT
6060402	BSO-SX	Auxiliary drain pan for horizontal units left side	HMC/HMT/VHC/VHT
6060403	BSO-DX	Auxiliary drain pan for horizontal units right side	HMC/HMT/VHC/VHT
6060420	SCR	Condensate drain with quick coupling	HMC/HMT/VHC/VHT
9060270	VBPS 1-3	Kit 3-way valve for unit size 151-251-351 - 1/2"F Kvs 1.6	all models
9060271	VBPS 4-7	Kit 3-way valve for unit size 401-501-601-701 - 1/2"F Kvs 2.5	all models
9060274	VBAS 1-7	Kit 3-way valve for 1-row coil - 1/2"F Kvs 1.6	all 4-pipes models
9060272	VBPM 1-3	Kit 3-way valve for unit size 151-251-351 factory mounted	all models
9060273	VBPM 4-7	Kit 3-way valve for unit size 401-501-601-701 factory mtd	all models
9060275	VBAM 1-7	Kit 3-way valve for 1-row coil factory mounted	all 4-pipes models
9070140	PCVL 1	Back panel for unit size 151	VMC/VMT/HMC/HMT
9070141	PCVL 2	Back panel for unit size 251	VMC/VMT/HMC/HMT
9070142	PCVL 3-4	Back panel for unit size 351 and 451	VMC/VMT/HMC/HMT
9070143	PCVL 5-6-7	Back panel for unit size 501-601-701	VMC/HMC
9060190	PCO 1	Back panel for unit size 151	HMC/HMT
9060191	PCO 2	Back panel for unit size 251	HMC/HMT
9060192	PCO 3-4	Back panel for unit size 351 and 451	HMC/HMT
9060193	PCO 5	Back panel for unit size 501	HMC
9060194	PCO 6-7	Back panel for unit size 601 e 701	HMC
9060220	KAF 1	Kit front air return for unit size 151 factory mounted	VHC/VHT
9060221	KAF 2	Kit front air return for unit size 251 factory mounted	VHC/VHT
9060222	KAF 3-4	Kit front air return for unit size 351-451 factory mounted	VHC/VHT
9060223	KAF 5	Kit front air return for unit size 501 factory mounted	VHC
9060224	KAF 6-7	Kit front air return for unit size 601-701 factory mounted	VHC

Nominal conditions				
	Cooling	Heating additional 1-row coil	Heating standard coil	Sound pressure level
Entering air temperature	27°C(db) 19°C (wb)	20°C	20°C	At 2m distance in closed environment
Entering water temperature	7°C	70°C	50°C (at same water flow as for ceiling)	$100m^3$ volume with 0,5 sec reverberation time
Leaving water temperature	12°C	60°C		

All specifications subject to change without notice.

S-HDC

Ducted units						
Model Number (2 pipe)			S-HDC 601-2	S-HDC 801-2	S-HDC 1001-2	S-HDC 1301-2	S-HDC 1601-2
Performances							
Main power supply		V/F/Hz	230/1+N/50				
Total cooling capacity		Max/med/min kW	5,59/5,06/4,54	7,65/7,26/6,79	10,50/9,53/8,81	12,89/11,67/10,08	16,53/15,39/13,49
Sensible cooling capacity		Max/med/minn kW	4,58/4,07/3,59	6,07/5,71/5,28	8,36/7,46/6,82	10,13/9,03/7,65	13,21/12,15/10,45
Heating capacity		Max/med/min kW	8,13/7,25/6,41	10,7/10,11/9,34	14,8/13,2/12,0	17,91/15,9/13,4	23,4/21,54/18,5
Air flow		Max/med/min m³/h	1180/1005/850	1515/1390/1255	2130/1825/1615	2500/2140/1720	3365/3000/2450
External static pressure		Max/med/min Pa	60/50/35	60/50/35	60/50/35	60/50/35	60/50/35
Absorbed power		Max/med/minn W	205/160/125	290/260/240	460/390/340	580/500/440	960/820/680
Water pressure drop	Cooling	Max/med/min kPa	6,2/5,2/4,3	12,2/11,2/9,9	18,3/15,4/13,3	15,3/12,7/9,8	13,8/12,0/9,5
Water pressure drop	Heating	Max/med/min kPa	5,3/4,4/3,6	10,3/9,4/8,3	15,5/13,0/11,3	12,9/10,7/8,3	11,7/10,2/8,0
Sound power level - outlet (Lw)		Max/med/min dB(A)	62/57/53	66/63/61	65/63/59	67/64/60	72/69/63
Sound power level - inlet+radiated (Lw)		Max/med/minn dB(A)	63/59/55	69/66/63	68/65/62	69/67/64	75/72/67
Sound pressure level - outlet (Lp)		Max/med/min dB(A)	53/48/44	57/54/52	56/54/50	58/55/51	63/60/54
Sound pressure level - inlet+radiated (Lp)		Max/med/min dB(A)	54/50/46	60/57/54	59/56/53	60/58/55	66/63/58
Rows		No	4	4	4	4	4
Coil water content		Lt	2,6	3,7	4,6	6,0	7,1
Water connections		inch	3/4″ male	1″ male	1″ male	1 1/4″ male	1 1/4″ male
Dimensions (HxLxD)		mm	310x1133x748	310x1133x748	360x1133x748	360x1445x903	435x1445x903
Net weight		kg	47	48	56	78	88
Model Number (4 pipe)			S-HDC 601-4	S-HDC 801-4	S-HDC 1001-4	S-HDC 1301-4	S-HDC 1601-4
Performances							
Main power supply		V/F/Hz	230/1+N/50				
Total cooling capacity		Max/med/min kW	5,42/4,89/4,39	7,41/7,02/6,56	10,18/9,22/8,52	12,48/11,28/9,72	16,01/14,89/13,04
Sensible cooling capacity		Max/med/min kW	4,41/3,91/3,45	5,84/5,49/5,08	8,05/7,19/6,56	9,75/8,69/7,36	12,72/11,70/10,05
Heating capacity		Max/med/min kW	4,75/4,40/3,97	6,21/5,92/5,57	8,10/7,54/7,02	10,36/9,46/8,25	13,36/12,72/11,25
Air flow		Max/med/minn m³/h	1120/955/810	1435/1325/1190	2023/1735/1535	2375/2035/1635	3200/2850/2330
External static pressure		Max/med/min Pa	60/50/35	60/50/35	60/50/35	60/50/35	60/50/35
Absorbed power		Max/med/min W	205/160/125	290/260/240	460/390/340	580/500/440	960/820/680
Water pressure drop	Cooling	Max/med/min kPa	5,8/4,8/4,0	11,6/10,5/9,3	17,4/14,6/12,6	14,5/12,1/9,2	13,0/11,4/9,0
Water pressure drop	Heating	Max/med/min kPa	11,9/10,3/8,6	21,0/19,3/17,3	14,9/13,1/11,6	25,9/22,1/17,2	24,4/22,4/17,9
Sound power level - outlet (Lw)		Max/med/min dB(A)	62/57/53	66/63/61	65/63/59	67/64/60	72/69/63
Sound power level - inlet+radiated (Lw)		Max/med/min dB(A)	63/59/55	69/66/63	68/65/62	69/67/64	75/72/67
Sound pressure level - outlet (Lp)		Max/med/min dB(A)	53/48/44	57/54/52	56/54/50	58/55/51	63/60/54
Sound pressure level - inlet+radiated (Lp)		Max/med/min dB(A)	54/50/46	60/57/54	59/56/53	60/58/55	66/63/58
Rows - cooling+heating coils		No	4+1	4+1	4+1	4+1	4+1
Coil water content - cooling coil		Lt	2,6	3,7	4,6	6,0	7,1
Coil water content - heating coil		Lt	0,9	1,1	1,4	2,0	2,7
Water connection - cooling coil		inch	3/4″ male	1″ male	1″ male	1 1/4″ male	1 1/4″ male
Water connection - heating coil		inch	3/4″ male	3/4″ male	3/4″ male	1″ male	1″ male
Dimensions (HxLxD)		mm	310x1133x748	310x1133x748	360x1133x748	360x1445x903	435x1445x903
Net weight		kg	50	51	60	83	94

Nominal conditions				
	Cooling	Heating additional 1-row coil	Heating standard coil	Sound pressure level
Entering air temperature	27°C(db) 19°C (wb)	20°C	20°C	At 2m distance in closed environment
Entering water temperature	7°C	70°C	50°C (at same water flow as for ceiling)	100m³ volume with 0,5 sec reverberation time
Leaving water temperature	12°C	60°C		

All specifications subject to change without notice.

S-HSC

Ducted units										
Model Number (2 pipe)			S-HSC 151-2	S-HSC 201-2	S-HSC 301-2	S-HSC 351-2	S-HSC 501-2	S-HSC 601-2	S-HSC 701-2	S-HSC 801-2
Performances										
Main power supply		V/F/Hz	230/1+N/50							
Total cooling capacity		Max/med/min kW	1,71/1,59/1,46	1,98/1,83/1,67	3,14/2,87/2,68	3,48/3,16/2,95	5,10/4,65/4,27	5,84/5,28/4,81	6,95/6,51/5,81	7,81/7,28/6,45
Sensible cooling capacity		Max/med/min kW	1,32/1,22/1,11	1,47/1,35/1,23	2,36/2,15/2,00	2,57/2,32/2,15	3,94/3,56/3,24	4,38/3,93/3,55	5,26/4,90/4,34	5,78/5,36/4,72
Heating capacity		Max/med/min kW	2,21/2,05/1,87	2,46/2,25/2,04	3,84/3,49/3,24	4,25/3,84/3,55	6,39/5,78/5,30	7,17/6,43/5,84	8,52/8,00/7,07	9,43/8,79/7,72
Air flow		Max/med/min m³/h	315/290/260	315/290/260	540/480/440	540/480/440	930/820/730	930/820/730	1200/1100/950	1200/1100/950
External static pressure		Max/med/min Pa	65/50/40	65/50/40	65/50/40	65/50/40	65/50/40	65/50/40	65/50/40	65/50/40
Absorbed power		Max/med/min W	63/55/50	63/55/50	110/99/92	110/99/92	190/160/140	190/160/140	210/195/175	210/195/175
Water pressure drop	Cooling	Max/med/min kPa	10,0/8,8/7,4	16,0/13,8/11,6	16,2/13,8/12,0	12,0/10,2/9,0	19,8/16,8/14,4	12,0/10,2/8,4	16,8/14,4/12,0	12,0/10,8/8,4
Water pressure drop	Heating	Max/med/min kPa	8,6/7,4/6,2	13,7/11,7/9,8	13,7/11,4/10,0	104/9,1/7,8	17,6/15,0/13,0	10,4/9,1/7,2	15,0/13,0/10,4	11,1/9,8/7,8
Sound power level - outlet (Lw)		Max/med/min dB(A)	51/49/46	51/49/46	51/49/47	51/49/47	57/55/51	57/55/51	58/56/52	58/56/52
Sound power level - inlet+radiated (Lw)		Max/med/min dB(A)	59/56/52	59/56/52	58/55/53	58/55/53	63/60/57	63/60/57	64/61/58	64/61/58
Sound pressure level - outlet (Lp)		Max/med/min dB(A)	42/40/37	42/40/37	42/40/38	42/40/38	48/46/42	48/46/42	49/47/43	49/47/43
Sound pressure level - inlet+radiated (Lp)		Max/med/min dB(A)	50/47/43	50/47/43	49/46/44	49/46/44	54/51/48	54/51/48	55/52/49	55/52/49
Rows		No	3	4	3	4	3	4	3	4
Coil water content		Lt	1,0	1,3	1,7	2,3	2,0	2,9	3,2	4,2
Water connections		inch	1/2″ female							
Dimensions (HxLxD)		mm	218x669x530	218x669x530	248x884x530	248x884x530	248x1099x530	248x1099x530	248x1550x530	248x1550x530
Net weight		kg	16	17	24	26	29	32	45	48
Model Number (4 pipe)			S-HSC 151-4		S-HSC 301-4		S-HSC 501-4		S-HSC 701-4	
Performances										
Main power supply		V/F/Hz	230/1+N/50							
Total cooling capacity		Max/med/min kW	1,71/1,59/1,46		3,14/2,87/2,68		5,10/4,65/4,27		6,95/6,51/5,81	
Sensible cooling capacity		Max/med/min kW	1,32/1,22/1,11		2,36/2,15/2,00		3,94/3,56/3,24		5,26/4,90/4,34	
Heating capacity		Max/med/min kW	2,00/1,87/1,73		3,24/2,98/2,81		5,16/4,75/4,38		7,09/6,68/6,02	
Air flow		Max/med/min m³/h	315/290/260		540/480/440		930/820/730		1200/1100/950	
External static pressure		Max/med/min Pa	65/50/40		65/50/40		65/50/40		65/50/40	
Absorbed power		Max/med/minn W	63/55/50		110/99/92		190/160/140		210/195/175	
Water pressure drop	Cooling	Max/med/min kPa	10,0/8,8/7,4		16,2/13,8/12,0		19,8/16,8/14,4		16,8/14,4/12,0	
Water pressure drop	Heating	Max/med/min kPa	8,0/7,0/6,0		3,9/3,3/2,8		9,0/8,0/7,0		20,0/18,0/15,0	
Sound power level - outlet (Lw)		Max/med/min dB(A)	51/49/46		51/49/47		57/55/51		58/56/52	
Sound power level - inlet+radiated (Lw)		Max/med/min dB(A)	59/56/52		58/55/53		63/60/57		64/61/58	
Sound pressure level - outlet (Lp)		Max/med/min dB(A)	42/40/37		42/40/38		48/46/42		49/47/43	
Sound pressure level - inlet+radiated (Lp)		Max/med/min dB(A)	50/47/43		49/46/44		54/51/48		55/52/49	
Rows - cooling+heating coils		No	3+1		3+1		3+1		3+1	
Coil water content - cooling coil		Lt	1,0		1,7		2,0		3,2	
Coil water content - heating coil		Lt	0,4		0,5		0,6		0,9	
Water connection - cooling coil		inch	1/2″ female		1/2″ female		1/2″ female		1/2″ female	
Water connection - heating coil		inch	1/2″ female		1/2″ female		1/2″ female		1/2″ female	
Dimensions (HxLxD)		mm	218x669x530		248x884x530		248x1099x530		248x1550x530	
Net weight		kg	17,4		25,7		31,0		47,7	

Nominal conditions				
	Cooling	Heating additional 1-row coil	Heating standard coil	Sound pressure level
Entering air temperature	27°C(db) 19°C (wb)	20°C	20°C	At 2m distance in closed environment
Entering water temperature	7°C	70°C	50°C (at same water flow as for ceiling)	100m³ volume with 0,5 sec reverberation time
Leaving water temperature	12°C	60°C		

All specifications subject to change without notice.

Indicates conformation
with EC Directives

ISO 9001: 2001
Certificate Number: JQ116B

ISO 14001: 2001
Certificate Number: ECOOJ0303-33

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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.

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