

FULL DC INVERTER SYSTEMS

INDIVIDUAL AND MODULAR DESIGN
& FLEXIBLE COMBINATION

COMMERCIAL AIR CONDITIONERS SDV4 2011/2012



 **sinclair**
AIR CONDITIONING

WELCOME TO THE WORLD OF SINCLAIR AIR CONDITIONERS

Company operation and procedures comply with ISO 9001. SINCLAIR products comply with European standards, which guarantee safe operation. SINCLAIR represents high standard of quality, great performance with modern design.

SINCLAIR SDV4 commercial system provides complex solution for air conditioning of entire buildings. Wide range of capacities and models of indoor units enable countless combinations which will meet any of your needs.

SDV4 model line uses only environmentally friendly, CFC free refrigerant R-410A which prevents ozone layer depletion by CFCs. This refrigerant also improves energy efficiency.





SDV4 UNITS LINE UP

INDOOR UNITS

Model (kW)	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0
Four-way Cassette (Compact)	•	•	•	•				
Four-way Cassette					•	•	•	•
Duct	•	•	•	•	•	•	•	•
High Static Pressure Duct								
Fresh Air Processing Duct Unit								
Ceiling & Floor			•	•	•	•	•	•
Wall -mounted	•	•	•	•	•			

OUTDOOR UNITS

Model (kW)	10.5	12.0	14.0	16.0
Small unit	•	•	•	•
Combinable unit				
NON-combinable unit				



10.0	11.2	12.5	14.0	20.0	25.0	28.0	model
							SDV4-xxCA
•	•		•				SDV4-xxC4A
	•		•				SDV4-xxDA
				•	•	•	SDV4-xxxDHA
		•	•	•	•	•	SDV4-xxxDFA
	•		•				SDV4-xxFA
							SDV4-xxHA-B

25.2/28.0	33.5/40.0/45.0	53.0/56.0	model
			SDV4-xxxEA
•	•		SDV4-xxxEA
•	•	•	SDV4-xxxEai



Introduction

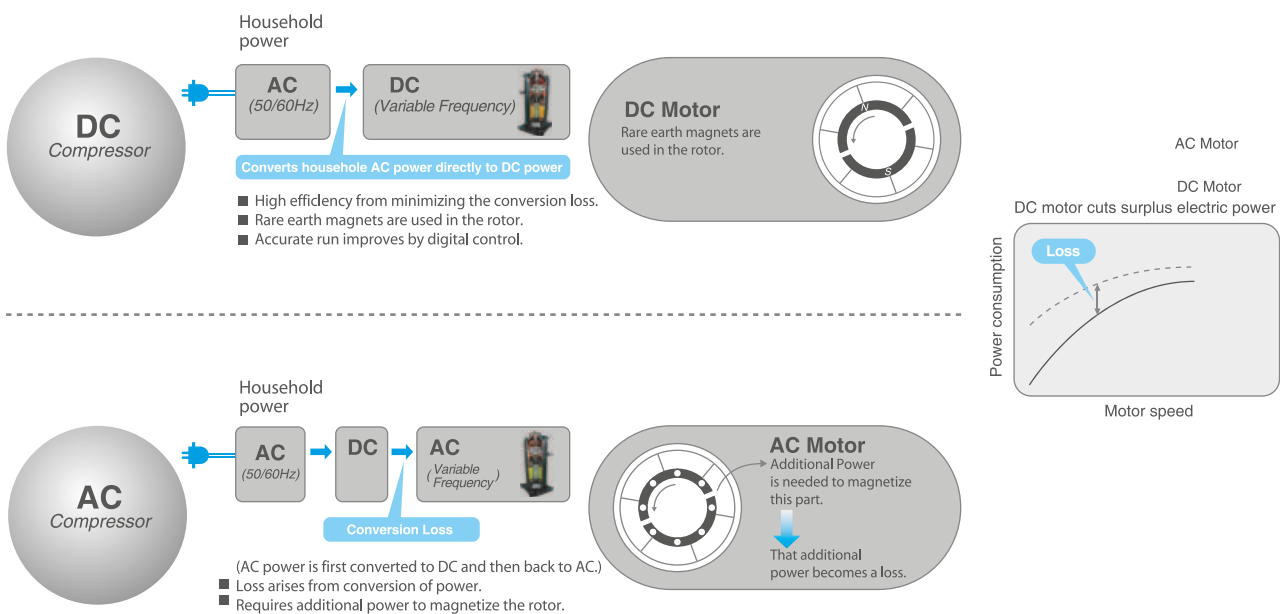
Features

- Wide product range, including DC inverter smart series and DC inverter smart series (individual).
- Wide adjustment range, high level and modern nature design. Sinclair DC inverter A/C can create perfect living conditions.
- Adopts DC inverter technology.
- Energy saving

DC Compressor

DC COMPRESSOR IS ADOPTED FOR IMPROVING EFFICIENCY

(Less energy consumption saves your electricity charges.)

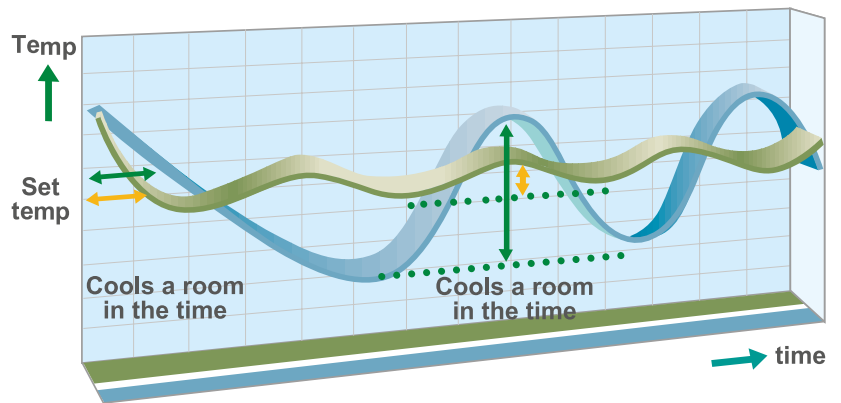




Low noise and comfortable

At startup, full power is used to achieve the room temperature setting quickly. Then, the capacity is adjusted according to the outdoor temperature changes and subtle indoor load changes to achieve fine-control of the room temperature setting.

Non-inverter type air conditioners must be switched on and off repeatedly, causing large fluctuations of the room temperature.



cooling operation

■ Inverter power control ■ Non-inverter type air conditioner

Select the best indoor and universal controller

Select the best indoor unit to match room requirement and design needs. We have 7 types of indoor units to choose from, including 4-way cassette, ceiling and floor, wall-mounted, duct and so on.

Diversification and universal controller for DC inverter air conditioners, including wireless remote controller, wired controller, weekly timer, central controller and network controller.



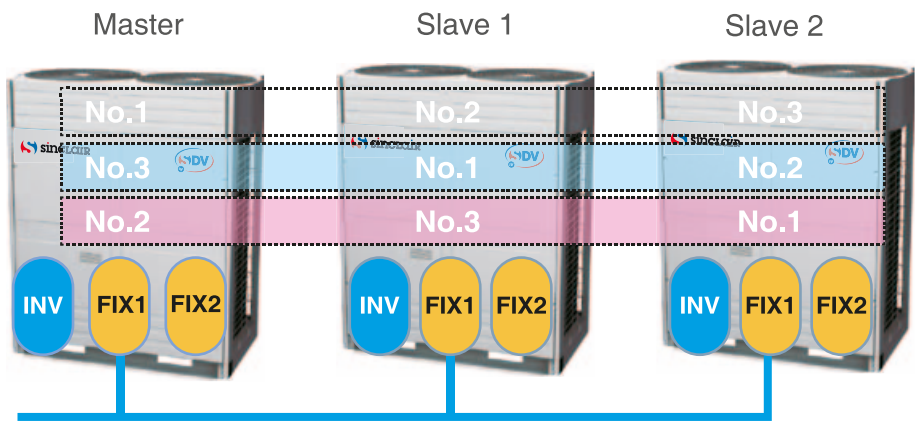


New SDV4 system

Intelligent Management

RECYCLE OPERATION OF OUTDOOR UNITS

Slave 1 error, forbid run, come into standby state, the last modules can still work.



In one combination, any of outdoor unit can run as the master outdoor unit and realize the similar lifespan among the ODS in the combination.

OUTDOOR MODULE BACKUP OPERATION

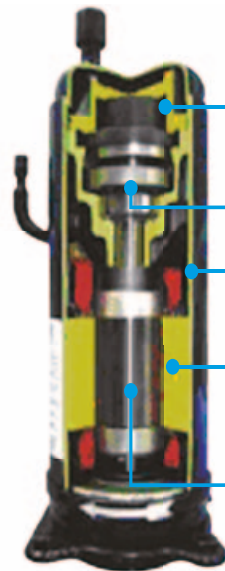


Slave 1 error, forbid run, come into standby state, the last modules can still work.

High Efficiency

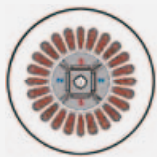
HIGH EFFICIENCY DC INVERTER COMPRESSOR, SAVES POWER 25%

DC adjustable-speed save 25% electric fee than AC adjustable-speed



- New structure, enhanced mid frequency performance
- R410A special new scroll tooth-like form
- By compact design, weight reduced 50%.
- Elaborate design compressor magnet arrange, magnet flux more centralized.
- Adopt advanced technical DC Inv. motor, motor including thulium Nd need not additional current.

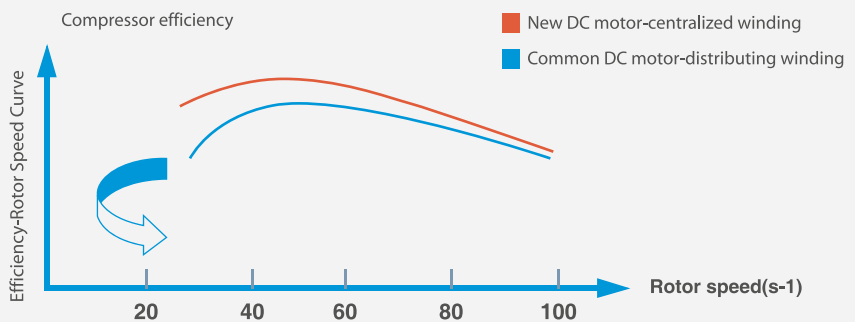
The AC load ratio of building is 30%-75%, the area is 55%, most of the AC runs in the mid load, so the mid load operation ratio control the whole year AC running charge.



Centralizing winding



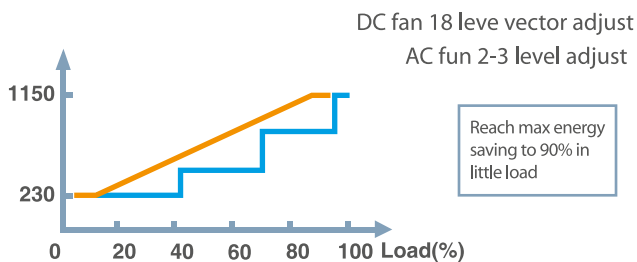
Distributing winding



HIGH EFFICIENCY DC INVERTER MOTOR, SAVES POWER 50%

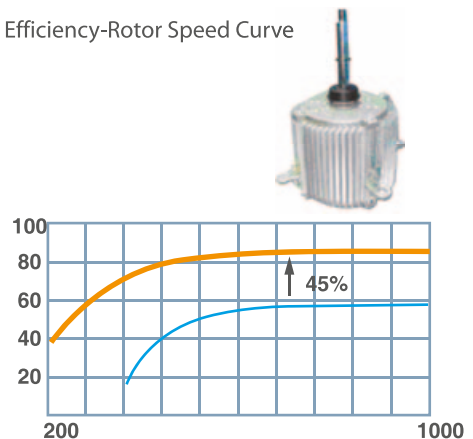
Common VRF unit uses low cost & efficiency AC motor, the energy consumption is 1 times of DC motor, and it only has 2-3 level adjust the max energy saving is only 50%-60%

Load-Rev curve



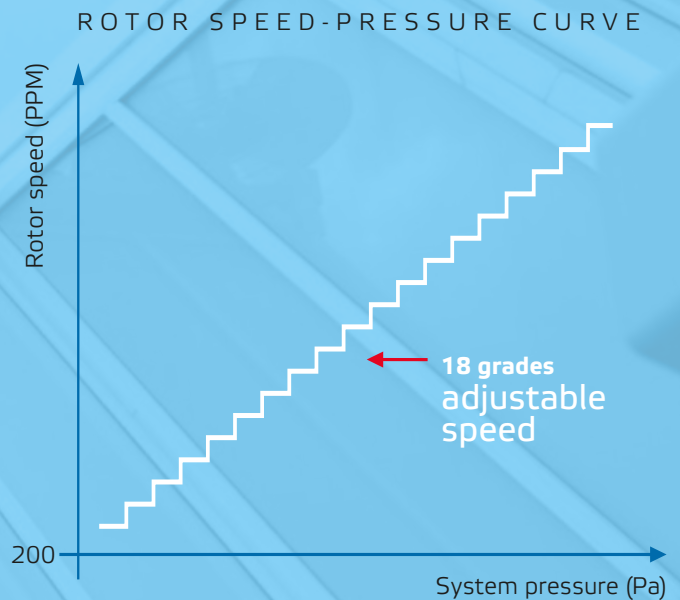
Common VRF unit use low cost & efficiency AC motor, the energy consumption is 1 times of DC motor, and it only has 2-3 level adjust.the max energy saving is only 50%-60%

Efficiency-Rotor Speed Curve



New SDV4 system

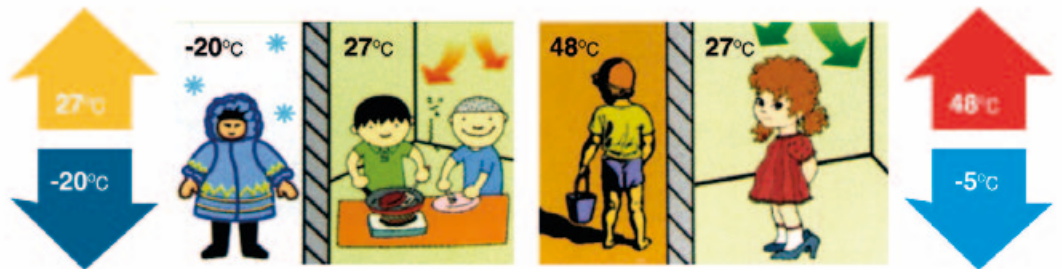
Motor rotor speed waves among $\pm 5r$ and can rapidly match DC Inv. Compressor to output and enhance efficiency in part load.



Enhanced Rated Heat Capacity

WIDE OPERATION RANGE

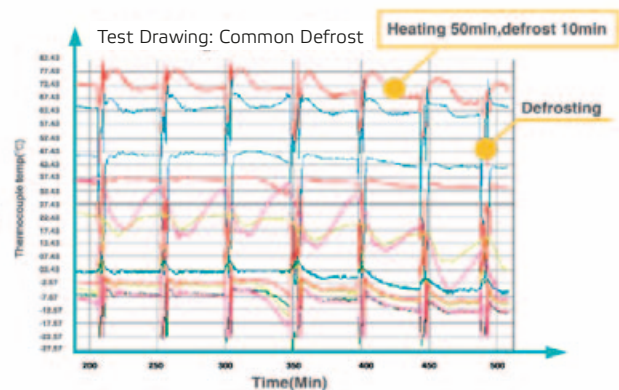
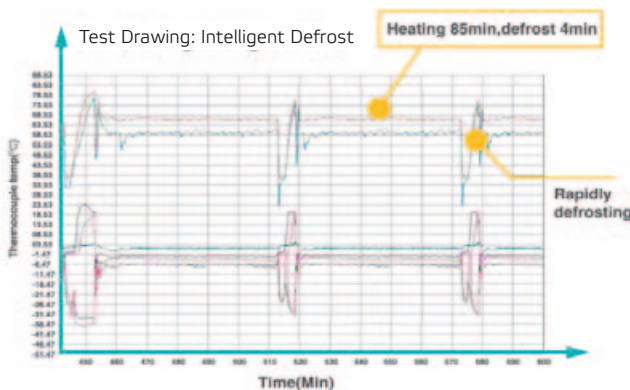
No matter in the 48°C summer, or in -20°C winter, SDV4 assures the well running to make you feel Spring All Year Round.



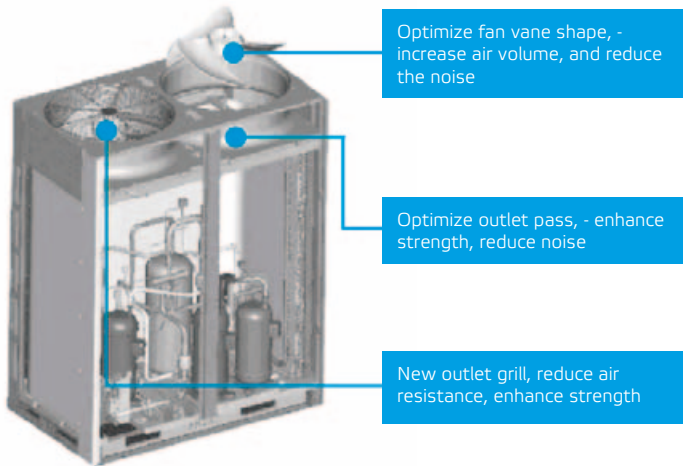
Intelligent defrost

System will adjust defrost according to the main operation parameters but not fixed the defrost time.

SDV4 INDIVIDUAL INTELLIGENT DEFROST IMPROVES THE HEATING CAPACITY



TAKE 45KW UNIT (16HP) FOR EXAMPLE



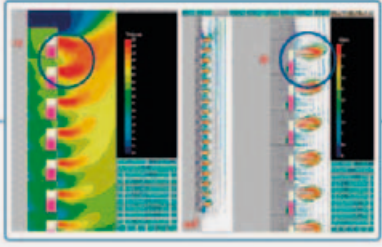
Silent Operation

IMPROVED AIR VOLUME



- Increase the static pressure and decrease the loss of pressure.
- Decrease the input and decrease the noise level.

OUTDOOR UNIT STATIC PRESSURE UP TO 80PA, WHILST ITS SOUND PRESSURE IS KEPT

The static pressure is not enough. And fan speed is too low, the air will be short connect for high floor units.



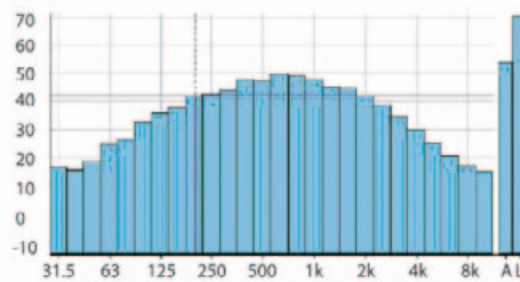
Increase the fan speed after increased static pressure and the air have no short connect

AUTOSPECTRUM (SIGNAL2)-INPUT2 (REAL)\CPB ANALYZER

Environment friendly technology

[dB(A)/20U Pa]



Cursor values
X:200.00 HZ
Y:41.666 dB(A)/20U
Total:57.026 dB(A)

SDV4 28kW noise testing data!

SOUND LEVEL

unit:dB(A)	25,2kW	28kW	33,5kW	40kW	45kW
SDVIII	60	60	62	62	62
SDV4	57	57	58	60	60
Decrease	-3	-3	-4	-2	-2



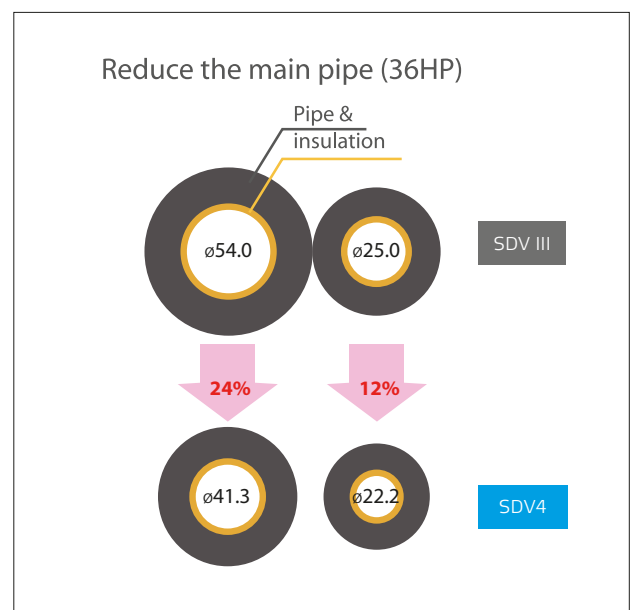
New SDV4 system

More flexible design

SMALLER PIPE DIAMETER

SDV4 reduces the size of the main pipe, greatly reduces the cost of purchasing refrigerant pipe and saves the space.

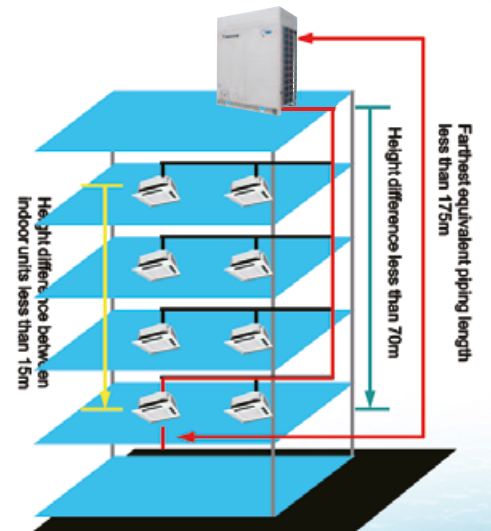
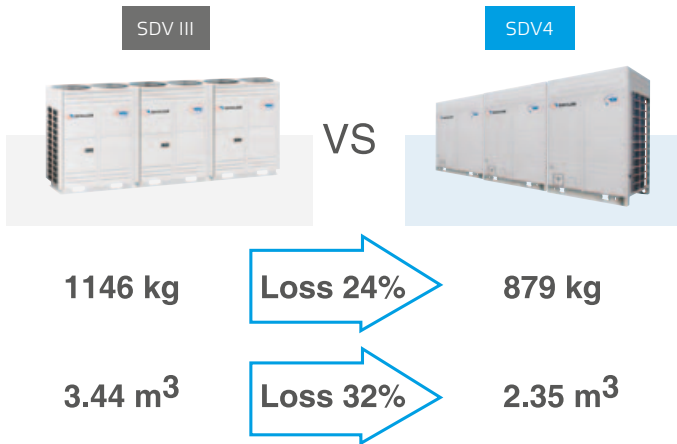
Pipe diameter (mm)			
TYPE		SDVIII	SDV4
8HP	L	ø12.7	ø9.5
	G	ø28.6	ø19.1
10/12HP	L	ø12.7	ø9.5
	G	ø28.6	ø22.2
14/16HP	L	ø15.9	ø12.7
	G	ø38.0	ø28.6



More easy installation

- SDV4 designed by the special control software, combines CFD to simulate heat-exchange.
- Less space, lighter weight and easy to maintain.
- Longer connecting pipe, higher fall, flexible use for various buildings.

TAKE 101KW (36HP) FOR EXAMPLE



More combinations



Flexible outdoor unit combination

The capacity range can be from 25.2kW (8HP) to 180kW (64HP) by outdoor different modular combination:

NEW COMBINATION IS MORE RATIONAL

Capacity (HP)	Model	Recommended combinations						Max. indoor units nos.
		8	10	12	14	16	models	
8	SDV4-252EA	•					SDV4-252EA	13
10	SDV4-280EA		•				SDV4-280EA	16
12	SDV4-335EA			•			SDV4-335EA	16
14	SDV4-400EA				•		SDV4-400EA	16
16	SDV4-450EA					•	SDV4-450EA	20
18	SDV4-532EA	•	•				SDV4-252EA+SDV4-280EA	20
20	SDV4-560EA		••				SDV4-280EA+SDV4-280EA	24
22	SDV4-615EA		•	•			SDV4-280EA+SDV4-335EA	24
24	SDV4-680EA		•		•		SDV4-280EA+SDV4-400EA	28
26	SDV4-730EA		•			•	SDV4-280EA+SDV4-450EA	28
28	SDV4-785EA				••		SDV4-400EA+SDV4-400EA	28
30	SDV4-850EA				•	•	SDV4-400EA+SDV4-450EA	32
32	SDV4-900EA					••	SDV4-450EA+SDV4-450EA	32
34	SDV4-960EA		••		•		SDV4-280EA+SDV4-280EA+SDV4-400EA	36
36	SDV4-1010EA		••			•	SDV4-280EA+SDV4-280EA+SDV4-450EA	36
38	SDV4-1065EA		•	•		•	SDV4-280EA+SDV4-335EA+SDV4-450EA	36
40	SDV4-1130EA		•		•	•	SDV4-280EA+SDV4-400EA+SDV4-450EA	42
42	SDV4-1180EA				•••		SDV4-400EA+SDV4-400EA+SDV4-400EA	42
44	SDV4-1235EA				••	•	SDV4-400EA+SDV4-400EA+SDV4-450EA	42
46	SDV4-1300EA				•	••	SDV4-400EA+SDV4-450EA+SDV4-450EA	48
48	SDV4-1350EA					•••	SDV4-450EA+SDV4-450EA+SDV4-450EA	48
50	SDV4-1432EA	•	•			••	SDV4-252EA+SDV4-280EA+SDV4-450EA+SDV4-450EA	54
52	SDV4-1460EA		••			••	SDV4-280EA+SDV4-280EA+SDV4-450EA+SDV4-450EA	54
54	SDV4-1515EA		•	•		••	SDV4-280EA+SDV4-335EA+SDV4-450EA+SDV4-450EA	54
56	SDV4-1580EA		•		•	••	SDV4-280EA+SDV4-400EA+SDV4-450EA+SDV4-450EA	58
58	SDV4-1630EA				•••	•	SDV4-280EA+SDV4-400EA+SDV4-450EA+SDV4-450EA	58
60	SDV4-1685EA				••	••	SDV4-400EA+SDV4-400EA+SDV4-450EA+SDV4-450EA	58
62	SDV4-1750EA				•	•••	SDV4-400EA+SDV4-450EA+SDV4-450EA+SDV4-450EA	64
64	SDV4-1800EA					••••	SDV4-450EA+SDV4-450EA+SDV4-450EA+SDV4-450EA	64

different combinations of SDVIII

More Operation Choices

- High static pressure mode
- 0 static pressure mode (default)
- Silence mode in night mode
- Heating priority mode (default)
- Cooling priority mode.
- First on-indoor units priority mode
- Heating only mode
- Cooling only mode

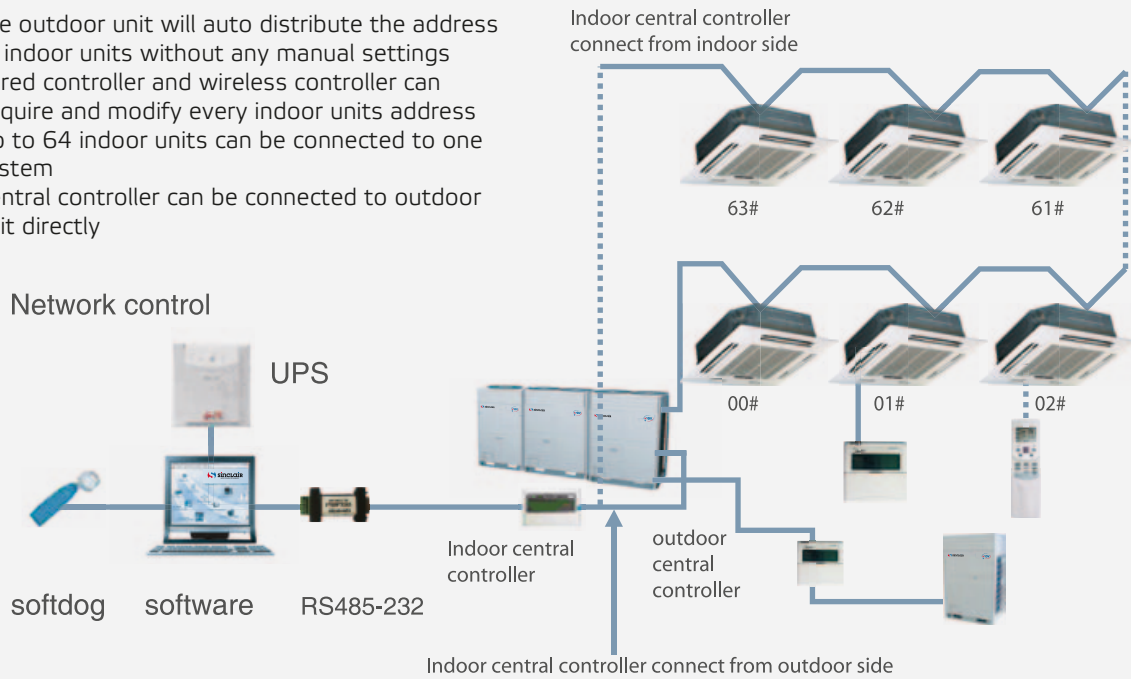


Intelligent control technology

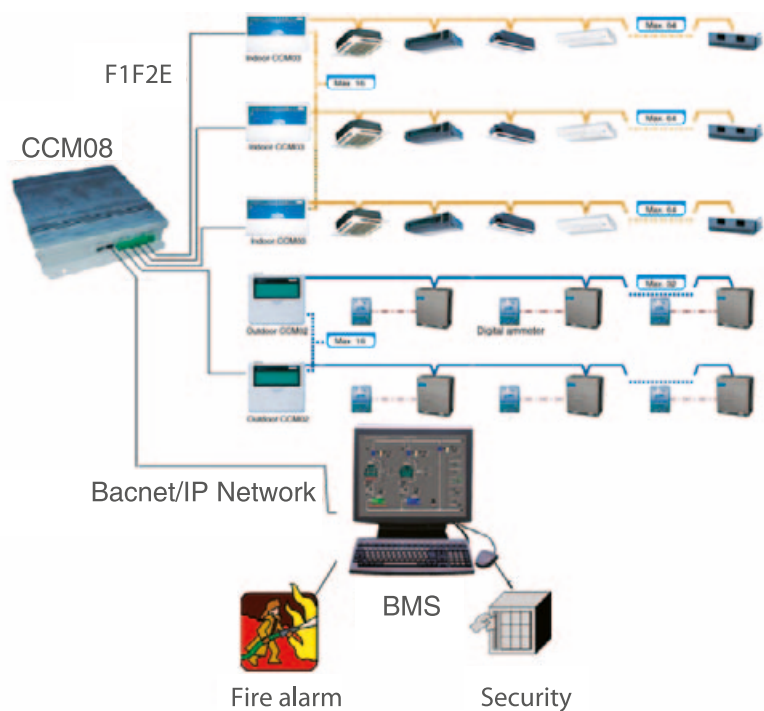


AUTO DISTRIBUTE ADDRESS

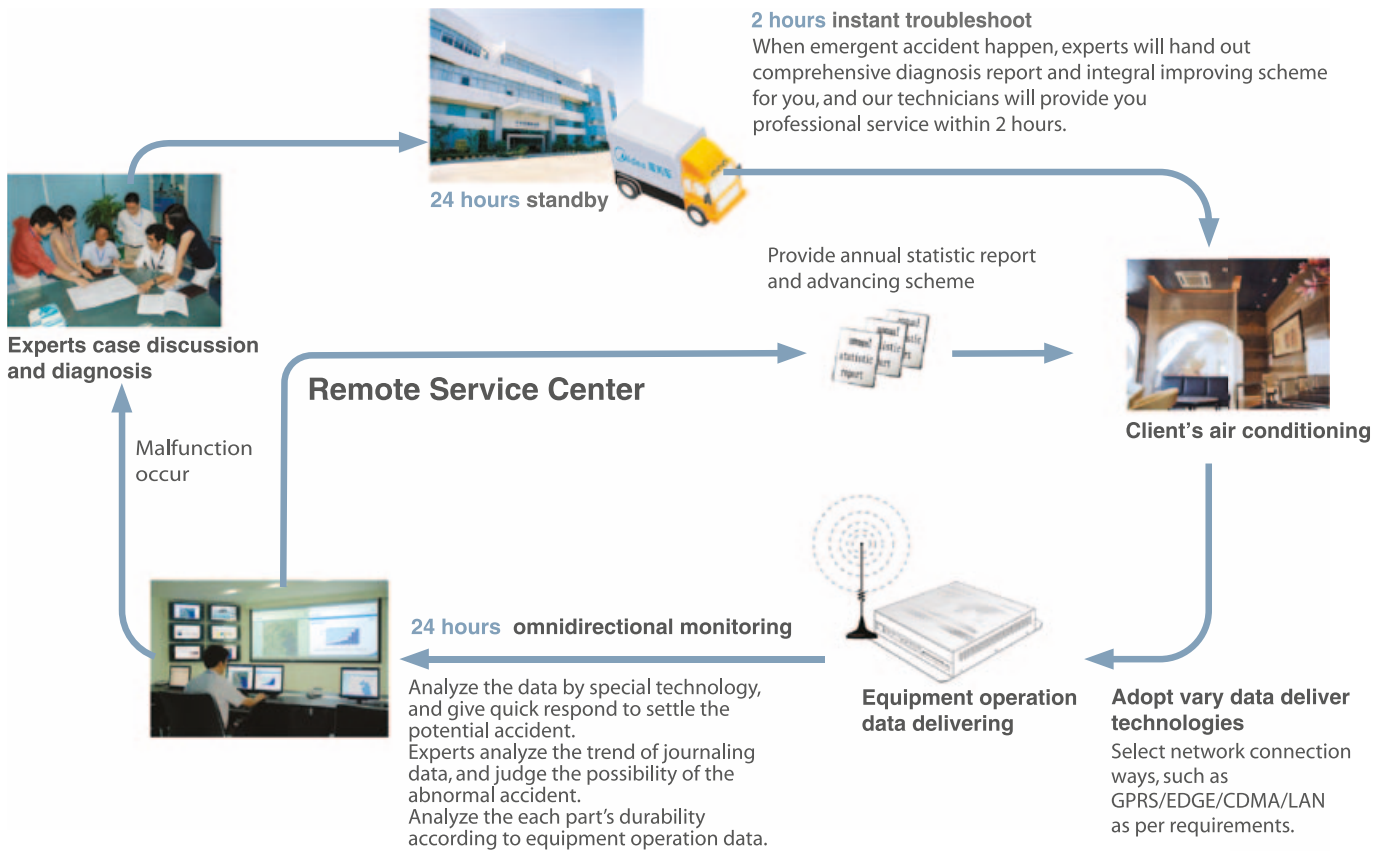
- The outdoor unit will auto distribute the address to indoor units without any manual settings
- Wired controller and wireless controller can enquire and modify every indoor units address
- Up to 64 indoor units can be connected to one system
- Central controller can be connected to outdoor unit directly



NETWORK CONTROL SYSTEM



Long-distance Monitor Technology



Specification

SMALL



10,5 / 12,0
14,0 / 16,0 kW

COMBINABLE



25,2 / 28 kW

33,5 / 40 / 45 kW

SMALL OUTDOOR UNIT

Model		SDV4-105EA	SDV4-120EA	SDV4-140EA	SDV4-160EA
Cooling Capacity	kW	10.5	12.0	14.0	16.0
Cooling Input Power	kW	3.26	3.94	4.08	4.60
Heating Capacity	kW	12.2	13.2	15.5	17.1
Heating Input Power	kW	3.38	3.52	4.12	4.83
Operating Range-Cooling	°C	-15°C~43°C	-15°C~48°C	-15°C~43°C	-15°C~43°C
Operating Range-Heating	°C	-15°C~21°C	-15°C~27°C	-15°C~21°C	-15°C~21°C
Power	V-ph-Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	380-415~3Ph,50Hz	380-415~3Ph,50Hz
Sound Pressure Level	dB(A)	57/54	57/54	57/54	57/54
Airflow	m ³ /h	6500/4800	6000	6500/4300	6500/4300
Vertical Pipe Length	m	Upper Outdoor: max.30m; Lower Outdoor: max.20m			
Actual Pipe Length	m	45	45	45	45
Equivalent Pipe Length	m	50	50	50	50
Total Pipe Length	m	100	100	100	100
Net Weight	kg	108	95	115	115
Gross Weight	kg	116	106	121	121
Net Dimension (WxHxD)	mm	940x1245x360	900x1327x400	940x1245x360	940x1245x360
Packing Dimension (WxHxD)	mm	1058x1380x438	1030x1456x435	1058x1380x438	1058x1380x438



COMBINABLE OUTDOOR UNIT

Model		SDV4-252EA	SDV4-280EA	SDV4-335EA	SDV4-400EA	SDV4-450EA
Cooling Capacity	kW	25.2	28	33.5	40.0	45.0
Cooling Input Power	kW	5.88	7.2	9.05	12.3	14.0
Heating Capacity	kW	27.0	31.5	37.5	45.0	50.0
Heating Input Power	kW	6.15	7.6	9.0	11.2	12.8
Operating Range-Cooling	°C	-5°C~48°C	-5°C~48°C	-5°C~48°C	-5°C~48°C	-5°C~48°C
Operating Range-Heating	°C	-20°C~21°C	-20°C~21°C	-20°C~21°C	-20°C~21°C	-20°C~21°C
Power	V-ph-Hz	380-415~3Ph,50Hz	380-415~3Ph,50Hz	380-415~3Ph,50Hz	380-415~3Ph,50Hz	380-415~3Ph,50Hz
Sound Pressure Level	dB(A)	57	57	58	60	60
Airflow	m ³ /h	11000	11000	12500	15000	15000
Vertical Pipe Length	m	Upper Outdoor: max.70m; Lower Outdoor: max.50m				
Actual Pipe Length	m	150	150	150	150	150
Equivalent Pipe Length	m	175	175	175	175	175
Total Pipe Length	m	500	500	500	500	500
Net Weight	kg	245	245	285	325	325
Gross Weight	kg	260	260	305	355	355
Net Dimension (WxHxD)	mm	980x1615x765	980x1615x765	980x1615x765	1290x1615x756	1290x1615x756
Packing Dimension (WxHxD)	mm	1044x1790x830	1044x1790x830	1044x1790x830	1354x1790x860	1354x1790x860

Non-combinable outdoor units

Note: This unit can not be connected parallel

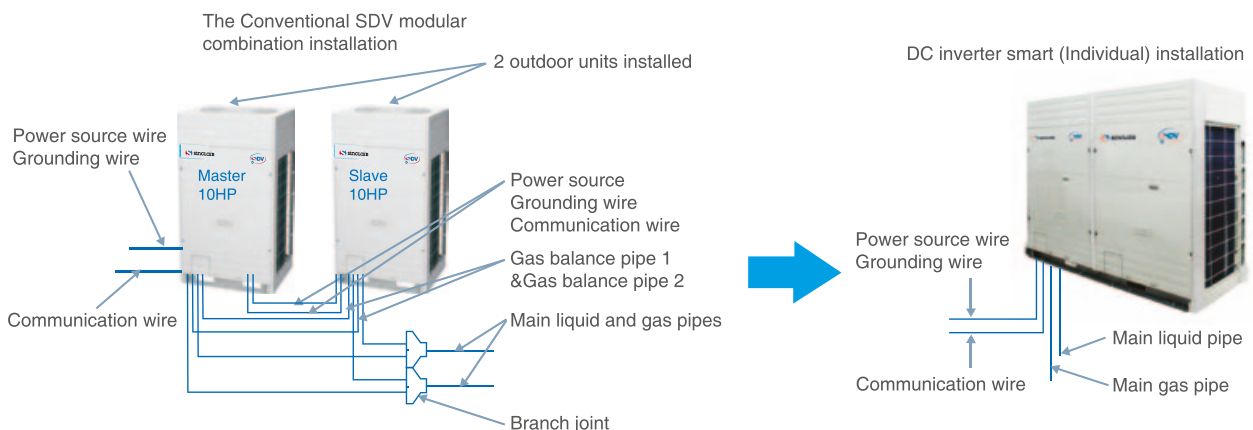


Features

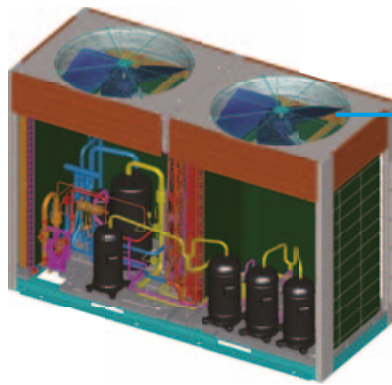
- Adopts DC scroll compressor
- Own SDV4 advantage technology
- Simple installation and save space
- Same pipe length, Height difference, operating temp range
- Integrated design



ALL UNITS ARE ASSEMBLED AND TESTED AT SINCLAIR FACTORIES THEREFORE MINIMIZING PROBLEMS AT INSTALLATION STAGE



New design axial flow fan and grill



New design grill reduces the wind resistance and increase the flow volume

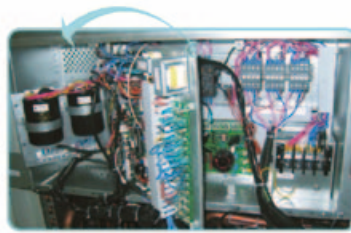
New design fan shape decrease the noise

The non combinable DC inverter Smart can install the air ventilation assembly, for specification instruction please refer to the service manual.

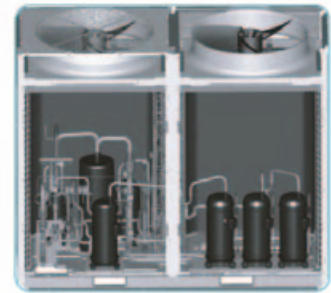
New design makes the maintenance more convenient. The new design E-part box ass'y makes it very convenient for installation and tear-down.



The customer only need remove two bolts



The electrical board can turn



The compressors are fixed in front position, it is more convenient for changing or maintaining the compressors.

NON-COMBINABLE OUTDOOR UNIT

Model		SDV4-252EAi	SDV4-280EAi	SDV4-335EAi	SDV4-400EAi	SDV4-450EAi	SDV4-530EAi	SDV4-560EAi
Cooling Capacity	kW	25.2	28	33.5	40.0	45.0	53.0	56.0
Cooling Input Power	kW	5.88	7.2	9.05	12.3	14.0	16.0	17.0
Heating Capacity	kW	27.0	31.5	37.5	45.0	50.0	59.0	63.0
Heating Input Power	kW	6.15	7.6	9.0	11.2	12.8	14.9	16.0
Operating Range-Cooling	°C	-5°C~48°C	-5°C~48°C	-5°C~48°C	-5°C~48°C	-5°C~48°C	-5°C~48°C	-5°C~48°C
Operating Range-Heating	°C	-20°C~21°C	-20°C~21°C	-20°C~21°C	-20°C~21°C	-20°C~21°C	-20°C~21°C	-20°C~21°C
Power	V-ph-Hz	380-415~3Ph,50Hz						
Sound Pressure Level	dB(A)	57	57	58	60	60	63	63
Airflow	m ³ /h	11000	11000	12500	15000	15000	23000	23000
Vertical Pipe Length	m	Upper Outdoor: max.70m; Lower Outdoor: max.50m						
Actual Pipe Length	m	150	150	150	150	150	150	150
Equivalent Pipe Length	m	175	175	175	175	175	175	175
Total Pipe Length	m	500	500	500	500	500	500	500
Net Weight	kg	245	245	285	325	325	485	485
Gross Weight	kg	260	260	305	355	355	505	505
Net Dimension (WxHxD)	mm	980x1615x765			1290x1615x756		1960x1615x800	
Packing Dimension (WxHxD)	mm	1044x1790x830			1354x1790x860		2021x1790x865	

INDOOR UNITS SPECIFICATIONS



SUMMARY

INDOOR UNITS

Model (kW)	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	10.0	11.2	12.5	14.0	20.0	25.0	28.0
Four-way Cassette (Compact) 	•	•	•	•											
Four-way Cassette 					•	•	•	•	•	•		•			
Duct 	•	•	•	•	•	•	•	•		•		•			
High Static Pressure Duct 													•	•	•
Fresh Air Processing Duct unit 											•	•	•	•	•
Ceiling & Floor 			•	•	•	•	•	•		•		•			
Wall-mounted 	•	•	•	•	•										



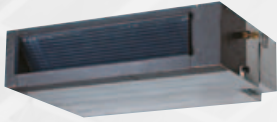
FOUR WAY COMPACT CASSETTE TYPE INDOOR UNIT

Model			SDV4-22CA	SDV4-28CA	SDV4-36CA	SDV4-45CA
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.4	3.2	4.0	5.0
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Rated Power		W	48	48	56	56
Performance	Air flow volume	m ³ /h	414/313/238	414/313/238	521/409/314	521/409/314
	Noise level	dB(A)	38.1/33.4/23.4	38.1/33.4/23.4	41.5/35.6/28.8	41.5/35.6/28.8
Refrigerant		Type	R410A	R410A	R410A	R410A
Net Dimension	Body(WxHxD)	mm	630x265x570	630x265x570	630x265x570	630x265x570
	Panel(WxHxD)	mm	647x50x647	647x50x647	647x50x647	647x50x647
Packing Dimension	Body(WxHxD)	mm	675x285x675	675x285x675	675x285x675	675x285x675
	Panel(WxHxD)	mm	705x113x705	705x113x705	705x113x705	705x113x705
Net weight	Body	kg	17.5	17.5	19.0	19.0
	Panel	kg	3.0	3.0	3.0	3.0
Gross Weight	Body	kg	22.0	22.0	23.5	23.5
	Panel	kg	5.0	5.0	5.0	5.0
Pipe diameter	Liquid side	mm	ø6.4	ø6.4	ø6.4	ø6.4
	Gas side	mm	ø12.7	ø12.7	ø12.7	ø12.7
	Drainage pipe	mm	ø25.0	ø25.0	ø25.0	ø25.0



FOUR WAY CASSETTE TYPE INDOOR UNIT

Model			SDV4-56C4A	SDV4-71C4A	SDV4-80C4A	SDV4-90C4A	SDV4-100C4A	SDV4-112C4A	SDV4-140C4A
Capacity	Cooling	kW	5.6	7.1	8.0	9.0	10.0	11.2	14.0
	Heating	kW	6.3	8.0	9.0	10.0	11.0	12.5	15.0
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Rated Power		W	90	115	115	160	160	160	180
Performance	Air flow volume	m ³ /h	950/800/650	1120/1010/820	1220/1010/820	1540/1300/1120	1540/1300/1120	1540/1300/1120	1800/1500/1280
	Noise level	dB(A)	42/38/35	45/42/39	45/42/39	48/45/43	48/45/43	48/45/43	50/47/44
Refrigerant		Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Net Dimension	Body(WxHxD)	mm	840x230x840	840x230x840	840x230x840	840x300x840	840x300x840	840x300x840	840x300x840
	Panel(WxHxD)	mm	950x46x950	950x46x950	950x46x950	950x46x950	950x46x950	950x46x950	950x46x950
Packing Dimension	Body(WxHxD)	mm	955x247x955	955x247x955	955x247x955	955x317x955	955x317x955	955x317x955	955x317x955
	Panel(WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035
Net weight	Body	kg	26	26	26	32	32	32	33
	Panel	kg	6	6	6	6	6	6	6
Gross Weight	Body	kg	32	32	32	39	39	39	40
	Panel	kg	9	9	9	9	9	9	9
Pipe diameter	Liquid side	mm	ø9.5	ø9.5	ø9.5	ø9.5	ø9.5	ø9.5	ø9.5
	Gas side	mm	ø15.9	ø15.9	ø15.9	ø15.9	ø15.9	ø15.9	ø15.9
	Drainage pipe	mm	ø32.0	ø32.0	ø32.0	ø32.0	ø32.0	ø32.0	ø32.0



DUCT TYPE INDOOR UNIT

Model			SDV4-22DA	SDV4-28DA	SDV4-36DA	SDV4-45DA	SDV4-56DA	SDV4-71DA
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.6	3.2	4.0	5.0	6.3	8.0
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Rated Power		W	62	62	67	115	115	163
Performance	Air flow volume	m ³ /h	570/530/410/320	570/530/410/320	570/530/410/320	958/850/667/583	958/850/667/583	1207/1050/905/821
	Static pressure	Pa	10~30(40 site setting)	10~30(40 site setting)	10~30(40 site setting)	10~30(40 site setting)	10~30(40 site setting)	10~30(40 site setting)
	Noise level	dB(A)	38/35/32	38/35/32	40/38/36	41/40/36	41/40/36	43/40/36
Refrigerant		Type	R410A	R410A	R410A	R410A	R410A	R410A
Net Dimension	(WxHxD)	mm	700x210x635	700x210x635	700x210x635	920x210x635	920x210x635	920x210x635
Packing Dimension	(WxHxD)	mm	915x290x655	915x290x655	915x290x655	1135x290x655	1135x290x655	1135x350x655
Net weight		kg	21.5	21.5	22.0	27.0	27.0	31.0
Gross Weight		kg	26.0	26.0	26.5	32.0	32.0	36.0
Pipe diameter	Liquid side	mm	ø6.4	ø6.4	ø6.4	ø6.4	ø9.5	ø9.5
	Gas side	mm	ø12.7	ø12.7	ø12.7	ø12.7	ø15.9	ø15.9
	Drainage pipe	mm	ø32.0	ø32.0	ø32.0	ø32.0	ø32.0	ø32.0

Model			SDV4-80DA	SDV4-90DA	SDV4-112DA	SDV4-140DA
Capacity	Cooling	kW	8.0	9.0	11.2	14
	Heating	kW	9.0	10.0	12.5	15.5
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Rated Power		W	231	231	327	357
Performance	Air flow volume	m ³ /h	(1558)/1350/1167/1033	(1558)/1350/1167/1033	2036	2138
	Static pressure	Pa	10~50(60 site setting)	10~50(60 site setting)	10~80(100 site setting)	10~100(120 site setting)
	Noise level	dB(A)	45/40/37	45/40/37	48/42/38	48/43/39
Refrigerant		Type	R410A	R410A	R410A	R410A
Net Dimension	(WxHxD)	mm	1140x270x775	1140x270x775	1140x270x775	1200x300x865
Packing Dimension	(WxHxD)	mm	1355x350x795	1355x350x795	1355x350x795	1385x375x920
Net weight		kg	40.0	42.0	42.0	50.0
Gross Weight		kg	48.5	50.0	50.0	59.5
Pipe diameter	Liquid side	mm	ø9.5	ø9.5	ø9.5	ø9.5
	Gas side	mm	ø15.9	ø15.9	ø15.9	ø15.9
	Drainage pipe	mm	ø32.0	ø32.0	ø32.0	ø32.0





HIGH STATIC PRESSURE DUCT TYPE INDOOR UNIT

Model			SDV4-200DHA	SDV4-250DHA	SDV4-280DHA
Capacity	Cooling	kW	20.0	25.0	28.0
	Heating	kW	22.5	26.0	31.5
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Rated Power		W	1516	1516	1516
Performance	Air flow volume	m ³ /h	4180/3820/3200	4180/3820/3200	4400/3940/3300
	Static pressure	Pa	50~250	50~250	50~250
	Noise level	dB(A)	59/55/52	59/55/52	59/55/52
Refrigerant		Type	R410A	R410A	R410A
Net Dimension	(WxHxD)	mm	1443x470x810	1443x470x810	1443x470x810
Packing Dimension	(WxHxD)	mm	1509x570x964	1509x570x964	1509x570x964
Net weight		kg	115	115	115
Gross Weight		kg	129	129	129
Pipe diameter	Liquid side	mm	ø9.5 (double)	ø9.5 (double)	ø9.5 (double)
	Gas side	mm	ø15.9 (double)	ø15.9 (double)	ø15.9 (double)
	Drainage pipe	mm	ø32	ø32	ø32



FRESH AIR PROCESSING DUCT TYPE INDOOR UNIT

Model			SDV4-125DFA	SDV4-140DFA	SDV4-200DFA	SDV4-250DFA	SDV4-280DFA
Capacity	Cooling	kW	12.5	14.0	20.0	25.0	28.0
	Heating	kW	10.5	12.0	18.0	20.0	22.0
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Performance	Air flow volume	m ³ /h	1700/1350/1050	1700/1350/1050	3150/2650/2300	3300/2850/2500	3300/2850/2500
	Static pressure	Pa	30~220	30~220	50~260	50~260	50~260
	Noise level	dB(A)	54/52/50	54/52/50	54/53/51	55/54/52	55/54/52
Refrigerant		Type	R410A	R410A	R410A	R410A	R410A
Net Dimension	(WxHxD)	mm	1368x420x691	1368x420x691	1443x470x810	1443x470x810	1443x470x810
Packing Dimension	(WxHxD)	mm	1436x440x768	1436x440x768	1509x522x964	1509x522x964	1509x522x964
Net weight		kg	69.5	69.5	115.0	115.0	115.0
Gross Weight		kg	76.0	76.0	125.0	125.0	125.0
Pipe diameter	Liquid side	mm	ø9.5	ø9.5	ø9.5	ø9.5	ø9.5
	Gas side	mm	ø15.9	ø15.9	ø15.9	ø15.9	ø15.9
	Drainage pipe	mm	ø25.0	ø25.0	ø32	ø32	ø32





CEILING AND FLOOR TYPE INDOOR UNIT

Model			SDV4-36FA	SDV4-45FA	SDV4-56FA	SDV4-71FA
Capacity	Cooling	kW	3.6	4.5	5.6	7.1
	Heating	kW	4.0	5.0	6.3	8.0
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Rated Power		W	120	120	122	125
Performance	Air flow volume	m ³ /h	650/570/500	800/600/500	800/600/500	800/600/500
	Noise level	dB(A)	40/38/36	43/41/38	43/41/38	43/41/38
Refrigerant		Type	R410A	R410A	R410A	R410A
Net Dimension		(WxHxD)	990x660x206	990x660x206	990x660x206	990x660x206
Packing Dimension		(WxHxD)	1089x744x296	1089x744x296	1089x744x296	1089x744x296
Net weight		kg	26.0	29.0	29.0	29.0
Gross Weight		kg	31.8	35.0	35.0	35.0
Pipe diameter	Liquid side	mm	ø6.4	ø6.4	ø9.5	ø9.5
	Gas side	mm	ø12.7	ø12.7	ø15.9	ø15.9
	Drainage pipe	mm	ø25.0	ø25.0	ø25.0	ø25.0

Model			SDV4-80FA	SDV4-90FA	SDV4-112FA	SDV4-140FA
Capacity	Cooling	kW	8.0	9.0	11.2	14.0
	Heating	kW	9.0	10.0	12.5	15.5
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Rated Power		W	130	130	182	182
Performance	Air flow volume	m ³ /h	1200/900/700	1200/900/700	1980/1860/1730	1980/1860/1730
	Noise level	dB(A)	45/43/40	45/43/40	47/45/42	47/45/42
Refrigerant		Type	R410A	R410A	R410A	R410A
Net Dimension		(WxHxD)	1280x660x206	1280x660x206	1670x680x244	1670x680x244
Packing Dimension		(WxHxD)	1379x744x296	1379x744x296	1764x760x329	1764x760x329
Net weight		kg	37.0	37.0	54.0	54.0
Gross Weight		kg	42.0	42.0	61.0	61.0
Pipe diameter	Liquid side	mm	ø9.5	ø9.5	ø9.5	ø9.5
	Gas side	mm	ø15.9	ø15.9	ø15.9	ø15.9
	Drainage pipe	mm	ø25.0	ø25.0	ø25.0	ø25.0



WALL MOUNTED TYPE INDOOR UNIT

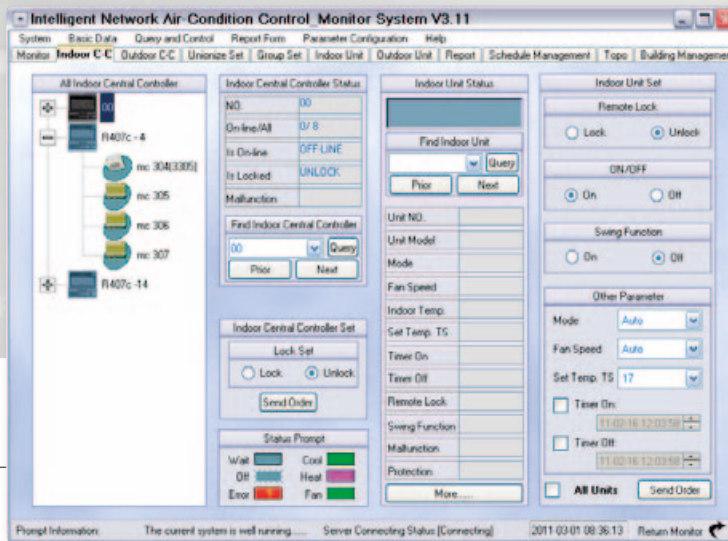
Model			SDV4-22HA-B	SDV4-28HA-B	SDV4-36HA-B	SDV4-45HA-B	SDV4-56HA-B
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating	kW	2.4	3.2	4.0	5.0	6.3
Power supply		V-Ph-H	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz	220-240~1Ph,50Hz
Rated Power		W	30	30	30	45	45
Performance	Air flow volume	m ³ /h	580/500/420	580/500/420	580/500/420	900/760/950	900/760/950
	Noise level	dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Refrigerant		Type	R410A	R410A	R410A	R410A	R410A
Net Dimension		(WxHxD)	915x290x230	915x290x230	915x290x230	1072x315x230	1072x315x230
Packing Dimension		(WxHxD)	1020x390x315	1020x390x315	1020x390x315	1180x415x315	1180x415x315
Net weight		kg	13	13	13	15.1	15.1
Gross Weight		kg	16.5	16.5	16.5	18.8	18.8
Pipe diameter	Liquid side	mm	ø6.4	ø6.4	ø6.4	ø6.4	ø9.5
	Gas side	mm	ø12.7	ø12.7	ø12.7	ø12.7	ø15.9
	Drainage pipe	mm	ø16.0	ø16.0	ø16.0	ø16.0	ø16.0

accessories

ALL THE INDOOR UNITS ARE EQUIPPED WITH WIRELESS CONTROLLERS AS STANDARD.

According to specification the units can be also operated by wire and central controllers with functions like ON/OFF time setting, function of master system control.

In combination with electrometer and PC CONTROL (software) it is easy to monitor the energy consumption of whole system or individual groups.



CONTROLLERS

PC CONTROL MONITORING SOFTWARE



R51

Infrared controller to all indoor units, except floor-ceiling.



R05/BG

Infrared controller for floor-ceiling units.



KJR-10B

Wire controller.



KJR-12B

Wire controller with additional function of temperature reading in place of the controller.



CCM02

Information panel about the operation of the outdoor units.



NIM05

Hotel module, enables to switch ON/OFF the unit.



CCM03 (CCM10)

Central wire controller with the possibility of setting priority of cooling or heating.



CCM04

Weekly timer with the possibility of setting four ON/OFF time periods.



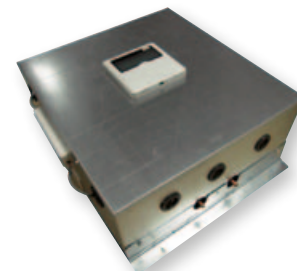
CCM09

Central controller with weekly timer



DTS-634

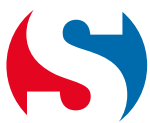
Digital electrometer to enable measuring the energy consumption



AHU kit

Sinclair SDV outdoor units can be used with this connection kit, creating an ideal solution when a unique AHU is required.





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