





Electric VRF

Room Air Conditioners Commercial Split Systems Gas Driven VRF Heating Solutions

Electric VRF

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Introducing SANYO Electric VRF

2010 sees the launch of the new series 6 high efficiency heat pump VRF system. The future is here today...

Constantly outperforming the competition for performance and reliability the SANYO ECOi range is an obvious choice when a VRF solution is required.

Over 20 years of research, development and production history ensures that SANYO's range matches and exceeds the market's needs.

We are never standing still and 2010 sees a new range of 2 way heat pump outdoor units with several new and unique functions.

- Outdoor capacities from 10kW 150kW
- 15 types of indoor units to suit all applications
- DC inverter technology throughout the range
- BMS interface
- Remote monitoring and control

SANYO

From the familiar to the super specialised – SANYO's technologies are hard at work in many fields. Some examples might include the refrigerated showcases at the local supermarket, the information device at the hospital,

and the large air conditioners at public facilities. SANYO's technologies can be found throughout the world and in every field. Not only that, but they boast the kind of quality that satisfies high-level professionals in those fields.



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 ECOi 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 comfortable living spaces.

Lower running and life cycle costs

SANYO ECOi VRF systems are amongst the most efficient 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 efficient 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.

2 way ECOi

The new ECOi 6 series is specifically designed for energy saving, easy installation and high efficiency performance as its main focus.





3 way ECOi

Simultaneous heating and cooling operation Heat Recovery Type





- Simultaneous cooling or heating operation for up to 40 indoor units
- Top Class COP
- Realisation of the smallest installation space, top class in the industry
- Rotation operation function and back-up operation function provided
- Changeover boxes do not need any power supply

Mini ECOi Outdoor Units

For light commercial use



Electric VRF, ECOi

- Full and extended range (8, 10, 12, 14, 16, 18, 20HP)
- Full Hi COP range (10, 12, 14, 16HP)
- DC inverter technology for precise temperature control and a low start-up current
- Improved COP and EER by new design for heat exchangers, fans, fan motors and compressors.
- High external static pressure available (80Pa)
- 64 indoor unit connectability from 38hp (107kW)
- Connectable indoor unit capacity ratio up to 200%
- Non stop operation during maintenance
- Extended operating range (-25°C in heating mode)
- Extended pipe runs (Max pipe length 1000m)
- Automatic backup operation
- Extended compressor life by operation time sharing
- Suitable for use with renewal technology



- 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.

ECOi 6 Series VRF

C0706DXH8 C0906DXH8 C1156DXH8 C1306DXH8 C1406DXH8 C1606DXH8 C1806DXH8

The ever-evolving SANYO ECOi VRF series **Hi COP Range**

At start up stage a unit can have Hi COP function selected - this lowers the capacity and increases the COP. You have the choice.

- Extended range Available from 8 to 20HP
- Hi COP units Available from 10 to 16HP • Up to 64 indoor unit connectablity -Ideal for multiple small area conditioning such as hotels



Extended compressor life by uniform compressor operation times

The total operation time of the compressors is monitored by a in the same refrigerant system are balanced. microcomputer so that the operation times of all compressors

A, C: DC inverter compressor B, D: Constant speed compressor





System (HP) 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 6 Connectable indoor units 13 16 19 23 26 29 33 36 40 43 47 50 53 56 59 64

High external static pressure

Special setting at site allows all models to provide up to 80Pa due to newly designed fan, fan motor and casing.

The flexible design requires an air discharge duct to avoid a reduction in performance due to shortcut of air circulation.

The new feature allows the outdoor unit to be installed inside plant rooms on any floor of the building.



Extended operating range

The heating operation range has been extended from -20°C to -25°C



Cooling operation range:

-10°C DB to 43°C DB

Automatic back-up operation in compressors and units

The system benefits by having an automatic back-up feature in periods of maintenance and emergency situations.



Easy to design solutions for schools, hotels, hospitals and other large buildings

Difference between Max. and Min. length after first branch can be a maximum of 50m; larger pipe runs can be up to 180m.



Compressors with shorter operation times are utilised first.

Increased piping lengths and design flexibility

Actual piping length 150m to 180m Max. piping length 300 to 1000m





Appearan	ce						-		-		Ĵ		Ĵ						-				J		IJ	-			J
HP			8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP	34HP	36HP	38HP	40HP	42HP	44HP	46HP	48HP	50HP	52HP	54HP	56HP	58HP	60HP
			C0706DXH8	C0906DXH8	C1156DXH8	C1306DXH8	C1406DXH8	C1606DXH8	C1806DXH8	C1306DXH8	C1306DXH8	C1306DXH8	C1406DXH8	C1406DXH8	C1406DXH	C1606DXH8	C1806DXH8	C1806DXH8	C1806DXH8	C1406DXH8	C1406DXH8	C1406DXH8	C1406DXH8	C1606DXH8	C1806DXH8	C1806DXH8	C1806DXH8	C1806DXH8	C1806DXH8
Model Nan	ne (SPW-)									C0706DXH8	C0906DXH8	C1156DXH8	C1156DXH8	C1306DXH8	C1406DXH	C1406DXH8	C1406DXH8	C1606DXH8	C1806DXH8	C1306DXH8	C1406DXH8	C1406DXH8	C1406DXH8	C1406DXH8	C1406DXH8	C1606DXH8	C1606DXH8	C1806DXH8	C1806DXH8
																			1	C1156DXH8	C1156DXH8	C1306DXH8	C1406DXH8	C1406DXH8	C1406DXH8	C1406DXH8	C1606DXH8	C1606DXH8	C1806DXH8
Power supp	ily 			00.0	00.5	380/400/415	5 3phase/ 50Hz	50.0	50.0	04.5	00.0	380/400/415	3phase/ 50Hz	05.0		380/400/41	5 3phase/ 50Hz	407.0	440.0	440.0	404.0	400.0	380/4	400/415 3phase/	/ 50Hz	454.0	450.0	100.0	400.0
Cooling cap	acity	KVV	22.4	28.0	33.5	40.0	45.0	50.0	56.0	61.5	68.0	/3.0	/8.5	85.0	90.0	96.0	101.0	107.0	113.0	118.0	124.0	130.0	135.0	140.0	145.0	151.0	156.0	162.0	168.0
Heating cap	bacity	KVV	25.0	31.5	37.5	45.0	50.0	56.0	63.0	69.0	/6.5	81.5	87.5	95.0	100.0	108.0	113.0	119.0	127.0	132.0	138.0	145.0	150.0	155.0	160.0	169.0	1/5.0	182.0	189.0
COP Llootin	-	VV/VV	4.05	3.60	3.01	3.62	3.35	3.49	3.33	3.60	3.01	3.bl	3.62	3.48	3.35	3.45	3.34	3.41	3.33	3.62	3.52	3.43	3.35	3.53	3.34	3.39	3.43	3.38	3.33
CUP Healin	y Pupping or		4.0/	4. IU	4.10	4.21	3.80	3.88	3.01	4.1U	4.10	4.10	4.21	4.UZ	3.80	3.98	3.83	3.84	3.81	4.ZI	4.08	3.90	3.80	3.97	3.84	3.80	3.00	3.83	3.81 01 7/77 C /74 0
С	poling Power input	ILLES A	5.0/0.3/0.2	7 70	0.20	11.0/10.4	12 /2	1 23.2/22.1/21.3	16.9	17 21	10.0/23.0/20.0	20.24	21.7	24.45	43.3/41.4/33	.9 44.0/42.4/40.3	20.22	21 11	22 61	22 75	25.07	27.96	10.3/02.0/39.0	20.71	/0.0/07.2/04.0	12.2/00.0/00.1	15.1/10.0/07.5	//.///3.0//1.1	61.7/77.0/74.0 50.41
Electric	Running ar	mneres A	89/84/81	12 5/11 8/11 4	14 8/14 1/13 6	17 3/16 5/15 9	21 0/20 0/19 3	23 4/22 3/21 4	26 8/25 4/24 5	5 27 7/26 3/25 3	30 3/28 7/27 7	20.54	21.7	24.43	42 0/39 9/38	5 43 2/41 1/39 6	30.23	50 2/47 7/46 0	53 6/50 9/49 1	51 1/48 5/46 8	54.6/51.9/50.0	59 3/56 4/54 3	63 1/59 9/57 8	63 7/60 5/58 4	68 8/65 4/63 0	71 2/67 7/65 2	73 6/69 9/67 4	77 0/73 1/70 5	80 4/76 3/73 6
ratings H	eating Power input	it kW	5.48	7 68	9 15	10.7	12 97	14 45	16.52	17 07	18.66	19.84	20.8	23.63	25.93	26.66	29.48	30.96	33.04	31 49	33.7	36.59	38.9	39.3	42 45	43.93	45.41	47.48	49.56
S	tarting amperes	Α	1/1/1																										
Dimensions	(H*W*D)	mm	1758*770*930	1758*770*930	1758*770*930	1758*1000*930	0 1758*1000*930) 1758*1540*930) 1758*1540*93	0 1758*1830*930	1758*1830*930	1758*1830*930	1758*1830*930	1758*2060*930	1758*2060*9	30 1758*2600*930	0 1758*2600*930	1758*3140*930	1758*3140*930	0 1758*2890*930	1758*2890*930	1758*3120*930	1758*3120*930	1758*3660*930	1758*3660*930	1758*4200*930		1758*4740*930	
Net weight		kg	230	281	281	307	307	423	423	537	588	588	588	614	614	730	730	846	846	895	895	921	921	1,037	1,037	1,153	1,269	1,269	1,269
Air circulati	on	m²/min	147	153	190	212	212	244	283	358	365	402	402	424	424	456	495	528	567	614	614	636	636	668	707	740	771	810	849
External sta	atic pressure	Pa	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Refrigerant	amount at shipme	nt kg	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9	9,9
	Gas pipe	mm	19.05	22.22	25.4	25.4	28.58	28.58	28.58	28.58	28.58	31.75	31.75	31.75	31.75	31.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
Piping	Liquid pip	e mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Balance p	ipe mm	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
Ambient te	mperature operatin	g range			Cooling:-10°	°CDB~+43°CDB,	Heating:-25°CW	/B~+15°CW B			Cooling:-10	°CDB~+43°CDB,	Heating:-25°CW	/B~+15°CW B	Cooling:-	0°CDB~+43°CDB,	Heating:-25°CW	B~+15°CW B			Cooling:-10	°CDB~+43°CDB,	Heating:-25°CW	/B~+15°CW B					
Sound pres	Normal m	iode dB(A)	56.5	59.0	61.0	62.0	62.0	60.0	63.0	63.0	63.5	64.5	64.5	65.0	65.0	64.0	65.5	65.0	66.0	66.5	66.5	67.0	67.0	66.0	67.0	66.5	66.0	67.0	68.0
	Silent mo	de dB(A)	53.5	56.0	58.0	59.0	59.0	57.0	60.0	60.0	60.5	61.5	61.5	62.0	62.0	61.0	62.5	62.0	63.0	63.5	63.5	64.0	64.0	63.0	64.0	63.5	63.0	64.0	65.0
													Data subject to	final confirmation														Data subject to	final confirmation

Hi COP

Appear	ance				-		-
HP				10HP	12HP	14HP	16HP
	(0.0)			C1306DXH8	C1406DXH8	C1606DXH8	C1806DXH8
Model N	lame (SP	W-)			Hi COP	Setting	
Power su	upply				380/400/415	3phase/ 50Hz	
Cooling	capacity		kW	28.0	35.5	40.0	45.0
Heating	capacity		kW	31.5	37.5	45.0	50.0
COP Coo	Heating capacity COP Cooling			4.06	4.07	4.01	3.88
COP Hea	iting		W/W	4.45	4.45	4.41	4.39
	Cooling	Running amperes	A	11.2/10.7/10.3	13.4/12.7/12.2	16.3/15.4/14.9	18.9/17.9/17.3
	Cooling	Power input	kW	6.90	8.23	9.98	11.06
Electric	Heating	Running amperes	A	11.5/10.9/10.5	13.7/12/12.5	16.6/15.8/15.2	18.6/17.6/17.0
latingo	пеашу	Power input	kW	7.08	8.43	10.2	11.4
	Starting	amperes	A	74/77/80	78/81/85	89/92/95	95/98/101
Refrigera	ant amoun	t at shipment	kg	9,9	9,9	9,9	9,9
	Gas pipe			22.22	25.4	25.4	28.58
Piping connecti	ons	Liquid pipe	mm	9.52	12.7	12.7	12.7
Balance pipe			mm	6.35	6.35	6.35	6.35
Ambient	temperat	ure operating range		Cooling:-10°	CDB~+43°CDB,	Heating:-25°CW	B~+20°CW B
Sound p		Normal mode	dB(A)	62.0	62.0	60.0	63.0
Sound bi	ound pressure Silent mode			59.0	59.0	57.0	60.0





Electric VRF, ECOi





3 Way ECOi

C0705DZH8 C0905DZH8 C1155DZH8 C1305DZH8 C1405DZH8

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.



- 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 refrig	erant piping lengths and to diff	erences in installation heights		
Items	Marks	Contents	Length (m)	
	11	Max piping longth	Actual piping length	≤150
Allowable piping length	LI		Equivalent piping length	≤175
	Δ L (L2–L4)	Difference between the max. length and the min. length from the No. 1	distribution	≤40
	LM	Max. length of main piping (at max. diameter)		≤80
The No 1 distribution joint	1, 2~40	Max. length of each distribution		≤30
The No.1 distribution joint	L1+1+2+~40+A+B+LF+LG+LH	Total max. piping length including length of each distribution (only narr	ow tubing)	≤300
	L5	Distance between PC and AD unit		≤10
	111	When outdoor unit is installed higher than indoor unit		≤50
Allowable elevation difference	н	When outdoor unit is installed lower than indoor unit		≤40
Allowable elevation ultrerence	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 cap	pacity 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



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



Appearance			N					The second se	T	ļ									ļ				
HP (Combine	d systems)		8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
			C0705DZH8	C0905DZH8	C1155DZH8	C1305DZH8	C1405DZH8	8 C0705DZH8	10 C0905DZH8	10 C0905DZH8	10 C0905DZH8	10 C0905DZH8	12 C1155DZH8	14 C1305DZH8	16 C1405DZH8	10 C0905DZH8	12 C1155DZH8	14 C1305DZH8	16 C1405DZH8				
Model								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
													1			14 C1305DZH8	16 C1405DZH8						
Power supply				380/40	00/415V-3phas	e/50Hz			380/400/415	-3phase/50Hz			380/400/415V-3	phase/50Hz					380/400/415V	-3phase/50Hz	1	1	1
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	/6,50	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		kVV	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	D :	KVV	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
Cooling	Running current/AIVIPs	A	10,0/9,5/9,2	13,//13,U/12,b	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	30,5/34,//33,5	39,4/3/,5/36,1	43,0/40,8/39,4	45,9/43,6/42,1	4/,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	Power Input	KVV	5,93	0,1Z	9,8Z	10.0/10.0/10.2	13,31	14,10	10,20 20,0/25,5/24,0	17,90 20.0/20.E/27.E	19,70	Z1,40	23, IU	24,9U	20,0U	27,80	29,0U	31,30	33,00	34,70	30,40	38,20	39,90
Heating	Power input		6 11	7 07	0.0/10,0/10,2	11,5/10,5/10,2	12 20	23,9/22,0/21,0	20,0/23,3/24,0	17.90	10.05	21 20	22.00	42,0/40,0/39,0	40,0/40,0/41,7	40,9/44,0/43,0	20 10	21 00	22 70	24.40	26 20	27.00	20,0/03,0/03,0
Recommended fu	se sizes (motor rated)	KVV	32	32	3,64	40	40	32x2	32x2	32x2	1x14 1x32	1x14 1x32	1x14 1x32	24,70 2x40	20,40 2x40	2x32 1x40	2x32 1x40	2x32 2x40	1x32 2x40	1x32 2x40	1x32 2x40	1x40 1x32	1x40 1x32
Dimensions (H/W	//D)	mm		18	87x890x890 (+1	60)	1		1887x1880	x890 (+60)			1887x1880x8	390 (+60)					1887x2870	x890 (+60)	1		1
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
	Gas	Inches	3/4	7/8		1 1/8			1	1/8			1 3/8	5		1 3/8				1 5/8			
Piping	Discharge	Inches	5/8	3,	/4	7,	/8		7,	/8		7/8		1 1/8		11	/8			1:	3/8		
connection	Liquid	Inches	3,	/8		1/2			5,	/8			3/4						3/	/4			
	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	657,8	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 numbe	r of indoor units		13	16	19	23	26	29	33	36	40	40	40	40	40	40	40	40	40	40	40	40	40
											Data subject t	o final confirmation										Data subj	ect to final confirmation

System example



Dimensions ECOi



Section Contemport

Electric VRF, ECOi





Mini ECOi

SPW-CR365GXH56B SPW-CR365GXH8B SPW-CR485GXH56B SPW-CR485GXH8B SPW-CR605GXH56B SPW-CR605GXH8B

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.



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 - lo	west 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





HP				4	4	5		6		
Model name				SPW-CR365GXH56B	3/SPW-CR365GXH8B	SPW-CR485GXH56B	SPW-CR485GXH8B	SPW-CR605GXH56B/	SPW-CR605GXH8B	
Power supply						230V, 1 phase, 50/60Hz	/400, 3 phase, 50/60Hz			
Cooling capaci	ty		kW	11	,20	14,	00	15,5	50	
Heating capaci	ity		kW	12	,50	16,	00	17,6	50	
EER cooling				4,	06	3,6	6	3,3	9	
COP heating				4,	34	4,1	0	3,8	4	
	Cooling	Running current/AMPs	A	14,1,	/4,34	19,6/	6,02	23,4/	7,18	
Electric	Cooling	Power input	kW	2,	76	3,8	3	4,5	7	
rating	Heating	Running current/AMPs	A	14,7,	/4,52	19,9/	6,13	23,4/	7,19	
	Heating Running current/A Power input		kW	2,88		3,90		4,5	8	
Recommended	Recommended fuse size (motor rated)			16	16	16	16	16	16	
Dimensions (H	/W/D)		mm							
Net weight			kg			10	4			
Air circulation			m³/min			10	0			
Refrigerant am	nount at shipn	nent	kg			3,	5			
Pining connect	ion	Gas	Inches	5,	/8	5/	8	3/-	4	
Tiping connect	Iping connection Liquid II		Inches	3,	/8	3/	8	3/	В	
Operating sour	Operating sound normal mode dB(dB(A)	A) 51,0		51,0		52,	0	
Quiet mode	Quiet mode dB(A			48	3,0	48	.0	49,0		
Maximum num	Maximum number of indoor units				6	8		9		

Items	Marks	Contents	Length (m)	
	11	May nining length	Actual piping length	≤150
	LI	iviax. piping lengtri	Equivalent piping length	≤175
Allowable piping length	Δ L (L2–L3)	Difference between the max. length and the min. length	from the No. 1 distribution joint	≤40
	Q1, Q2~Qn	Max. length of each distribution tube		≤30
	Q1+Q2+~Qn-1+L1	Total max. piping length including length of each distribution	ution (only narrow tubing)	≤200
	111	When outdoor unit is installed higher than indoor unit		≤50
Allowable elevation difference	п	When outdoor unit is installed lower than indoor unit		≤40
	H2	Max. difference between indoor units		≤15

L = Length, H = Height

Note: Do not use commercially available T-joints for the liquid tubing.

Be sure to use special R410A H1 distribution joints (APR: purchased separately) for outdoor unit connections and tubing branches.

> R410A distribution joint APR-P160BG (for indoor unit)

Specifications subject to change without notice.



cond	Model size		7	9	12	16	18	22	25	36	48	60	76	96	Wireless re	mote control	
Normal Matrix Normal	Capacity KM	Cooling	2,2	2,8	3,6	4,5	5,6	6,4	7,3	10,6	14,0	16,0	22,4	28,0			
chard find 500 600 600 700		Heating	2,5	3,2	4,2	5,0	6,3	7,0	8,0	11,4	16,0	18,0	25,0	31,5	Type with built-in	Type with separately	Functions
Nerror Norm	Canacity BTLL/h	Cooling	7500	9600	12000	15000	19000	22000	25000	36000	47800	54600	76400	95500	sensor part	installed sensor part	T unctions
single state single state <t< td=""><td></td><td>Heating</td><td>8500</td><td>11000</td><td>14000</td><td>17000</td><td>21000</td><td>24000</td><td>27000</td><td>39000</td><td>54600</td><td>61500</td><td>85300</td><td>107500</td><td></td><td></td><td></td></t<>		Heating	8500	11000	14000	17000	21000	24000	27000	39000	54600	61500	85300	107500			
Normal Normal Normal Normal Normal Normal Normal Normal Normal Normal Normal Normal Normal Normal Normal Normal	X type		SPW-X075XH	SPW-X095XH	SPW-X125XH	SPW-X165XH	SPW-X185XH		SPW-X255XH	SPW-X365XH	SPW-X485XH	SPW-X605XH					WIDE (()) CON DRY
Inductores in the concert in the c	Semi Concealed Cassette	11-	Panel	Panel	Panel	Panel	Panel		Panel	Panel	Panel	Panel			✓		
Statucardia Strawardse Strawardse </td <td></td> <td></td> <td>PINN-AD464GHAD</td> <td>PINE-AD464GRAD</td> <td>PINE-AD484GHAD</td> <td>PINE-AD464GRAD</td> <td>PINE-AD464GHAD</td> <td></td> <td>PINN-AD484GRAD</td> <td>PINN-AD484GRAD</td> <td>PINN-AD484GRAD</td> <td>PINN-AD484GRAD</td> <td></td> <td></td> <td></td> <td></td> <td>AUTO</td>			PINN-AD464GHAD	PINE-AD464GRAD	PINE-AD484GHAD	PINE-AD464GRAD	PINE-AD464GHAD		PINN-AD484GRAD	PINN-AD484GRAD	PINN-AD484GRAD	PINN-AD484GRAD					AUTO
sind with with with with with with with with	XM type		SPW-XM075XH	SPW-XM095XH	SPW-XM125XH	SPW-XM165XH	SPW-XM185XH								1	1	
Sind State Sind State <td>Semi Concealed</td> <td>10</td> <td>Panel PNR-XM185</td> <td>Panel PNR-XM185</td> <td>Panel PNR-XM185</td> <td>Panel PNR-XM185</td> <td>Panel PNR-XM185</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>v</td> <td>v</td> <td>🔁 🗲 🍌 🕀</td>	Semi Concealed	10	Panel PNR-XM185	Panel PNR-XM185	Panel PNR-XM185	Panel PNR-XM185	Panel PNR-XM185								v	v	🔁 🗲 🍌 🕀
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $																	
Sincardon Nat	LDK type Semi Concealed			Panel	SPW-LDK124GXH56B Panel	Panel	Panel		SPVV-LDR254GXH56B Panel						1	1	
Number of State Number of State <thn< td=""><td>Slim Cassette</td><td></td><td></td><td>PNR-LD254GHAB</td><td>PNR-LD254GHAB</td><td>PNR-LD254GHAB</td><td>PNR-LD254GHAB</td><td></td><td>PNR-LD254GHAB</td><td></td><td></td><td></td><td></td><td></td><td>•</td><td>•</td><td>📩 🗲 🍌 🛈</td></thn<>	Slim Cassette			PNR-LD254GHAB	PNR-LD254GHAB	PNR-LD254GHAB	PNR-LD254GHAB		PNR-LD254GHAB						•	•	📩 🗲 🍌 🛈
Dimensional analysis Incluit problem Incluit problem Severation of provider accorders Severation of providers Sev	25,	48 type															
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	DR type		l.						SPW-DR254GXH56B	SPW-DR364GXH56B	SPW-DR484GXH56B		SPW-DR764GXH56B	SPW-DR964GXH56B		\checkmark	
SPACE SPACE <th< td=""><td></td><td>76,96 type</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td></th<>		76,96 type															7
Data with bar. SW USTSM																	WIDE (() 🔂 DRY
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Concented Duct SPM UNDEXM SPM UNDEX																	
Concessed DuctSPW-UBESHSPW-UBES	U type																WIDE (()) CON DRY
Image: Representation of the second of th	Concealed Duct	de de	SPW-U075XH	SPW-U095XH	SPW-U125XH	SPW-U165XH	SPW-U185XH		SPW-U255XH	SPW-U365XH	SPW-U485XH	SPW-U605XH				✓	
Fiber/Guing Mounted Units SPW-FITR4E0H666 SPM-FITR4E0H666 SPM-FITR4E0H6666 SPM-FITR4E0H666 SPM-FITR4E0H666 SPM-FITR4E0H6666 SPM-FITR4E0H666 SPM-FITR4E0H666 <t< td=""><td></td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		0															
Floor/Caling Mounted Units SHY-HITPECROUG	FTR type						CDW/ ETD10/EVUEGD										OPERATION
Type SPW-T125M SPW-T125M SPW-T185M SPW-T255M SPW-T255M SPW-T485M	Floor/Ceiling Mounted Uni	its	SI W-I III/4LAIIJOD	31 VV-1 11134L/1130D	31 W-1 11124LAHJOD	51 W-1 111104EA1130D	SI W-I IIII04EAIIJOD	31 W-1 111224EA1130D							v	•	2 5
L Lype SPW-H742SH4 SPW-H712SH4 SPW-H112SH4 SPW-H118SH4 SPW-H118SH4 SPW-H725SH4 SPW-H735SH4 SPW-H48SH4 SPW-H48SH Image: SPW-H48SH K Wall Mounted Unit SPW-K075KH SPW-K075KH SPW-K075KH SPW-K075KH SPW-K125KH SPW-K116KH SPW-K11																	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	T type				SPW-T125XH	SPW-T165XH	SPW-T185XH		SPW-T255XH	SPW-T365XH	SPW-T485XH				\checkmark	\checkmark	
Kype Wall Mounted Unit SPW-K075XH SPW-K075XH SPW-K075XH SPW-K125XH SPW-K125XH SPW-K125XH SPW-K125XH SPW-K126XH68 SPW-F1146XH68	Ceiling Mounted Unit																AUTO 🗲 🏠
K Majl Mounted Unit SPW-K075XH SPW-K075XH SPW-K075XH SPW-K125XH SPW-																	
International and	K type Wall Mounted Unit		SPW-K075XH	SPW-K095XH	SPW-K125XH										\checkmark	✓	
KR type SPW-KR74GXH56B SPW-KR124GXH56B SPW-KR124GXH56B SPW-KR184GXH56B SPW-KR184																	AUTO Z
Wall Mounted Unit SPW-KR74GXH568 SPW-KR124GXH568 SPW-FR124GXH568 SPW-FR124GXH568 <th< td=""><td>KR type</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>WIDE (()) CON DRY</td></th<>	KR type																WIDE (()) CON DRY
Image: And the standing Unit	Wall Mounted Unit		SPW-KR74GXH56B	SPW-KR94GXH56B	SPW-KR124GXH56B	SPW-KR164GXH56B	SPW-KR184GXH56B		SPW-KR254GXH56B						✓	✓	
FR type SPW-FR74GXH56B SPW-FR94GXH56B SPW-FR124GXH56B SPW-FR124G																	AUTO
Floor Standing Unit SPW-FN/4GAH366 SPW-FN/2GAH366	FR type																
FMR type Concealed Floor Standing Unit SPW-FMR74GXH56B SPW-FMR124GXH56B SPW-FMR164GXH56B SPW-FMR164GXH56B SPW-FMR164GXH56B SPW-FMR184GXH56B SPW-F	Floor Standing Unit		3PW-FR/4GAR30D	3PW-FR94GAR30D	3PVV-FR124GARDOB	3PVV-FR104GAR30D	3PVV-FR184GAR30B		3PW-FR2346AR300							v	4
FMR type Concealed Floor Standing Unit SPW-FMR74GXH56B SPW-FMR124GXH56B SPW-FMR164GXH56B SPW-FMR164GXH56B SPW-FMR184GXH56B SPW-FMR254GXH56B SPW-FMR254																	
Concealed Floor Standing Unit SPW-GU055XH SPW-GU075XH SPW-GU105XH SPW-GU105X	FMR type		SPW-FMB74GXH56B	SPW-FMR94GXH56B	SPW-FMR124GXH56B	SPW-FMR164GXH56F	SPW-FMR184GXH56B		SPW-FMB254GXH56B							\checkmark	
GU type Total Heat Exchanger SPW-GU055XH SPW-GU075XH SPW-GU105XH SPW-GU105XH <th< td=""><td>Concealed Floor Standing</td><td>Unit</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>4</td></th<>	Concealed Floor Standing	Unit															4
GU type Total Heat Exchanger SPW-GU055XH SPW-GU075XH SPW-GU105XH		100															
	GU type Total Heat Exchanger	00		SPW-GU055XH		SPW-GU075XH	SPW-GU105XH									✓	
																	7

CFR type Heat Recovery Units (page A29-A30)











SPW-X075XH SPW-X095XH SPW-X125XH SPW-X165XH SPW-X185XH SPW-X255XH SPW-X365XH SPW-X485XH SPW-X605XH

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.





- 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



The flap can be removed easily for washing with water.



Lighter and thinner, easier installation! The top class lightest weight with 26 kg (for type 36~60), body height only 256 mm (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.



Height: 256 mm

Easy servicing of the drain pan

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



indoor unit	specific	cations										
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 - 5	i0, 60 Hz				
Cooling		kW	2,2	2,8	3,6	4,5	5,6	7,3	10,6	14	16	
capacity		BTU/h	7500	9600	12000	15000	19000	25000	36000	47800	54600	
Heating		kW	2,5	3,2	4,2	5,0	6,3	8,0	11,4	16,0	18,0	
capacity		BTU/h	8500	11000	14000	17000	21000	27000	39000	54600	61400	
Power	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	
input	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	Cooling	А		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	
amperes	Heating	А		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	
-	Туре						Turbo fan					
Fan motor	Airflow ra	ate (H/M/L) m³/min		15,5/	14/13		16/14/13	20/16/14	28/23/21	33/25/22	34/27/23	
	Output k	W			0,	05				0,09		
Power sound le	evel (H/M	/L) dB(A)			42/40/38			45/42/39	50/47/44	53/49/45	55/51/47	
Sound pressure	e sound (H	I/M/L) dB(A)			31/29/27			34/31/28	39/36/33	42/38/34	44/40/36	
-	Height	mm			256 +	<35>				319 + <35>		
Dimensions _	Width	mm					840 <950>					
	Depth	mm					840 <950>					
D:	Liquid	inches mm		1	/4 (ø6.35)				3/8 (ø9.52	2)		
ripe connections -	Gas	inches mm		1	/2 (ø12.7)				5/8 (ø15.8	8)		
Connoctions	Drain pip	ing					VP-25					
Net weight		kg			21+ <		26 + <4,5>					
he values in <>	> for exter	nal dimensions and N	Net weight are the	e values for the op	tional ceiling pane	el.			Specifications subject to change without notice			



Electric VRF, ECOi



SPW-XM075XH SPW-XM095XH SPW-XM125XH SPW-XM165XH SPW-XM185XH

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





- Mini cassette fits into a 600x600mm ceiling grid
- 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



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.



Model Name			SPW-XM075XH	SPW-XM095XH	SPW-XM125XH	SPW-XM165XH	SPW-XM185XH
Power source				2	20/230/240V, 1 phase - 50, 60	Hz	
Cooling		kW	2,2	2,8	3,6	4,7	5,6
capacity		BTU/h	7500	9600	12000	15000	19000
Heating		kW	2,5	3,2	4,2	5,0	6,3
capacity		BTU/h	8500	11000	14000	17000	21000
Douvor innut	Cooling	kW	0,034/0,0	031/0,030	0,037/0,034/0,031	0,044/0,040/0,037	0,055/0,049/0,040
Power Input	Heating	kW	0,024/0,0	021/0,020	0,027/0,024/0,021	0,034/0,030/0,027	0,045/0,039/0,030
Duration	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
Running amperes	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
	Туре				Centrifugal fan		
Fan motor	Airflow rate	(H/M/L) m³/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)	41/3	38/36	43/40/37	47/43/39	52/48/44
Pressure sound leve	I (H/M/L)	dB(A)	30/2	27/25	32/29/26	36/32/28	41/37/33
	Height	mm			283		
Dimensions	Width	mm			575 <625>		
	Depth	mm			575 <625>		
0.	Liquid	inches mm			1/4 (ø6.35)		
Pipe	Gas	inches mm			1/2 (ø12.7)		
Connections	Drain piping				VP-20		
Net weight		kg			19 + <2,7>		



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



Simplified remote controller



RCS-KR1EG



SPW-LDR94GXH56B SPW-LDR124GXH56B SPW-LDR164GXH56B SPW-LDR184GXH56B SPW-LDR254GXH56B

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.



Controller Options Panel Timer remote controller PNR-LD254GHAB RCS-TM80BG

- 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.







(3) One-direction ceiling-mounted system

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

(Additional accessories required)

ndoor unit spe SPW-LDR94GXH56B SPW-LDR124GXH Model Name Power source kW 2,8 3,6 Cooling capacity BTU/h 9600 12000 3,2 4,2 kW Heating capacity BTU/h 11000 14000 0,105/0,110/0,115 Cooling kW 0,105/0,110/0,115 Power 0,075/0,080/0,085 0,075/0,080/0,085 input kW Heating 0,50/0,50/0,51 0,50/0,50/0,51 Running Cooling А 0,36/0,37/0,38 0,36/0,37/0,38 amperes Heating Δ Type Fan Airflow rate (H/M/L) m³min 12/10/9 motor kW Output Power sound level (H/M/L) dB(A) 47/45/44 Pressure sound level (H/M/L) dB(A) 36/34/33 Heiaht mm Width Dimensions mm Depth mm l iquid inches mm Pipe Gas inches mm connections Drain pipin Net weight ka

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



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

Wireless remote controller (Transmitter, common part)





RCS-BH80BG.WL

Simplified remote controller



RCS-KR1EG

56B	SPW-LDR164GXH56B	SPW-LDR184GXH56B	SPW-LDR254GXH56B
2	20/230/240V, 1 phase - 50, 60 H	łz	
	4,5	5,6	7,3
	15000	19000	25000
	5,0	6,3	8,0
	17000	21000	27000
ò	0,105/0,110/0,115	0,110/0,115/0,120	0,115/0,120/0,125
5	0,075/0,080/0,085	0,080/0,085/0,090	0,085/0,090/0,095
	0,50/0,50/0,51	0,53/0,53/0,54	0,55/0,55/0,56
	0,36/0,37/0,38	0,38/0,39/0,40	0,40/0,41/0,42
	Sirocco fan		
	12/11/10	13/11,5/10	18/15/13
	0,05		
	47/46/45	49/47/45	56/51/47
	36/35/34	38/36/34	45/40/36
	200 + <20>		
	1000 <1230>		
	710 <800>		
1/4 (¢	v6.35)		3/8 (ø9.52)
1/2 (ø12.7)		5/8 (ø15.88)
	VP-25		
21 +	<5,5>		22 + <5,5>



SPW-DR254GXH56B SPW-DR364GXH56B SPW-DR484GXH56B SPW-DR764GXH56B SPW-DR964GXH56B

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



Controller Options

Timer remote controller



RCS-TM80BG

- 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 (field supply).



Rap valve kit

The types 76 and 96 require two rap valve kits for each unit. (not required on a 1:1 installation)



ATK-RX160AGB

Indoor unit specif	cations						
Model Name			SPW-DR254GXH56B	SPW-DR364GXH56B	SPW-DR484GXH56B	SPW-DR764GXH56B	SPW-DR964GXH56B
Power source				220/230/240V, 1	phase - 50, 60 Hz		220/230/240, 1ph - 50Hz
Cooling consoity		kW	7,3	10,6	14,0	22,4	28,0
cooning capacity		BTU/h	25000	36000	47800	76400	95500
Hosting consoity		kW	8,0	11,4	16,0	25,0	31,5
пеациу сарасну		BTU/h	27000	39000	54600	85300	107500
Power	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
input	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	Cooling	А	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
amperes	Heating	А	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
	Туре				Sirocco fan		
Fon motor	Airflow rate	(H/M/L) m³/min	23/22/21	30/28/25	36/35/33	56/53,1/49,6	72/70/66
Fall IIIULUI	Output	kW	0	,2	0,35	0,2*2	0,4*2
	External stat	tic pressure Pa	186	176	167	176	216
Power sound level (H/N	Л/L)	dB(A)	55/54/53	56/55/53	58/57/55	59/58/57	62/61/60
Pressure sound level (H	I/M/L)	dB(A)	44/43/42	45/44/42	47/46/44	48/47/46	51/50/49
	Height	mm	42	20	450	4	67
Dimensions	Width	mm		1065		14	28
	Depth	mm		620		12	30
	Liquid	inches mm			3/8 (ø9.52)		
Pipe connections	Gas	inches mm		5/8 (ø15.88)		3/4 (ø19.05)	7/8 (ø22.22)
	Drain piping				VP-25		
Net weight		kg	47	50	54	110	120



Electric VRF, ECOi







RCS-BH80BG.WL

Simplified remote controller



RCS-KR1EG



US type concealed duct

SPW-US075XH SPW-US095XH SPW-US125XH SPW-US165XH SPW-US185XH

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.



Timer remote controller



RCS-TM80BG

- 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 sp	ecifications									
Model Name			SPW-US075XH	SPW-US095XH	SPW-US125XH	SPW-US165XH	SPW-US185XH			
Power source			220/230/240V, 1 phase - 50, 60Hz							
Cooling consoit		kW	2,2	2,8	3,6	4,5	5,6			
cooling capacity		BTU/h	7500	9600	12000	15000	19000			
Heating consulty			2,5	3,2	4,2	5,0	6,3			
BTU/			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			
Power input	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	Cooling	А	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			
amperes	Heating	А	0,23/0,23/0,23	0,23/0,23/0,23 0,27/0,27/0,27 0,28/0,28/0,28 0,34/0,34/0,34						
	Туре				Sirocco fan					
Fon motor	Airflow rate (H/M/I	L) m³/min	8/7/6	8,5/7,5/6,5	9/8/7	10,5/9,5/8	12,5/11,5/10			
Fall IIIUlUI	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 lev	vel (H/M/L)	dB(A)	28/27/25	28/27/25 30/29/27 32/30/28 34/32/30 35/33/31						
Height mm 200										
Dimensions Width mm 750										
	Depth	mm			640					
D :	Liquid	inches mm	1/4 (ø6.35)							
PIPE	Gas	inches mm	1/2 (ø12.7)							
0011100110113	Drain piping		VP-20							
Net weight		kg			19					



Electric VRF, ECOi

Controller Options





Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller



RCS-KR1EG



U type concealed duct

SPW-U075XH SPW-U095XH SPW-U125XH SPW-U165XH SPW-U185XH SPW-U255XH SPW-U365XH SPW-U485XH SPW-U605XH

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.





- 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.



Indoor unit sp	ecifications										
Model Name			SPW-U075XH	SPW-U095XH	SPW-U125XH	SPW-U165XH	SPW-U185XH	SPW-U255XH	SPW-U365XH	SPW-U485XH	SPW-U605XH
Power source 220/230/240V, 1 phase - 50, 60 Hz											
0		kW	2,2	2,8	3,6	4,5	5,6	7,3	10,6	14,0	16,0
Cooling capacity		BTU/h	7500	9600	12000	15000	19000	25000	36000	47800	54600
Upoting consoit.		kW	2,5	3,2	4,2	5,0	6,3	8,0	11,4	16,0	18,0
Heating capacity		BTU/h	8500 11000 14000		17000	21000	27000	39000	54600	61500	
Douvor 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	0,308/0,3	25/0,341
Power input	Heating	kW		0,082/0,088/0,094		0,084/0,0	090/0,097	0,168/0,183/0,198	0,300/0,315/0,330	0,296/0,3	13/0,329
Running	Cooling	А		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
amperes	Heating	А		0,40/0,41/0,42		0,39/0,40/0,41 0,78/0,81/0,8		0,78/0,81/0,84	1,39/1,40/1,41	1,36/1,	37/1,38
	Туре						Sirocco fan				
Fon motor	Airflow rate (H	/M/L) m³/min		10/8,5/7		12/1	0,5/9	18/15/13	30/26/21	33/3	0/25
Output kW				0,05			0,07		0,14		
External static pressure Pa			49(69)			40	(62)	50(92)	79(122)	78(*	13)
Power sound level (H/M/L) dB(A)			40/37/33			41/39/36		45/41/38	49/44/42	51/4	8/44
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
	Height	mm					310				
Dimensions	Width	mm		700						1480	
Depth 630											
Liquid inches mm					1/4 (ø6.35)				3/8 (ø9.52)	
Connections Gas inches mm					1/2 (ø12.7)				5/8 (ø	15.88)	
0011100010113	Drain piping						VP-25				
Net weight		kg		24		2	25	32		47	
The values in () for	the external stat	tic proceuro and	operating sound a	ra for use of boos	tor cable				Specificatio	ne subject to chan	ne without notice

n () for the external static pressure and operating



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

Controller Options

Timer remote controller



RCS-TM80BG



Wireless remote controller

RCS-BH80BG.WL

Simplified remote controller



RCS-KR1EG

7-22°C Air off temperature control as standard

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





SPW-FTR74EXH56B SPW-FTR94EXH56B SPW-FTR124EXH56B SPW-FTR164EXH56B SPW-FTR184EXH56B SPW-FTR224EXH56B

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





RCS-TM80BG

- 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.



$\begin{tabular}{ c c c c c c } \hline $PW-FTR74EXH568 $PW-FTR34EXH568 $PW-FTR124EXH568 $PW-FTR164EXH568 $PU-FTR164EXH568 $PU-FTR$	Indoor unit sp	oecifications									
$\begin{tabular}{ c c c c c c } \hline Power source & $$20/230/240V, 1 phase-50 Hz$ \\ \hline $$2000 random ra$	Model Name			SPW-FTR74EXH56B	SPW-FTR94EXH56B	SPW-FTR124EXH56B	SPW-FTR164EXH56B	SPW-FTR184EXH56B	SPW-FTR224EXH56B		
$\begin{tabular}{ c c c c c c } \hline k V $2,2$ $2,8$ $3,6$ $4,5$ $5,6$ $6,4$ \\ \hline BTU/h 7500 9600 12000 15000 19000 22000 \\ \hline A V $2,5$ $3,2$ $4,2$ $5,0$ $6,3$ $7,0$ \\ \hline BTU/h 8500 11000 14000 17000 21000 24000 \\ \hline BTU/h 8500 11000 14000 17000 21000 24000 \\ \hline BTU/h 8500 11000 14000 17000 21000 24000 \\ \hline BTU/h 8500 $0,65,0,65$ $0.887,088,088$ \\ \hline $Heating$ k W $0,65/0,65$ $0.887,089,088$ \\ \hline $Heating$ A $0,29/0,29,0,29$ $0.41/0,41/0,41$ \\ \hline $Heating$ A $0,29/0,29/0,29$ $0.41/0,89,7$ $12/10,80,7$ $12/10,80,7$ $12/$	Power source										
$\begin{tabular}{ c c c c c c } \hline BTU/h & 7500 & 9600 & 12000 & 15000 & 19000 & 22000 \\ \hline BTU/h & 8500 & 11000 & 14000 & 17000 & 21000 & 24000 \\ \hline BTU/h & 8500 & 11000 & 14000 & 17000 & 21000 & 24000 \\ \hline BTU/h & 8500 & 11000 & 14000 & 17000 & 21000 & 24000 \\ \hline BTU/h & 8500 & 0.65/0.65/0.65 & 0.88/0.88/0.88/0.88/0.88/0.88/0.88/0.88$	Cooling consoit		kW	2,2	2,8	3,6	4,5	5,6	6,4		
$\begin{tabular}{ c c c c c c } \hline kW & $2,5$ & $3,2$ & $4,2$ & $5,0$ & $6,3$ & $7,0$ \\ \hline BTU/h & 8500 & 11000 & 14000 & 17000 & 21000 & 24000 \\ \hline BTU/h & 8500 & 1000 & 14000 & 17000 & 21000 & 24000 \\ \hline $Bruning$ & kW & $0.65/0.65/0.65$ & $0.88/0.88/0.88$ \\ \hline $Heating$ & kW & $0.65/0.65/0.65$ & $0.88/0.88/0.88$ \\ \hline $Runing$ & A & $0.29/0.29/0.29$ & $0.41/0.41/0.41$ \\ \hline $Heating$ & A & $0.29/0.29/0.29$ & $0.41/0.41/0.41$ & $0.60/0.51/0.51$ \\ \hline $Power sound$ level$ $(H/M/L]$ & $dB(A)$ & $60/54/49$ & $62/58/54$ & $63/60/57$ \\ \hline $Pressure$ sound$ level$ $(H/M/L]$ & $dB(A)$ & $49/3/38$ & $51/47/43$ & $52/49/46$ \\ \hline $Height$ m m & 900 \\ \hline Hom D $Depth$ m m & 190 \\ \hline $Power$ $Depth$ m m & $1/4(46.35)$ \\ \hline $Pressure$ D $Depth$ m m D $Depth$ m m D $Depth$ m D $Depth$ m D $Depth$ D $Depth$ D $Depth$ $$	cooling capacity		BTU/h	7500	9600	12000	15000	19000	22000		
$\begin{tabular}{ c $	Upsting constitu			2,5	3,2	4,2	5,0	6,3	7,0		
$ \begin{array}{ c c c c c } \hline Power input \\ \hline Power input \\ \hline Power input \\ \hline Heating & W & 0.65/0.65/0.65 & 0.88/0.88/0.88 \\ \hline Heating & W & 0.65/0.65/0.65 & 0.88/0.88/0.88 \\ \hline Running amperes & Cooling & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & A & 0.29/0.29/0.29 & 0.41/0.41/0.41 \\ \hline Heating & K & 0.07 & 0.9 \\ \hline Power sound leve & (H/M/L) & m^3/min & 10.5/9/7.5 & 12/10.8/9.7 & 15/13.5/12 \\ \hline Output & K & 0.07 & 0.09 \\ \hline Power sound leve & (H/M/L) & dB(A) & 60/54/49 & 62/58/54 & 63/60/57 \\ \hline Pressure sound leve & (H/M/L) & dB(A) & 60/54/49 & 51/47/43 & 52/49/46 \\ \hline Pressure sound leve & (H/M/L) & dB(A) & 49/43/38 & 51/47/43 & 52/49/46 \\ \hline Pressure sound leve & Min & 0. & 900 \\ \hline Power & Minth & mm & 900 \\ \hline Depth & mm & 900 \\ \hline Depth & mm & 190 \\ \hline Popth & mm & 190 \\ \hline Pressure sound inches m & 1/4 (e6.35) \\ \hline Pressure sound inches m & 1/2 (g12.7) \\ \hline Drain piping & VP-26 \\ \hline \end{array}$	Heating capacity		BTU/h	8500 11000		14000	17000	21000	24000		
Power hight 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 Cooling Fan motor Type Sirocco fan 12/10,8/9,7 15/13,5/12 Output KW 0,07 0,09 0 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 Width mm 680 190 190 190 Pipe connections Liquid inches mm 1/4 (ø6.35) 1/2 (ø12.7) 1/2 (ø12.7) Drain piping Drain piping VP-26 VP-26 VP-26	Power input	Cooling	kW		0,65/0,65/0,65			0,88/0,88/0,88			
$\begin{tabular}{ c c c c c c } \hline Running amperes & Cooling A & 0.29/0.29/0.29 & 0.41/0.41/0.41 &$	Heating kW				0,65/0,65/0,65			0,88/0,88/0,88			
amperes Heating A 0,29/0,29/0,29 0,41/0,41/0,41 Fan motor Type Sirocco fan Sirocco fan Sirocco fan 12/10,8/9,7 15/13,5/12 Pan motor Airflow rate (H/M/L) m³/min 10,5/9/7,5 12/10,8/9,7 15/13,5/12 Output kW 0,07 0,09 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 Dimensions Width mm 900 Pipe Equid inches mm 19/4 (ø6.35) Pipe connections Gas inches mm 1/2 (ø12.7)	Running Cooling A				0,29/0,29/0,29		0,41/0,41/0,41				
Type Sirocco fan Fan motor Airflow rate (H/M/L) m³/min 10,5/9/7,5 12/10,8/9,7 15/13,5/12 Output kW 0,07 0,09 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 51/47/43 52/49/46 Dimensions Width mm 900 51/47/43 52/49/46 Pippe connections Liquid inches mm 10/4 (ø6.35) 51/47/43 52/49/46 Pippe connections Eliquid inches mm 11/4 (ø6.35) 51/47/43 52/49/46 Pippe connections Fing piping Inches mm 11/4 (ø6.35) 51/47/43 52/49/46	amperes Heating A				0,29/0,29/0,29			0,41/0,41/0,41			
Fan motor Airflow rate (H/M/L) m³/min 10,5/9/7,5 12/10,8/9,7 15/13,5/12 Output kW 0,07 0,09 <td< td=""><td></td><td>Туре</td><td></td><td></td><td></td><td>Siroc</td><td>co fan</td><td></td><td></td></td<>		Туре				Siroc	co fan				
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 52/49/46 Dimensions Width mm 900 51/47/43 52/49/46 Dimensions Width mm 900 51/47/43 52/49/46 Pipe Gas inches mm 11/4 (ø6.35) 51/47/43 52/49/46 Pipe Gas inches mm 11/4 (ø6.35) 51/47/43 52/49/46 Pipe Gas inches mm 11/4 (ø6.35) 51/47/43 51/47/43	Fan motor	Airflow rate (H/M/L	.) m³/min		10,5/9/7,5		12/10),8/9,7	15/13,5/12		
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 52/49/46 52/49/46 Dimensions Width mm 900 50/57 50/57 Depth mm 190 50/57 50/57 50/57 Pipe connections Liquid inches mm 1/4 (ø6.35) 50/57 50/57 Pripe connections Gas inches mm 1/2 (ø12.7) 50/57 50/57		Output	kW	0,07				0,09			
Pressure sound level (H/M/L) dB(A) 49/43/38 51/47/43 52/49/46 Dimensions Height mm 680 52/49/46 52/49/46 <	Power sound leve	I (H/M/L)	dB(A)		60/54/49		62/58/54 63/60/57				
Height mm 680 Dimensions Width mm 900 Depth mm 190 Pipe connections Liquid inches mm Gas inches mm 1/2 (ø12.7) Drain piping VP-26	Pressure sound le	vel (H/M/L)	dB(A)	49/43/38 51/47/43					52/49/46		
Dimensions Width mm 900 Depth mm 190 Pipe connections Liquid inches mm 1/4 (ø6.35) Drain piping VP-26 VP-26		Height	mm		680						
Depth mm 190 Pipe connections Liquid inches mm 1/4 (ø6.35) Gas inches mm 1/2 (ø12.7) Drain piping VP-26 VP-26	Dimensions Width mm			900							
Pipe connections Liquid Gas inches mm 1/4 (ø6.35) Drain piping VP-26 VP-26	Depth mm				190						
Pipe connections Gas inches mm 1/2 (ø12.7) Drain piping VP-26	Liquid inches mr			1/4 (ø6.35)							
Drain piping VP-26	ripe	Gas i	inches mm			ø12.7)					
		Drain piping				VP	VP-26				
Net weight kg 23,5	Net weight		kg			23	3,5				



Electric VRF, ECOi

Wireless remote controller

Simplified remote controller



RCS-TH80AG.WLB

RCS-BH80AG.WLB



RCS-KR1EG



SPW-T125XH SPW-T165XH SPW-T185XH SPW-T255XH SPW-T365XH SPW-T485XH

The T type ceiling mounted unit 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.



Controller Options

Timer remote controller



RCS-TM80BG

- 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.



ecifications								
		SPW-T125XH	SPW-T165XH	SPW-T185XH	SPW-T255XH	SPW-T365XH	SPW-T485XH	
				220/230/240V, 1	phase - 50, 60 Hz			
_	kW	3,6	4,5	5,6	7,3	10,6	14,0	
	BTU/h	12000	15000	19000	25000	36000	47800	
_	kW	4,2	5,0	6,3	8,0	11,4	16,0	
	BTU/h	14000	17000	21000	27000	39000	54600	
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 Cooling /		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	
amperes Heating		0,26/0,24/0,23	0,26/0,24/0,23	0,38/0,35/0,34	0,62/0,57/0,55	0,69/0,63/0,62		
Туре				Siroco	co fan			
Airflow rate (H/M/L)	m³/min	12/10/9,0	13/1	1/9,0	18,5/15/14	27,5/23/20	30/26/22	
Output kV		0,03			0,04	0,	08	
Power sound level (H/M/L)		46/43/41 47/44/41		4/41	49/47/44	52/49/46	54/51/48	
Pressure sound level (H/M/L) dl		35/32/30	36/3	3/30	38/36/33	41/38/35	43/40/37	
Height	mm			21	10			
Dimensions Width mm			910		1180	15	95	
Depth mm				68	30			
Liquid inches mm			1/4 (ø6.35)			3/8 (ø9.52)		
Pipe Gas inches mn		1/2 (ø12.7) 5/8 (ø15.88)						
Drain piping				VP	P-20			
	kg		21		25	3	3	
Model Name Power source Cooling capacity Heating capacity Power Cooling input Heating Running Cooling amperes Heating Fan motor Airflow rate (H/N Power sound level (H/M/L) Pressure sound level (H/M/L) Pressure sound level (H/M/L) Pipe Content Commensions Width Depth Liquid Gas Drain piping Net weight Linguid		kclifications kW BTU/h kW BTU/h kW BTU/h cooling kW Beating kW Cooling A Heating A Type Airflow rate (H/M/L) Airflow rate (H/M/L) m³/min Output kW (H/M/L) dB(A) al (H/M/L) dB(A) Height mm Depth mm Liquid inches mm Gas inches mm Drain piping kg	SPW-T125XH kW 3,6 BTU/h 12000 kW 4,2 BTU/h 12000 kW 4,2 BTU/h 14000 Cooling kW www.second 0,028/0,029/0,029 Heating kW 0,028/0,029/0,029 Cooling A 0,26/0,24/0,23 Heating A 0,26/0,24/0,23 Type	KW 3,6 4,5 BTU/h 12000 15000 KW 4,2 5,0 BTU/h 12000 17000 Cooling KW 0,028/0,029/0,029 0,039/0,029/0,028 Heating KW 0,028/0,029/0,029 0,029/0,029/0,028 Cooling A 0,26/0,24/0,23 0,26/0,24/0,23 Cooling A 0,26/0,24/0,23 0,26/0,24/0,23 Heating A 0,26/0,24/0,23 0,26/0,24/0,23 Type	SPW-T125XH SPW-T165XH SPW-T185XH 220/230/240V, 1 kW 3,6 4,5 5,6 BTU/h 12000 15000 19000 kW 4,2 5,0 6,3 BTU/h 14000 17000 21000 Cooling kW 0,028/0,029/0,029 0,039/0,029/0,028 0,031/0,032/0,032 Heating KW 0,028/0,029/0,029 0,029/0,028 0,031/0,032/0,032 Cooling A 0,26/0,24/0,23 0,26/0,24/0,23 0,28/0,26/0,24 Heating A 0,26/0,24/0,23 0,26/0,24/0,23 0,28/0,26/0,24 Heating A 0,26/0,24/0,23 0,26/0,24/0,23 0,28/0,26/0,25 Type Sirrocr Sirrocr Sirrocr Airflow rate (H/M/L) m³/min 12/10/9,0 13/11/9,0 Output kW 0,03 2/1 Width mm 2/2 2/2 Width mm 910 2/2 Depth mm 1	SPW-T125XH SPW-T165XH SPW-T185XH SPW-T255XH 220/230/240V, 1 phase - 50, 60 Hz 220/230/240V, 1 phase - 50, 60 Hz 220/230/240V, 1 phase - 50, 60 Hz kW 3,6 4,5 5,6 7,3 BTU/h 12000 15000 19000 25000 kW 4,2 5,0 6,3 8,0 BTU/h 14000 17000 21000 27000 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 Heating KW 0,028/0.029/0.029 0.029/0.029 0,028/0.029/0.032 0,042/0.042/0.043 Cooling A 0,260/0.24/0.23 0,26/0.24/0.23 0,28/0.26/0.25 0,38/0.35/0.33 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 Type Sirocco fan Sirocco fan Sirocco fan Sirocco fan Airflow rate (H/M/L) m³/min 12/10/9.0 13/11/9.0 18.5/15/14 Output kW 0,03 36/33/30 38/36/33<	SPW-T125XH SPW-T165XH SPW-T185XH SPW-T255XH SPW-T365XH Image: Several state of the sta	



Electric VRF, ECOi

Wireless remote controller





RCS-BH80BG.WL



RCS-KR1EG



SPW-K075XH SPW-K095XH SPW-K125XH

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

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



Controller Options

Timer remote controller



RCS-TM80BG

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 durable 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

Indoor unit sp	ecifications						
Indoor Unit			SPW-K075XH	5PW-K095XH	5PW-K125XH		
Power Source				220/230/240V, 1 phase - 50, 60Hz			
Cooling conscitu		kW	2,20	3,60			
cooning capacity		BTU/h	7500 9600		12000		
lleating consoit.		kW	2,50 3,20		4,20		
Heating capacity		BTU/h	8500	14000			
Derver 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		
Cooling A			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)	4	48/44/40			
Sound pressure le	vel (H/M/L)	dB(A)	3	37/33/29			
	Туре		Sirocco fan				
Fan motor	Airflow rate (H/M/L)	m³/min		10/8,5/6,5			
	Output	kW					
Air circulation (H/M/L) m ³ /hr			540/450/360	540/450/360	600/510/390		
Dimensions (HxWxD) mm			285x825x217	285x825x217	285x825x217		
Liquid inches mm			1/4 (ø6.35)				
Pipe connections Gas inches mm			1/2 (ø12.7)				
	Drain piping		VP-13				
Net weight		kg	10				



Electric VRF, ECOi

Wireless remote controller





RCS-SH1BG

RCS-BH80BG.WL

Simplified remote controller



RCS-KR1EG



KR type wall mounted

SPW-KR74GXH56B SPW-KR94GXH56B SPW-KR124GXH56B SPW-KR164GXH56B SPW-KR184GXH56B SPW-KR254GXH56B

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.



Controller Options

Timer remote controller



RCS-TM80BG

- 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 prevents noise in quiet rooms and bedrooms

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.

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

Index unit specifications Spw-KR74GXH568 Spw-KR74GXH568 Spw-KR14GXH568 Spw KR164GXH568										
Model NameSPW-KR74GXH566SPW-KR74GXH566SPW-KR164GXH566SPW-KR184GXH566SPW-KR184GXH566SPW-KR254GXH566Power source <td< th=""><th>Indoor unit</th><th>specifications</th><th>5</th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	Indoor unit	specifications	5							
Power source 200/230/240V, 1 pixe - 50, 60 Hz Cooling capacity RW 2,2 2,8 3,6 4,5 5,6 7,3 BTU/h 7500 9600 12000 15000 19000 25000 Heating capacity RW 2,5 3,2 4,2 5,0 6,3 8,0 Power input RW 0,8500 11000 14000 17000 21000 27000 Power input Cooling RW 0,8500 11000 14000 17000 21000 27000 Power input Cooling RW 0,8500 11000 14000 17000 0,049/0,052/0,055 0,049/0,052/0,055 0,049/0,052/0,052 0,023/0,230 Running amperes Cooling A 0,15/0,15/0,15 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,24 0,23/0,23/0,2	Model Name			SPW-KR74GXH56B	SPW-KR94GXH56B	SPW-KR124GXH56B	SPW-KR164GXH56B	SPW-KR184GXH56B	SPW-KR254GXH56B	
$ \begin{array}{c c c c c } \hline \begin{tabular}{ c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Power source					220/230/240V, 1	phase - 50, 60 Hz			
	Cooling consoit		kW	2,2	2,8	3,6	4,5	5,6	7,3	
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 Cooling Cooling KW Cooling KW Cooling Cooling Cooling Cooling Cooling Cooling Cooling Cooling A Cooling	cooling capacit	Lý	BTU/h	7500	9600	12000	15000	19000	25000	
Heating capacity BTU/h 8500 11000 14000 17000 21000 27000 Power input Cooling KW 0.049/0.052/0.053 0.049/0.052/0.055 0.049/0.052/0.055 0.049/0.052/0.055 Running amperes Cooling A Cooling A 0.049/0.052/0.055 0.049/0.052/0.055 0.049/0.052/0.055 0.049/0.052/0.055 0.023/0.23/0.24 Running amperes Cooling A Cooling A 0.023/0.23/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 0.023/0.24 <	Heating concei	h.	kW	2,5	3,2	4,2	5,0	6,3	8,0	
Power inputCoolingKW0.049/0.052/0.0530.049/0.052/0.053Running amperesCoolingA0.049/0.052/0.0530.049/0.052/0.053Running amperesCoolingA0.023/0.23/0.240.23/0.23/0.24AmperesFatageA0.015/0.15/0.15/0.150.23/0.23/0.24Fan motorType0.049/0.052/0.0530.023/0.23/0.240.23/0.23/0.24Fan motorType0.0110.0150.023/0.23/0.24OutputKW0.0110.0150.023Power sound Iver (H/M/L)dB(A)0.0110.0150.023Pressure sound Iver (H/M/L)dB(A)0.0110.0110.015Pressure sound Iver (H/M/L)dB(A)0.0110.0110.011Pressure sound Iver (H/M/L)dB(A)0.0110.0110.011Pressure sound Iver (H/M/L)dB(A)0.0110.0110.011Pressure sound Iver (H/M/L)dB(A)0.0110.0110.011Pre	Heating capaci	ly	BTU/h	8500	11000	14000	17000	21000	27000	
Howen inputHeatingKW0.049/0.052/0.0550.049/0.052/0.055Running amperesCoolingA0.15/0.15/0.15/0.150.23/0.23/0.24HeatingA0.015/0.15/0.15/0.15/0.150.23/0.23/0.24Fan motorType0.23/0.23/0.240.23/0.23/0.24Fan motorAirflow rate (H/M/L) m³/min10/8/6.012/10/8.016/14/10OutputkW0.0110.0150.023Power sound level(H/M/L) dB(A)0.0110.0150.023Pressure sound level(H/M/L) dB(A)36/32/2842/35/38PinensionsHeight mm285330DimensionsWidth mm9951140Depth mm10/4 (6.35)3/8 (89.52)	Power input	Cooling	kW			0,031/0,033/0,035			0,049/0,052/0,055	
$\begin{array}{c c c c c c } \hline Running amperes & \hline Cooling A & 0,15/0,15/0,15 & 0,23/0,23/0,24 \\ \hline Heating A & 0,15/0,15/0,15 & 0,23/0,23/0,24 \\ \hline Heating A & 0,015/0,15/0,15/0,15 & 0,23/0,23/0,24 \\ \hline Fan motor & \hline Type & \hline Cross for for \\ \hline Airflow rate (H/M/L) m^3/min & 10/8/6,0 & 12/10/8,0 & 16/14/10 \\ \hline Output & kW & 0,011 & 0,015 & 0,023 \\ \hline Power sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Power sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,015 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,013 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,013 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,013 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,013 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,013 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,013 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,013 & 0,023 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,011 & 0,013 & 0,013 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,013 & 0,013 & 0,013 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,013 & 0,013 & 0,013 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,013 & 0,013 & 0,013 & 0,013 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,013 & 0,013 & 0,013 & 0,013 \\ \hline Pressure sound level (H/M/L) dB(A) & 0,013 & 0,013 & 0,013 &$	rower input	Heating	kW			0,031/0,033/0,035			0,049/0,052/0,055	
$\begin{array}{c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Running Cooling A 0,15/0,15/0,15							0,23/0,23/0,24		
Type Cross for Construction Fan motor Airflow rate (H/M/L) m³/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) G 36/32/28 53/49/46 Pressure sound level (H/M/L) dB(A) G 36/32/28 42/35/38 Pinensions Height mm 42/35/38 330 Dimensions Width mm 1140 1140 Depth mm G 203 28 Liquid inches mm 11/4/66.35) 3/8 (89.52)	amperes	Heating	A 0,15/0,15/0,15							
Fan motor Airflow rate (H/M/L) m³/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 53/49/46 Pressure sound level (H/M/L) dB(A) 36/32/28 42/35/38 42/35/38 Dimensions Height mm 300 1140 Dimensions Width mm 1140 228 Liquid inches mm 11/4 (ø6.35) 3/8 (ø9.52)	Туре					Cross f	low fan			
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 Pressure sound level (H/M/L) dB(A) 42/35/38 42/35/38 Dimensions Width mm 14/06/359 14/06/35	Fan motor Airflow rate (H/M/L) m ³ /min		10/8/6,0 12/10/8,0					16/14/10		
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 Pressure sound level (H/M/L) dB(A) 36/32/28 33/30 Pressure sound level (H/M/L) dB(A) 38/36/32 33/30 Pressure sound level (H/M/L) dB(A) 38/36/32 33/30 Dimensions Width mm 995 1140 Depth mm 228 228 228 Liquid inches mm 11/4 (ø6.35) 3/8 (ø9.52)	Output kW 0,011 0,011				0,0	15	0,023			
Pressure sound Level (H/M/L) dB(A) 36/32/28 42/35/38 Dimensions Height mm 0330 330 Dimensions Width mm 1140 1140 Depth mm 11406.35) 328 328	Power sound le	vel (H/M/L)	dB(A)			47/43/39			53/49/46	
Height mm 285 330 Dimensions Width mm 995 1140 Depth mm 203 228 Liquid inches 1/4 (ø6.35) 3/8 (ø9.52)	Pressure sound	level (H/M/L)	dB(A)			36/32/28			42/35/38	
Dimensions Width mm 995 1140 Depth mm 203 228 Liquid inches 1/4 (ø6.35) 3/8 (ø9.52)		Height	mm			285			330	
Depth mm 203 228 Liquid inches mm 1/4 (ø6.35) 3/8 (ø9.52)	Dimensions	Width	mm	mm 995						
Liquid inches mm 1/4 (ø6.35) 3/8 (ø9.52)		Depth mm 203							228	
	D :	Liquid inches mm 1/4 (ø6.35)					3/8 (ø9.52)			
Pripe Gas inches mm 1/2 (ø12.7) 5/8 (ø15.88)	PIPE	onnetions Gas inches mm 1/2 (ø12.7)				5/8 (ø15.88)				
Drain piping VP-13	Drain piping					VP	-13			
Net weight kg 14 21	Net weight		kg			14			21	



Electric VRF, ECOi

Wireless remote controller





RCS-SH1BG

RCS-BH80BG.WL

Simplified remote controller



RCS-KR1EG



SPW-FR74GXH56B SPW-FR94GXH56B SPW-FR124GXH56B SPW-FR164GXH56B SPW-FR184GXH56B SPW-FR254GXH56B

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.







RCS-TM80BG

- 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.



Indoor unit	specification	s								
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 concoi		kW	2,2 2,8		3,6	4,5	5,6	7,1		
Cooling capacity		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	0,116/0,126/0,136	0,150/0,160/0,170		
Power Input	Heating	kW	0,036/0,0	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	Cooling	А	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		
amperes	Heating	А	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		
Туре				Sirocco fan						
Fan motor 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	sions (HxWxD) mm 615x1065x230 615x1380x230									
Eiquid inches mm 1/4 (ø6.35)						3/8 (ø9.52)				
Pipe Gas inches mm				1/2 (ø12.7) 5/8 (ø15.88)						
CONTRECTIONS	Drain piping		VP-20							
Net weight		kg		29			39			



Electric VRF, ECOi

Controller Options

Wireless remote controller



RCS-BH80BG.WL

Simplified remote controller



RCS-KR1EG



SPW-FMR74GXH56B SPW-FMR94GXH56B SPW-FMR124GXH56B SPW-FMR164GXH56B SPW-FMR184GXH56B SPW-FMR254GXH56B

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



Controller Options

Timer remote controller



RCS-TM80BG

- 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



Indoor unit s	pecifications									
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 conseits		kW	2,2 2,8		3,6	4,5	5,6	7,1		
cooling capacity		BTU/h	7500 9800		12000	15000	19000	24000		
Heating consoits		kW	2,5	3,2	4,2	5,0	6,3	8,0		
Heating capacity		BTU/h	8500 11000		14000	17000	21000	27000		
Power input	Cooling	kW	0,051/0,0	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	Cooling	А	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		
amperes	Heating	А	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		
Туре					Siroc	co fan				
Fan motor Airflow rate (H/M/L) m ³ /min		M/L) m³/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 leve	el (H/M/L)	dB(A)	44/4	1/39	50/46/40	49/46/42	49/46/42	52/49/46		
Pressure sound le	ure sound level (H/M/L) dB(A) 33/30/28 39/35/29 38/35/31 39/36/				39/36/31	41/38/35				
Dimensions	(HxWxD)	mm	mm 616x904x229 616x1219x229							
Liquid inches mm				1/4 (ø6.35)			3/8 (ø9.52)			
Connections Gas inches mm		inches mm	1/2 (ø12.7) 5/8 (ø15.88)							
connections	Drain piping				VP-20					
Net weight		kg		21			28			



Electric VRF, ECOi

Wireless remote controller







RCS-BH80BG.WL



RCS-KR1EG



SPW-GU055XH SPW-GU075XH SPW-GU105XH

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







RCS-TM80BG

- Integration of heat recovery ventilation and DX coil technology for optimum air temperature control
- The DX coil can be connected to all GHP outdoor units
- Humidifying function available as an option
- Easy to clean filter
- Compact design

- Humidifier and filter option
- Heat recovery: Solenoid valve kit is required for each unit
- Heat pump: RAP kit is required for each unit



Indoor unit speci	fications								
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 treat-	Cooling	kW	5,3 (1,7)*1	8,2 (2,6)*1	10,7 (3,4)*1				
ment capacity	Heating	kW	6,5 (2,3)*1	9,8 (3,5)*1	12,6 (4,6)*1				
Enthalpy Exchange	Cooling	%		59					
Efficiency	Heating	%	67						
Temp exchange efficie	ncy			75					
Equivalant apoling oor	positi i	kW	3,6	5,6	7,3				
	Jacity	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				
rower input	Heating	kW	0,532/0,532/0,532	0,737/0,737/0,737	0,798/0,798/0,798				
Rupping ampores	Cooling	А	2,5/2,4/2,3	3,4/3,2/3,1	3,7/3,5/3,4				
	Heating	А	2,5/2,4/2,3	3,4/3,2/3,1	3,7/3,5/3,4				
	Туре			Sirocco fan					
Ean motor	External static pressure-return air	Pa	183 (170)	221 (188)	135 (88)				
Fall IIIULUI	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)				
	Height mm		425	45	50				
Dimensions	Width mm		1785	19	03				
	Depth mm		1000	1120	1220				
	Liquid	inches mm		1/4 (ø6.35)					
Pipe connections	Gas	inches mm		1/2 (ø12.7)					
	Drain piping			VP-25					
Connection duct diam	eter	mm		300					
Net weight		kg	134	153	168				
The values in () for the	external static pressure and operating	sound are fo	r use of booster cable.						

*1: Heat recovery capacity by heat exchanger.



Electric VRF, ECOi

Controller Options

Wireless remote controller



- 20



RCS-BH80BG.WL

Simplified remote controller



RCS-KR1EG

CFR/CFR-PHE

The CFR-PHE uses a unique purifying Bioxigen system to produce negative ions; this can reduce pollutants by up to 85% whilst significantly improving air quality within most environments.



CFRS-AHU CFRR-AHU

SANYO's high quality engineering and components have allowed the development of highly energy efficient air handling systems.

High efficiency heat exchanger and easy to clean filters

The CFR-PHE unit structure is constructed from Aluzink frame work and galvanised steel with 20mm thick fire resistant acoustic insulation, reducing both weight and sound levels to a minimum.

The system is supplied with ducted spigots which can be positioned either at the front or side of the unit to ease installation.

The high efficiency low pressure loss total heat exchanger is made from specially treated paper to enable the unit to be as efficient as 76% during normal operation. This allows system to recover both latent and sensible heat.

The CFRS-AHU series feature a cross-flow aluminium plate exchanger (medium efficiency of 55%). The CFRR-AHU series is equipped with absorption or rotary exchanger which allows the recovery of both sensible and latent heat, providing maximum efficiencies of 70%.

The cooling or heating is managed by a direct expansion coil using R410A refrigerant which enables higher efficiencies to be reached.

IVIOUEI GEN/ GEN-PHE		33	55	110	1/5	220	255	320	410
Nominal air flow *	m³/hr	300	620	920	1580	1850	2250	2950	3920
External static pressure	ра	45	55	65	70	77	80	100	100
Sound pressure **	dB(A)	43	51	50	53	52	51	54	56
Fans									
Power input	W	184	180	294	700	700	700	1100	1500
Absorbed power	A	0,75	1,8	2,2	4,4	4,8	5,2	8,3	5
Fan speeds	no		1			3			2
Insulation class					l	F			
Electrical supply	V/ph/Hz				230/1/50				400/3/50
Bioxigen Elements (PHE only)									
Number of elements		1:	кС		2 x C			2 x F	
Electrical supply	V/ph/Hz				230/	/1/50			
Power in	W	4	,5		9			12	
Filter					31	EU			
Paper Heat Exchanger	CFR-PHE								
Temperature Efficiency heating ***	Temp.	76%	74%	72%	68%	73%	75%	70%	66%
Enthalpy Efficiency heating ***	Entha.	62%	60%	56%	55%	65%	67%	62%	56%
Temperature Efficiency cooling ****	Temp.	62%	60%	58%	54%	59%	62%	56%	52%
Enthalpy Efficiency cooling ****	Entha.	60%	58%	55%	53%	59%	62%	55%	51%

* Nominal air flow

Indoor unit specific Model CFR/ 0 Nominal air f External stat

** Sound pressure 1,5m from the unit in free field

*** Data referred to Outdoor Temp. -5°C - 80% RH room condition 20°C - 50% RH **** Data referred to Outdoor Temp. 32°C - 50% RH room condition 26°C - 50% RH

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

ISO 14001:2001 does not apply

Model		500	1000	1500	2000
Nominal air flow	m³/h	5000	10000	15000	20000
Air flow range	m³/h	3500 + 5000	7000 + 10000	11000 + 15000	16000 + 20000
External static pressure	Pa	250	250	250	250
Electrical supply V	, ph, Hz		400,	3, 50	
Total max absorbed current	А	11	18,5	25,7	39
Filters					
Pleated filters efficiency (supply air and exhaust air)		G4	G4	G4	G4
Bag filters efficiency (supply air)		F7	F7	F7	F7

Electric VRF, ECOi







XM Type



0..... Õ Ō 1060 (suspe on bolt pitch) 1000 1190 (ceiling opening dir 20 \bigcirc 1 1230

LDR Type



Electric VRF, ECOi

Dimensions: mm











Dimensions: n 74~184 0 70 130 Ø 11 $\Theta \Theta \Theta$ Inspection por (field supply) +O 364~604
 Refrigerant piping
 9~18
 ø 6.35 (flared)

 (liquid pipes)
 25~60
 ø 9.52 (flared)

 Refrigerant piping
 9~18
 ø 12.7 (flared)
 Refrigerant piping (gas pipes) 1442 lange external dimensi 25~60 ø 15.88 (flared Drain piping connection port VP25 (out ø 32) 200 flexible hose accessory ovver drain port VP25 (outer ø 32). Suspension fitting (4-12 x 37 slot) Power supply inlet (2-ø 30) 0 utside air inlet (ø150 irregular opening) Discharge around duct adapter flange (3-ø 200 뉵 Inspection lid 8 Electric equipment box Wind shielding panel Suction angle duct flange (field supply) Inspection (field surro

Drain port VP20 (inner ø26, hose accessory Drain for left piping Upper piping outlet port (knock-out hole) Right piping outlet port (knock-out hole) Drain left piping outlet port (knock-out hole) Power supply entry port (knock-out hole ø40) Dever supply entry port (knock-out hole ø40) note controller wiring inlet port note control receiver mounting part 12~18 25 36~48 type type type <u>чуне</u> <u>туре</u> <u>туре</u> <u>туре</u> <u>A</u> (body) 910 1180 1595 <u>B</u>(suspension bolt pitch) 855 1125 1540 <u>B</u> Refrigerant piping 012.7 015.88 015.88 <u>B</u> Refrigerant piping Refrigerant piping (liquid pipes)
 Ø6.35
 Ø9.52
 Ø9.52

Т Туре









U Type

Electric VRF, ECOi

Dimensions: mm







KR Type Dimensions: mm 7~18 type 25 type Liquid pipe ø6.35 (Length: Approx. 470 mm)) Liquid pipe ø9.52 (Length: Approx. 570 mm) C) Equilibrium opped as a Length: Approx. 470 mm)
 C) Gas pipe ø12.7 (Length: Approx. 400 mm)
 C) Drain hose VP13 (Length: Approx. 450 mm)
 Gas pipe ø15.88 (Length: Approx. 570 mm)
 Drain hose VP13 (Length: Approx. 450 mm)
 Installation fitting Installation fitting 5 Fitting fixing hole (ø5 hole or 5 x 13 slot) Fitting fixing hole (ø5 hole or 5 x 13 slot) 6 Installation fitting piping, wiring inlet (ø80) Installation fitting piping, wiring inlet (ø80) ···? 30 60 30 30 47 40 30 90 75 <u>60</u> <u>75</u> <u>90</u> 0 0 3 × H^{147.5} à 0 ග් 6 View in direction of arrow Z View in direction of arrow Z

FR Type





FMR Type **Concealed Floor Standing type** Indoor A B C D E F unit 7~12 type 904 692 672 665 500 86 16 type 18 type 1219 1007 1002 980 900 51 25 type 170 184.5 . 166 C(inner dimension) E (hole pitch = 100) LF-+ + + + + + -<u></u> 3 40 4 30 B-60

Electric VRF, ECOi



 4 x ø12 holes (for floor fixing) Electric equipment box



CFR Type



Notes:

- The purifyng system BIOXIGEN® is only available for CFR-PHE models.
- The electric heater is only available for "E" version: for CFR-E models the electric heater is internal, for CFR-PHE models an external section is provided.
- The post-heating internal water coil is only available for "W" version (not available for sizes 33-55).

Madal		D	0	D	D1	02	г	-	E1	0	01(1)	N//2)	NI(2)	Y	Ø	<i>a</i> :	Version											
IVIOUEI	A	D	L.	U	DI	UZ	E	г	FI	G	GI(I)	IVI(Z)	IN(Z)			Ø	Base	"E"	"W"									
CFR 33 CFR-PHE 33	990	290	750	/	/	/	/	/	/	/	/	/ 250	/ 380	/	160	460	41	42,5 46	/									
CFR 55	000	200	750	,	,	,	,	,	,	,	/ -	/	/	,	200	355	45	46,5	,									
CFR-PHE 55	330	230	/ 30	/	/	/	/	/	/	/		250	380		200			50	/									
CFR 110	11/0	/10	960	260	05	115	210	220	115	200	2/4	/	/	50	/	/	80	82,5	02 E									
CFR-PHE 110	1140	410	000	200	90	115	210	220	115	200	3/4	250	450					88	02,0									
CFR 175	1200	500	960	200	77	77	210	225	100	255	2//	/	/	- 75	/	/	125	127,5	127,5									
CFR-PHE 175	1300	500	000	290	11	11	310	220	109	200	3/4	250	430					133										
CFR 220	1200	E00	060	210	07	07	220	225	120	255	2/4	55 2/4	/	/	75	,	,	120	140,5	140 5								
CFR-PHE 220	1300	500	900	310	0/	0/	330	220	129	200	3/4	250	480	75	/	/	130	146	140,0									
CFR 255	1650	600	1220	410	01	01	410	200	152	255 274	255 2/4	2/4	255 2/4	5 2/1	3//	/	/	162	,	,	160	165	165					
CFR-PHE 255	1000	000	1230	410	91	91	410	200	152	200	3/4	250	570	102	/	/	100	173	100									
CFR 320	1050	c00	1220	410	01	01	410	221	105	200	0.14	2/4	200 2/4	200 2/4	00 0/4	000 0/4	200 2/4	0/4	2/4	2/4	/	/	105	,	,	174	179	170
CFR-PHE 320	1000	600	1230	410	91	91	410	321	135	280	3/4	250	50 570 125	125	/	/	174	187	1 1/9									
CFR 410	1750	600	1220	410	116	116	410	221	160	200	2/4	/	/	105 /	,	100	195	10C E										
CFR-PHE 410	1750	000	1330	410	110	110	410	JZT	100	200	3/4	250	570	120	/	/	130	203	130,0									

Only for "W" version
 Only for "CFR-PHE-E" models (with electric heater in external section)

Electric VRF, ECOi



CFR 110 ÷ 410 CFR-PHE 110 ÷ 410 A wide variety of control options to meet the requirements of different applications.

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 Simplified remote con RCS-BH80BG.WL RCS-TRP80BG.WL RCS-TRP80BG.WL RCS-XM18BG.WL		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		1			
ON/OFF	\checkmark	\checkmark	\checkmark	_	
Mode setting	\checkmark	✓	✓	_	
Fan speed setting	✓	✓	✓	_	
Temperature setting	✓	✓	✓	_	
Air flow direction	✓ *1	✓ *1	✓ *1	_	
Permit/Prohibit switching			_	-	
Weekly program	\checkmark	_	_	✓	

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

Operation system	Operation system Centralised control systems					
Poquiromonto	Operation with various function	Only ON/OFF operation from	Simplified charge ratio for each tenant			
Requirements	from central station	central station	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	\checkmark	\checkmark	\checkmark	✓		
Mode setting	\checkmark	_	\checkmark	\checkmark		
Fan speed setting	✓		✓	✓		
Temperature setting	✓	_	✓	✓		
Air flow direction	✓	_	\checkmark	✓		
Permit/Prohibit switching	√ *1	\checkmark	√ *1	✓ *1		
Weekly program	_	_	\checkmark	✓		
	1			anifications subject to shange 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-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-SB80BG.WL RCS-BH80BG.WL RCS-BH80BG.WL RCS-TRP80BG.WL RCS-SH1BG RCS-KH1EG	As required	-	S	yste



Timer remote controller (RCS-TM80BG)



Dimensions H 120 x W 120 x D 16 mm

Basic remote controller ON/OFF

- Operation mode changeover (Cooling, Heating, Dry, Auto, Fan)
- Temperature setting (Cooling/Dry: 18-30 deg Heating: 16-30 deg)
- Fan speed setting H/ M/ L and 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



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)

Simplified remote controller (RCS-KR1EG)



Dimensions H 120 x W 70 x D 16 mm

Remote sensor (ART-K45AGB)



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

- 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
- 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.

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).
- 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. (connection 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)



Connection example 1

(power supply from the indoor unit)

H 120 x W 120 x D 16 mm

Dimensions

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 200m from the indoor unit) 2. System controller (power supply wiring length: within 100m 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.)

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

Web Interface Device (SHA-KW64EG)



- 50 daily timers with 50 actions each day, 50 weekly timers 50 weekly timers, 1 holiday timer, 5 special day timers, for each tenant



Connection example 2 (power supply from the central controller)



- 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



Functions

- Access and operation by Web browser
- Icon display
- Language codes available in English, French, German, Italian, Portuguese, Spanish
- Individual control possible (max. 64 indoor units) ON/OFF operation mode, set temperature, fan speed, Flap set, timer on/off
- alarm code monitoring, prohibit Remote Control
- Each Tenant (Zone) control
- All Units control
- Alarm Log
- Mail Sent Log
- Program Timer set
- Prohibit Remote Control set
- IP ADDRESS could be changed via Internet
- Note: it is recommended to install a remote controller or a system controller on site to enable local control if IT network experiance a problem

System controller (SHA-KC64AGB)



Dimensions Power supply I/O part 160 x W 160 x D 21 + 69 (embedding dimension) mm AC 220 to 240 V 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, max 1A)

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 30V, 0.5A)

 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 (Limitations can be user defined)

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

Communication adaptor (SHA-KA128AGB)



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. Including csv-file export via CF-card (supplementary accessory).

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"





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 and $\ensuremath{\mathsf{STAIMS}}$

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



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



All ON/OFF

Power supply Single phase 100/200V (50/60 Hz), 18W Batch operation/Batch stop (non-voltage contact/DC 24V, pulse signal) Cooling/Heating (non-voltage contact/static signal) Demand 1/2 (non-voltage contact/ static signal) (Local stop by switching) Operation output (non-voltage contact) Alarm output (non-voltage contact) Wiring length Indoor/Outdoor operation lines: Total length 1km Digital signal:

- 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)

100m or shorter



 Control and status monitoring is possible for individual indoor unit (or any external electrical device up to 250V AC, 10A) 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, or 0 to 140 Ohm

LonWorks interface (SHA-LN16UGB)



Signal output board (ACC-SG-AGB)



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



- 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			
		Start/stop			
	Settings for	Temp. setting			
A/C unit settings	each group of	Operation mode			
communicator	indoor units	Option 1 settings*			
commanioacor		Option 2 settings*			
	Settings for all units	Emergency stop			
		Start/stop			
		Temp setting			
		Operation mode			
		Option 1 settings*			
A/C unit status notificat	ions made to	Option 2 settings*			
	Cator	Alarm status			
		Indoor units with active alarms			
		Room temperature			
		A/C unit status			
Configuration proportion		Transmission intervals settings			
configuration properties		Minimum time secured for transmission			
* Select two of the follow	ing: remote controller pro	hibit fan speed setting air direction setting			

filter sign reset.

- Defrost, heating, cooling and thermostat ON signal can be put out to the outside.
- Signal type (2 types): Voltage specification (max. 240V AC, 5A or 30V DC, 5A), non-voltage specification

AMY Software An air conditioner central control system for buildings



Functions				
	Unit ON/OFF			
	Mode-change	_		
	Room temperature setting	_		
A/C unit acttings	Fan speed setting			
A/C unit settings	Flap setting			
	Central control setting			
	Filter-sign clear	_		
	Alarm reset	1000	12.2070-0	
	Unit ON/OFF status			
	Operation mode		Catholic .	Appropriate Contract of Second Law
	Setting temperature	1.2	L'ATTAL	With lard engine if least land.
	Fan speed status	1	and the second s	
A /C unit status	Flap status	-	A Benchetisser of PC Sally	Contraction of the second seco
A/C UNIT STATUS	Central control setting	1	8. Second Settings	the fill afting flast.
	Filter-sign situation	1	E. Net So and Borning .	Bis bis take to secrify
	Correct/incorrect status			
	Alarm code	1 3	8,607.	And the others.
	Charge calculation rate			

STAIMS Basic software TECS-5000KG

SANYO Total Air conditioning Intelligent Management System Up to 1024 indoor units can be controlled by one PC

Functions for basic software

- Standard remote control for all indoor units.
- Many 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.

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

TECS-5000AG 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



• Data of last 365 days will be stored.

CSV type file.

TECS-5000GG 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.

STAIMS is suitable for large shopping centres 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



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Software environment

Windows 2000.

Pack 6 or above Browser Internet Explorer 4.0 or above

Windows NT 4.0 Service

Electric VRF, ECOi



communication adapter SHA-KA128AG

TECS-5000BG for BACnet interface

Connectable to BMS system

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

TECS-5000WG for Web application

Web access and control from remote station

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







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.

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), Excel and PDF export
- Detailed wiring and pipework diagram



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



Electric VRF, ECOi





420

520

220

125

B

Electric VRF, ECOi





Indicates conformation with EC Directives



ISO 9001: 2001



ISO 14001: 2001 Certificate Number: JQ116B Certificate Number: ECOOJ0303-33

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

Rating Conditions

The cooling and heating capacities are based on the following conditions: Cooling: Indoor temperature 27°C DB / 19°C WB, Outdoor temperature 35°C DB / 24° C WB. Heating: Indoor temperature 20°C DB, Outdoor Temperature 7°C DB.



www.sanyoaircon.com

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