V021-EN-01

COMMERCIAL SYSTEMS
SDV AIR CONDITIONERS
CHILLERS
FAN COIL UNITS

2021-2022

sinclair
AIR CONDITIONING

Quality enhances partnership

ABOUT SINCLAIR BRAND

Sinclair brand has long tradition and we believe in bright future too. Sinclair air conditioners are getting more and more popularity and trust on the market every year. Our strong team of professionals ensures perfect cooperation with partners from many countries around the world. Development of our partnership never ends.

SINCLAIR Global Group is based on essential principals of long-term partnership and high-quality products. We regularly organize technical training in our academy to be sure that all our partners have updated information about news in our assortment and proper technical background.

SINCLAIR products will secure comfortable temperature in your home or office in all climatic conditions through the whole year. We are more than happy to introduce you SINCLAIR air conditioners.

sinclair AIR CONDITIONING

SGG PARTNER SINCLAIR GLOBAL GROUP

OUR VISION AND MISSION

Environment protection becomes more and more crucial for humanity and its future generations. SINCLAIR Global Group perceives it the same way hence we focus on developing and applying new technologies which helps to reduce energy consumption and global warming effect. Our products fulfil strict EU norms and in many cases even surpass them.

SINCLAIR believes in long-term, stable and healthy progression supported by hard work and strong code of ethics. Long-term success of any brand depends on satisfied customers. Our customers are satisfied thanks to high-quality, reliable a technically advanced products with reasonable pricing and timeless design.

www.sinclair-solutions.com

Our website is dedicated to everyone who wants to learn more about Sinclair air conditioners and other products. Additionally after log-in to partner section there is all technical documentation available for download.

Welcome
to the Sinclair world

The solution for any of your cooling
or heating requirements.

Decide whether it will be a system in which the medium is gas or water.

Family house, hospital, office, school, shop, hotel, sports hall, bank, manufacturing plant or anything else, just write to us and we will choose the best solution for you.

Using the design program Selection software, we will generate suitable outdoor units, indoor units, refnets and the exact amount of refrigerant that will need to be added to the system. Tell us the desired temperature in the room, we will take care of it. You will receive the result from us in several formats. Open your project anytime, anywhere.

Wide range of assortments, from small systems to large-scale solutions

Our mini SDV device starts at 9 kW, the mini chiller at 5 kW. With the set of three SDV5 outdoor units, you get an output of 270 kW. By connecting 16 chiller moduls, you get a perfect output of 1 440 kW.

64 - is the maximum number of indoor units that can be connected in one SDV5 refrigeration system.

High efficiency, savings, reliability, efficiency, easy installation = technology that will pleasantly surprise you.

Chillers and Fan Coils
Water cooling

Water. Colorless, clear, tasteless but still precious liquid essential for our everyday life. You can even use it for cooling and heating.

Chillers are used for air conditioning of buildings or for industrial cooling.

They are widely used from small family houses to buildings of the largest dimensions, due to the almost unlimited possibilities of water pipes.

FEATURES

- Convector-based indoor units
- Main part is a fan and heat exchanger
- Work similarly to air conditioning, but the medium here is water
- We offer wall, cassette, duct and floor-ceiling fan coils

SCV FanCoil

MINI CHILLERS

Sinclair DC Inverter Mini Chillers adopt unitary structure design and a hydraulic module is built in the outdoor unit. It is an air-cooled water heat pump chiller so there is no need of cooling water tower at the condensing side.

Cooling capacity of DC inverter Mini Chillers range is from 5 kW to 16 kW and it can be freely combined with fan coil units & floor heating. These units are designed for residential applications or light commercial applications that require cold or hot water.

MODULAR CHILLERS

Sinclair DC Inverter Modular Chillers adopt inner grooved copper tubes and hydrophilic aluminium fins greatly improving heat exchange in units of 30 kW, 60 kW and 90 kW. By the maximum combination of 16 units it is possible to get capacity of 1 440 kW. These modular chillers use high efficient DC inverter compressors. The advantage of modular connection is that if one module fails, other modules can become the back-up to provide a continuing operation.

Chillers are freely combinable with fan coil units and air handling units. Project owners may choose the best types according to their design taste (for interior) or needs for functions.

Air-Cooled Full DC Inverter Mini Chillers

FEATURES

- Energy saving – energy class A+
- High efficient DC inverter compressor and DC fan motor
- Low noise emission
- Easy installation and high reliability
- Integrated and compact design - include the hydraulic module
- High-performance heat exchanger
- Reliable operation – built-in controller & water pressure gauge
- Water pump starts/stops compulsory function
- Built-in electronic controller
- Wide operation temperature range and outlet water temperature range

Mode	Ambient temperature range	Inlet water temperature range
Cooling	-5 ºC ~ 46 ºC	10 ºC ~ 20 ºC
Heating	-15 ºC ~ 27 ºC	35 ºC ~ 50 ºC

WIRED CONTROLLER KJR-120F (OPTIONAL)

- Touch key operation
- Multiple timer
- Real time clock

SCV-100EA
SCV-120EA
SCV-140EA
SCV-160EA

SCV-50EA
SCV-70EA

Model			**SCV-50EA**	**SCV-70EA**	**SCV-100EA**	**SCV-120EA**	**SCV-140EA**	**SCV-160EA**
Power supply		V/Ph/Hz	220-240/1/50			380-415/3/50		
Cooling [1]	Capacity	kW	5,0 (1,9~5,8)	7,0 (2,1~7,8)	10,0 (2,9~10,5)	11,2 (3,1~12,0)	12,5 (3,3~14,0)	14,5 (3,5~15,5)
	Rated input	W	1550	2250	2950	3380	3900	4700
	Rated current	A	6,8	9,9	13,0	5,5	6,4	7,7
	EER	-	3,23	3,11	3,39	3,31	3,21	3,09
Cooling [2]	Capacity	kW	5,6	8,0	10,6	12,2	14,2	15,6
	Rated input	W	1150	1850	2300	2600	3100	3600
	EER	-	4,87	4,32	4,61	4,69	4,58	4,33
	SEER	-	5,83	6,07	5,71	6,18	6,69	6,78
Heating [3]	Capacity	kW	6,2 (2,1~7,0)	8,0 (2,3~9,0)	11,0 (3,2~12,0)	12,3 (3,3~13,2)	13,8 (3,5~15,4)	16,0 (3,7~17,0)
	Rated input	W	1900	2500	3140	3720	4250	4850
	Rated current	A	8,3	11,0	13,8	6,1	7,0	8,0
	COP	-	3,26	3,20	3,50	3,31	3,25	3,30
Heating [4]	Capacity	kW	6,2	8,6	11,5	13,0	15,1	16,5
	Rated input	W	1350	2100	2650	2850	3350	3920
	COP	-	4,59	4,10	4,34	4,56	4,51	4,21
	SCOP	-	3,55	3,46	3,34	3,66	3,78	3,39
Seasonal space heating energy efficiency (ηs)			138,9%	135,3%	130,7%	143,5%	148,3%	132,6%
Seasonal space heating energy efficiency class			A+	A+	A+	A+	A+	A+
Max. input current		A	11,4	13,7	25	8,9	9,6	10,1
Compressor	Type		ROTARY					
Outdoor fan	Motor type		DC Motor					
	Air flow	m^3/h	5100	5100	7000	7000	7000	7000
Air heat exchanger	Type		Fin-coil					
Water heat exchanger	Type		Plate heat exchanger					
	Water volume	L	0,53	0,53	0,70	0,78	0,78	1,06
	Water flow	m^3/h	0,86	1,20	1,72	1,92	2,15	2,49
	Water pressure drop	kPa	15	15	18	18	18	19
Water pump	Pump head	m	5,5	5,5	8,5	8,5	8,5	8,5
	Max. water flow	m3/h	2,5	2,5	4	4	4	4
Expansion tank volume		L	2	2	3	3	3	3
Refrigerant	Type		R410A	R410A	R410A	R410A	R410A	R410A
	Charged volume	kg / t eq. CO_2	2,5 / 5,22	2,5 / 5,22	2,8 / 5,8	2,8 / 5,8	2,9 / 6,0	3,2 / 6,7
Throttle type			Electronic expansion valve					
Sound power level		dB(A)	63	66	68	68	70	72
Sound pressure level [5]		dB(A)	58	58	59	62	62	62
Unit net dimension (WxHxD)		mm	990x966x354	990x966x354	970x1327x400	970x1327x400	970x1327x400	970x1327x400
Packing dimension (WxHxD)		mm	1120x1100x435	1120x1100x435	1082x1456x435	1082x1456x435	1082x1456x435	1082x1456x435
Net / Gross weight		kg	81/91	81/91	110/121	110/121	111/122	111/122
The Max. and Min. water inlet pressure [6]		kPa	500/150	500/150	500/150	500/150	500/150	500/150
Pipe connections	Water inlet/outlet	inch	1	1	1-1/4	1-1/4	1-1/4	1-1/4
Controller			Electronic controller (standard)					
Ambient temperature range	Cooling	ºC	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46
	Heating	ºC	-15~27	-15~27	-15~27	-15~27	-15~27	-15~27
Water inlet temperature range	Cooling	ºC	10~20	10~20	10~20	10~20	10~20	10~20
	Heating	ºC	35~50	35~50	35~50	35~50	35~50	35~50

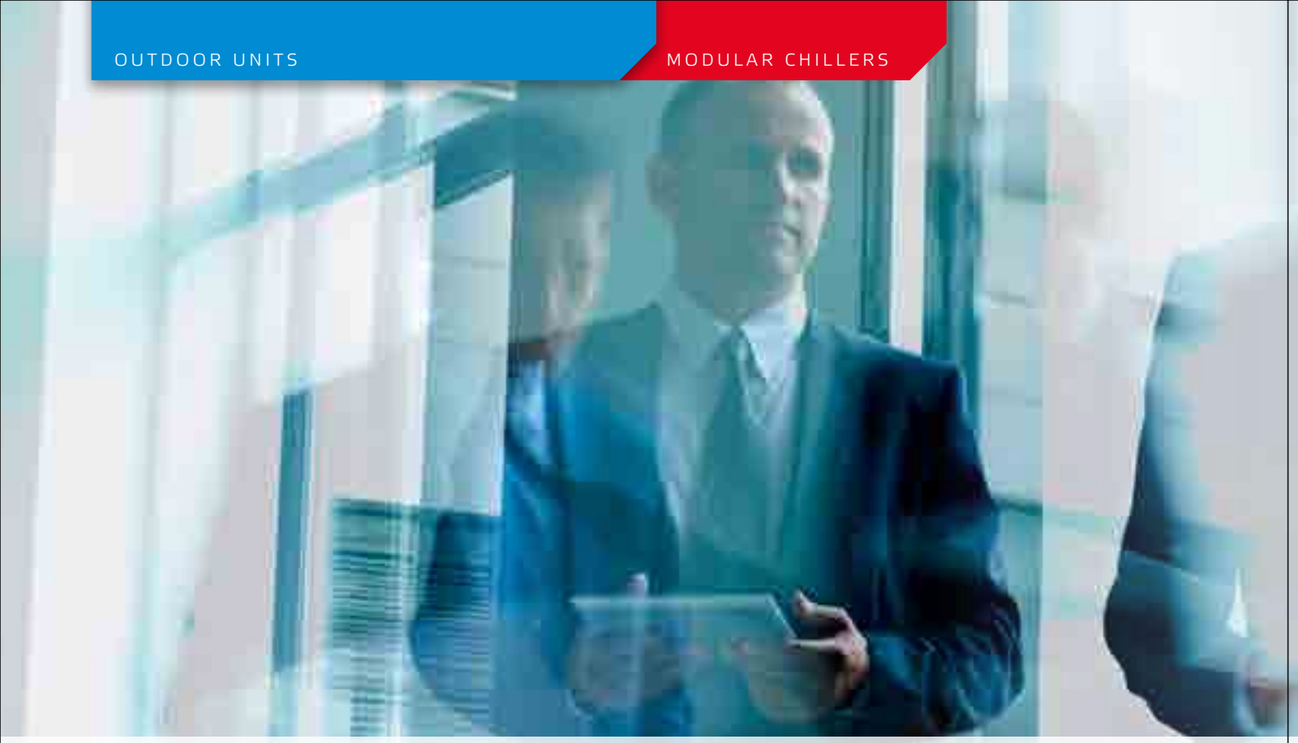
Nominal capacity is based on the following conditions:

1. Condenser air in 35 ºC. Evaporator water in/out 12/7 ºC
2. Condenser air in 35 ºC. Evaporator water in/out 23/18 ºC
3. Evaporator air in 7 ºC 85% R.H. Condenser water in/out 40/45 ºC
4. Evaporator air in 7 ºC 85% R.H. Condenser water in/out 30/35 ºC
5. 1 m far from fan side of unit in open field
6. The maximum and minimum operating pressure values refer to the activation of the pressure switches
7. The above data test reference standard EN14511:2014; EN14825:2016; EN50564:2011; EN12102:2014; (EU)No:811:2013; (EU)No:813:2013

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 2088. Noise is tested in the semi-anechoic

room, so it should be slightly higher in the actual Operation due to environmental change. Power input is tested under standard condition.



Air-Cooled DC Inverter Modular Chillers

FEATURES

- Modular design concept
- Combination of up to 16 modules
- SCV-600EA may be connected only with the same type
- SCV-300EB and SCV-600EB use ecological refrigerant R32
- SCV-300EB + SCV-600EB may be combined
- SCV-900EA may be connected only with the same type
- Easy connection of the main unit and slave units
- All units can be connected together with a three-core wired controller in series type
- Flexible pipe connection and installation
- On PCB you can remotely control: ON/OFF, heating/cooling, alarm
- Economical operation
- Easy transportation and installation
- Back-up functions (in combined system) - if one module fails, other modules are back-up for the failed one to provide a continuing operation
- High efficient full DC inverter compressor
- SCV-900EA uses EVI compressors which increase the efficiency of the system and heat up to -20 ºC of outdoor temperature
- Wide ambient and water outlet temperature range

Model			SCV-300EB	SCV-600EA	SCV-600EB	SCV-900EA	
Power supply		V/Ph/Hz	380-415/3/50				
Cooling[1]	Capacity	kW	27,5	55	55	82	
	Input	kW	10,3	22	21,5	36,8	
	EER	-	2,67	2,50	2,55	2,22	
	SEER	-	4,62	4,20	4,00	4,32	
Heating[2]	Capacity	kW	32	61	62	90	
	Input	kW	10	20,3	20	32,8	
	COP	-	3,20	3,00	3,10	2,80	
	SCOP	-	4,24	3,85	3,86	3,99	
Max. running current		A	20,0	36,8	40,5	60	
Compressor	Type	-	DC invertor rotary	DC invertor rotary	DC invertor rotary	DC invertor rotary	
	Quantity	Pieces	1	2	2	2	
Air side heat exchanger	Type	-	Finned tube	Finned tube	Finned tube	Finned tube	
	Quantity of fan motor	Pieces	1	2	2	3	
	Air flow	m^3/h	12 500	24 000	24 000	38 000	
Water side heat exchanger	Type	-	Plate	Plate	Plate	Plate	
	Water pressure drop	kPa	55	80	61	75	
	Volume	L	2,44	5,17	5,17	7,76	
	Water flow volume	m^3/h	5	9,8	9,8	15	
Refrigerant	Type	-	R32	R410A	R32	R410A	
	Charged volume	kg / t eq. CO_2	7,9 / 5,33	17 / 35,5	14 / 9,5	27 / 56,4	
	Throttle type	-	EXV	EXV + Capillary	EXV + Capillary	EXV	
Sound pressure level[3]		dB(A)	65	72	71	80	
Unit net dimension (DxHxW)		mm	1870x1175x1000	2220x1325x1055	2220x1325x1055	3220x1095x1513	
Packing dimension (DxHxW)		mm	1910x1225x1035	2250x1370x1090	2250x1370x1090	3270x1130x1540	
Net / Gross weight		kg	300/310	480/490	480/490	710/739	
Pipe connections	Water inlet/outlet	mm	DN40	DN50	DN50	DN50	
Water pipe connection type		-	Threaded connection	Clasp connection	Clasp connection	Clasp connection	
Controller			Wired controller KJRM-120H (standard)				
Ambient temperature range	Cooling	ºC	-10~43				
	Heating	ºC	-14~30	-15~30	-14~30	-20~30	
Water outlet temperature range	Cooling	ºC	5~20				
	Heating	ºC	25~54	25~55	25~54	25~55	

SCV-300EB, SCV-600EA, SCV-600EB and SCV-900EA don´t include hydraulic module due to variabilities of particular projects.

1. Cooling: Chilled water inlet/outlet temperature: 12/7 ºC, outdoor ambient temperature 35 ºC DB.
2. Heating: Warm water inlet/outlet temperature: 40/45 ºC, outdoor ambient temperature 7 ºC DB/6 ºC WB.
3. 1 m far from unit in open field.

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R410A (50% HFC-32, 50% HFC-125), GWP of refrigerant used:2088. Noise is tested in the semi-anechoic room, so it should be slightly higher due to change of location. Power input is tested under standard conditions.R32 (100% HFC-32), GWP of refrigerant: 675.

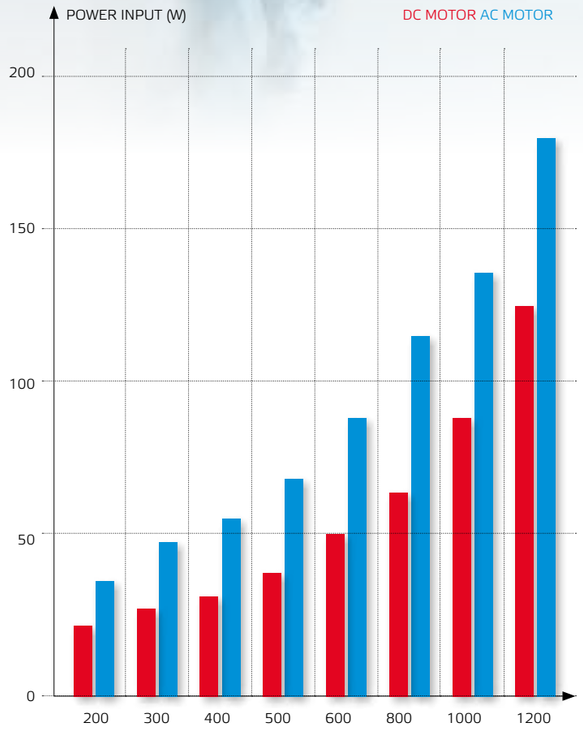
Fan Coil Units

ADVANTAGE OF FAN COIL UNITS WITH DC BRUSHLESS FAN MOTOR

The DC fan coil units are the new energy saving products improved with advanced DC driven technology. The DC fan coil units have advanced technology of high-energy efficiency, low noise operation and precise temperature control, so they are ideal for hospitals, office buildings, hotels, airports and various other applications.

TYPE OF UNIT

C2 Four-way cassette unit, 2 pipes
C4 Four-way cassette unit, 4 pipes
H Wall mounted unit, 2 pipes
D3 Duct, 3 rows, 2 pipes
F3 Floor ceiling, 3 rows, 2 pipes
SF Designation for sinclair fan coil



Sinclair DC FCU adopts the brushless DC motor whose efficiency is up to 90%. In contrast with the original FCU, DC FCU power consumption can be reduced by more than 30%.

FanCoil

FOUR-WAY CASSETTE, 2 PIPES

- Fresh air connection
- Possibility of air outlet into small room
- DC brushless fan motor
- Drainage water pump
- High efficient heat exchanger
- Advanced 3D spiral fan
- Long term filter
- Support Modbus RTU SF-xxxC2M

FOUR-WAY CASSETTE, 2 PIPES HAS REMOTE CONTROLLER R05 AS STANDARD

Model			SF-300C2(M)	SF-400C2(M)	SF-500C2(M)	SF-600C2(M)	SF-750C2(M)	SF-850C2(M)	SF-950C2(M)	SF-1500C2(M)
Power supply		V/Ph/Hz	220-240/1/50			220-240/1/50				
Air flow (H/M/L)		m^3/h	535/429/322	610/477/381	781/611/494	1175/987/768	1229/1020/810	1451/1146/1012	1530/1224/1101	1871/1415/1198
		CFM	314/252/189	359/281/224	459/359/290	691/580/451	722/600/476	853/674/595	900/720/647	1100/832/704
Cooling	Capacity (H/M/L)	kW	2,98/2,53/2	3,96/3,26/2,76	4,2/3,48/3,01	5,93/5,3/4,4	6,12/5,45/4,6	7,52/6,46/5,89	7,84/6,84/6,35	11,19/8,82/7,48
	Water flow rate	m3/h	0,53/0,45/0,35	0,7/0,58/0,51	0,75/0,61/0,54	1,05/0,92/0,77	1,10/0,96/0,81	1,37/1,18/1,07	1,43/1,24/1,13	1,96/1,53/1,28
	Water pressure drop	kPa	10/7/5	11,48/8,2/6,54	12,32/8,62/7,4	19,2/15,4/11	21,3/21,3/12,4	20,1/15,3/12,6	22/17/14,1	36,6/22,7/16,4
Heating	Capacity (H/M/L)	kW	4,01/3,35/2,61	5,4/4,34/3,57	5,76/4,69/3,84	8,42/7,37/6,06	8,62/7,49/6,27	10,37/8,72/7,88	10,86/9,24/8,49	14,92/11,73/10,07
	Water pressure drop	kPa	8,2/6/3,8	16,68/6,4/4,92	12,68/6,4/4,92	11,41/6,5/5,41	19,1/14,8/10,6	18,2/13,6/11,1	19,9/15,2/12,6	34,3/21,3/15
Max. power input		W	15	28	43	42	49	68	76	128
Sound pressure level (H/M/L)		dB(A)	39/33/27	42/36/30	43/38/32	43/39/33	44/40/34	45/40/37	46/42/39	49/43/39
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Quantity		1	1	1	1	1	1	1	1
Fan	Type		Centrifugal, forward-curved blades			Centrifugal, forward-curved blades				
	Quantity		1	1	1	1	1	1	1	1
Coil	Row		2	2	2	2	2	2	2	3
	Max. working pressure	MPa	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
	Diameter	mm	Φ7	Φ7	Φ7	Φ7	Φ7	Φ7	Φ7	Φ7
Panel	Net dimensions (WxHxD)	mm	647x50x647	647x50x647	647x50x647	950x45x950	950x45x950	950x45x950	950x45x950	950x45x950
	Packing size (WxHxD)	mm	715x123x715	715x123x715	715x123x715	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035
	Net weight	kg	2,5	2,5	2,5	6	6	6	6	6
	Gross weight	kg	4,5	4,5	4,5	9	9	9	9	9
Body	Net dimensions (WxHxD)	mm	575x261x575	575x261x575	575x261x575	840x230x840	840x230x840	840x300x840	840x300x840	840x300x840
	Packing size (WxHxD)	mm	670x290x670	670x290x670	670x290x670	900x260x900	900x260x900	900x330x900	900x330x900	900x330x900
	Net weight	kg	16,5	16,5	16,5	23	23	27	27	29,5
	Gross weight	kg	22,5	22,5	22,5	28	28	33	33	34,5
Pipe connections	Water inlet/outlet pipe	inch	G3/4	G3/4	G3/4	RC3/4	RC3/4	RC3/4	RC3/4	RC3/4
	Drain pipe	mm	Φ25	Φ25	Φ25	Φ32	Φ32	Φ32	Φ32	Φ32

Four-way cassette with 2 pipes doesn´t include 3 or 2-way valve in the package.
The valve uses the characteristics of NC (normally closed) and power supply 230V from fan coil unit. SINCLAIR doesn´t offer valves.

1. H: High fan speed; M: Medium fan speed; L: Low fan speed.
2. Cooling conditions: entering water 7 ºC, temperature rise 5 ºC, entering air temperature 27 ºC DB/19 ºC WB.
   Heating conditions: entering water 50 ºC, entering air temperature 20 ºC DB, the same water flow as the cooling conditions.
3. Noise is tested in a semi-anechoic test room.

FOUR-WAY CASSETTE, 4 PIPES

- Independent connection to the heating and cooling circuits
- Fresh air connection
- Possibility of air outlet into small room
- DC brushless fan motor
- Drainage water pump
- High efficient heat exchanger
- Advanced 3D spiral fan
- Long term filter
- Support Modbus RTU SF-xxxC4M

FOUR-WAY CASSETTE, 4 PIPES HAS
REMOTE CONTROLLER R05 AS STANDARD

Model			SF-300C4(M)	SF-400C4(M)	SF-500C4(M)	SF-600C4(M)	SF-750C4(M)	SF-950C4(M)	SF-1200C4(M)	SF-1500C4(M)
Power supply		V/Ph/Hz	220-240/1/50			220-240/1/50				
Air flow (H/M/L)		m^3/h	493/395/295	669/523/415	673/526/425	1184/997/783	1278/1057/855	1403/1115/1001	1642/1421/1285	1708/1297/1096
		CFM	290/232/173	393/307/244	395/309/250	696/586/460	751/621/502	824/655/588	965/835/755	1004/762/644
Cooling	Capacity (H/M/L)	kW	2,16/1,86/1,49	2,78/2,38/2,05	2,77/2,38/2,07	4,96/4,38/3,64	5,18/4,56/3,88	5,31/4,59/4,28	7,98/7,25/6,7	8,04/6,62/5,84
	Water flow rate	m3/h	0,42/0,37/0,3	0,53/0,46/0,4	0,56/0,49/0,43	0,9/0,8/0,67	0,94/0,83/0,71	0,96/0,84/0,78	1,42/1,29/1,2	1,43/1,19/1,05
	Water pressure drop	kPa	17,4/13,5/9,3	13,15/9,4/7	16,8/13,1/10,3	14,8/11,5/8,1	15,9/12,4/9	16,4/12,6/10,9	33,9/30/24	33/22,6/17,7
Heating	Capacity (H/M/L)	kW	3,56/2,99/2,36	4,25/3,58/3,02	4,51/3,79/3,22	6,94/6,22/5,27	7,37/6,53/5,6	7,66/6,65/6,2	11,05/10,15/9,5	11,34/9,6/8,7
	Water flow rate	m3/h	0,36/0,31/0,25	0,41/0,36/0,31	0,47/0,4/0,36	0,64/0,58/0,5	0,68/0,61/0,53	0,71/0,62/0,58	1/0,92/0,87	1,02/087/0,79
	Water pressure drop	kPa	29,8/21,7/14,3	30,4/22,2/16,7	36,1/25,9/19	37,2/26,1/19,3	39,5/32,5/23,8	43,8/33,5/29,3	52,1/44,9/40,6	62,1/45,7/38,3
Max. power input		W	24	38	42	62	72	90	121	139
Sound pressure level		dB(A)	39/33/27	42/35/30	44/39/31	42/37/31	44/39/33	46/41/38	48/44/42	49/43/38
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Quantity		1	1	1	1	1	1	1	1
Fan	Type		Centrifugal, forward-curved blades			Centrifugal, forward-curved blades				
	Quantity		1	1	1	1	1	1	1	1
Coil	Row		2	2	2	2	2	2	3	3
	Max. working pressure	MPa	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
	Diameter	mm	Φ7	Φ7	Φ7	Φ7	Φ7	Φ7	Φ7	Φ7
Panel	Net dimensions (WxHxD)	mm	647x50x647	647x50x647	647x50x647	950x45x950	950x45x950	950x45x950	950x45x950	950x45x950
	Packing size (WxHxD)	mm	715x123x715	715x123x715	715x123x715	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035
	Net weight	kg	2,5	2,5	2,5	6	6	6	6	6
	Gross weight	kg	4,5	4,5	4,5	9	9	9	9	9
Body	Net dimensions (WxHxD)	mm	575x261x575	575x261x575	575x261x575	840x300x840	840x300x840	840x300x840	840x300x840	840x300x840
	Packing size (WxHxD)	mm	670x290x670	670x290x670	670x290x670	900x330x900	900x330x900	900x330x900	900x330x900	900x330x900
	Net weight	kg	16,7	16,7	16,7	27,5	27,5	27,5	30	30
	Gross weight	kg	22,7	22,7	22,7	33,5	33,5	32,4	35	35
Pipe connections	Water inlet/outlet pipe	inch	Cold water: G3/4; Hot water: G1/2			Cold water: RC3/4; Hot water: RC1/2				
	Drain pipe	mm	Φ25	Φ25	Φ25	Φ32	Φ32	Φ32	Φ32	Φ32

Four-way cassette with 4 pipes doesn´t include 3 or 2-way valves for cold and hot water in the package.
The valve uses the characteristics of NC (normally closed) and power supply 230V from fan coil unit. SINCLAIR doesn´t offer valves.

1. H: High fan speed; M: Medium fan speed; L: Low fan speed.
2. Cooling conditions: entering water 7 ºC, temperature rise 5 ºC, entering air temperature 27 ºC DB/19 ºC WB.
   Heating conditions: entering water 70 ºC, temperature drop 10 ºC DB, entering air temperature 20 ºC DB.
3. Noise is tested in a semi-anechoic test room.

FanCoil

WALL MOUNTED UNITS, 2 PIPES

- Digital LED display
- Easy installation
- Built-in 3-way electromagnetic valve
- DC fan motor
- Auto swing louver
- Support Modbus RTU SF-xxxHM

WALL MOUNTED UNITS HAVE
REMOTE CONTROLLER R05 AS STANDARD

Model			SF-250H(M)	SF-400H(M)	SF-600H(M)
Power supply		V/Ph/Hz	220-240/1/50		
Air flow (H/M/L)		m^3/h	492/454/400	825/689/590	979/849/717
		CFM	289/267/235	485/405/347	575/499/421
Cooling	Capacity (H/M/L)	kW	2,7/2,59/2,39	3,81/3,3/2,88	4,87/4,26/3,79
	Water flow rate	m^3/h	0,48/0,46/0,42	0,67/0,57/0,51	0,85/0,72/0,65
	Water pressure drop	kPa	31,6/28,6/25,4	56,8/41,2/33	50,7/39,5/33,7
Heating	Capacity (H/M/L)	kW	3,29/3,03/2,63	5,08/4,33/3,77	6,31/5,57/4,77
	Water pressure drop	kPa	37,5/30,3/26,5	61,9/37,9/30,3	51,7/36,3/30,3
Max. power input		W	13	34	38
Sound pressure level (H/M/L)		dB(A)	32/30/27	45/39/35	44/40/35
Fan motor	Type		DC Motor	DC Motor	DC Motor
	Quantity		1	1	1
Fan	Type		Tangential fan		
	Quantity		1	1	1
Coil	Row		2	2	2
	Max. working pressure	MPa	1,6	1,6	1,6
	Diameter	mm	Φ7	Φ7	Φ7
Net dimensions (WxHxD)		mm	915x290x230	915x290x230	1072x315x230
Packing size (WxHxD)		mm	1020x390x315	1020x390x315	1180x415x315
Net weight		kg	12,7	12,7	14,9
Gross weight		kg	17,3	16,3	18,6
Water inlet/outlet pipe		inch	G3/4	G3/4	G3/4
Drain pipe		mm	Φ20	Φ20	Φ20

1. H: High fan speed; M: Medium fan speed; L: Low fan speed.
2. Cooling conditions: entering water 7 ºC, temperature rise 5 ºC, entering air temperature 27 ºC DB/19 ºC WB.
   Heating conditions: entering water 50 ºC, entering air temperature 20 ºC DB, the same water flow as the cooling conditions.
3. Noise is tested in a semi-anechoic test room.

DUCT, 3 ROWS, 2 PIPES

- Intelligent electronic control
- High efficient heat exchanger
- Longer V shape drainage pan
- DC brushless fan motor
- Fresh air intake
- Possibility of using external control of fan speed (low, medium, high) by 230V

OPTIONAL WIRED CONTROLLER
KJR-18B OR SWC-86A FOR DUCT FAN COIL UNITS

Model			SF-200D3	SF-400D3	SF-600D3	SF-1000D3
Power supply		V/Ph/Hz	220-240/1/50			
Air flow (H/M/L)		m^3/h	340/255/170	680/510/340	1020/765/510	1700/1275/850
		CFM	200/150/100	400/300/200	600/450/300	1000/750/500
Standard external static pressure		Pa	12Pa (default); 30/50Pa can be set through dial switch on PCB			
Cooling	Capacity (H/M/L)	kW	2,2/1,9/1,68	4/3,4/2,95	5,8/4,88/4,45	9,0/7,8/6,57
	Water flow rate	m^3/h	0,38	0,69	1,0	1,55
	Water pressure drop	kPa	9,4	9,7	30,1	21,8
Heating	Capacity (H/M/L)	kW	3,5/3,08/2,59	6,8/5,85/5,1	9,8/8,6/7,4	15,5/14,24/12
	Water pressure drop	kPa	8,2	11,4	25,0	18,4
Max. power input		W	16	28	45	90
Sound pressure level	12Pa (H/M/L)	dB(A)	36/32/26	37/34/27	39/36/29	42/39/32
	30Pa (H/M/L)	dB(A)	40/36/29	42/38/31	44/40/33	46/42/34
	50Pa (H/M/L)	dB(A)	42/39/31	45/41/33	47/43/35	50/45/37
Fan motor	Type		DC motor			
	Quantity		1	1	1	2
Fan	Type		Centrifugal, forward-curved Blades			
	Quantity		1	2	2	4
Coil	Row		3	3	3	3
	Max. working pressure	MPa	1,6	1,6	1,6	1,6
	Diameter	mm	Φ9,52	Φ9,52	Φ9,52	Φ9,52
Net dimensions (WxHxD)		mm	741x241x522	941x241x522	1161x241x522	1566x241x522
Packing size (WxHxD)		mm	790x260x550	990x260x550	1210x260x550	1615x260x550
Net weight		kg	16,7	21,0	23,7	34,7
Gross weight		kg	19,7	24,0	27,2	39,2
Water inlet/outlet pipe		inch	RC3/4	RC3/4	RC3/4	RC3/4
Drain pipe		mm	Φ24	Φ24	Φ24	Φ24

Duct with 2 pipes doesn´t include 3 or 2-way valve in the package.
The valve uses the characteristics of NC (normally closed) and power supply 230V from fan coil unit. SINCLAIR doesn´t offer valves.

1. H: High fan speed; M: Medium fan speed; L: Low fan speed.
2. Air flow rate at 0Pa ESP.
3. Cooling conditions: entering water 7 ºC, temperature rise 5 ºC, entering air temperature 27 ºC DB/19 ºC WB.
   Heating conditions: entering water 50 ºC, entering air temperature 20 ºC DB, the same water flow as the cooling conditions.
4. Noise is tested in a semi-anechoic test room.

FanCoil

FLOOR CEILING, 3 ROWS, 2 PIPES

- High efficiency and low noise operation
- Horizontal or vertical installation
- DC brushless fan motor
- Possibility of using external control 2/3-way valve
- ON/OFF contact
- ALARM contact (230V)
- Support Modbus RTU
- Possibility of using external control of fan speed (low, medium, high) by 230V

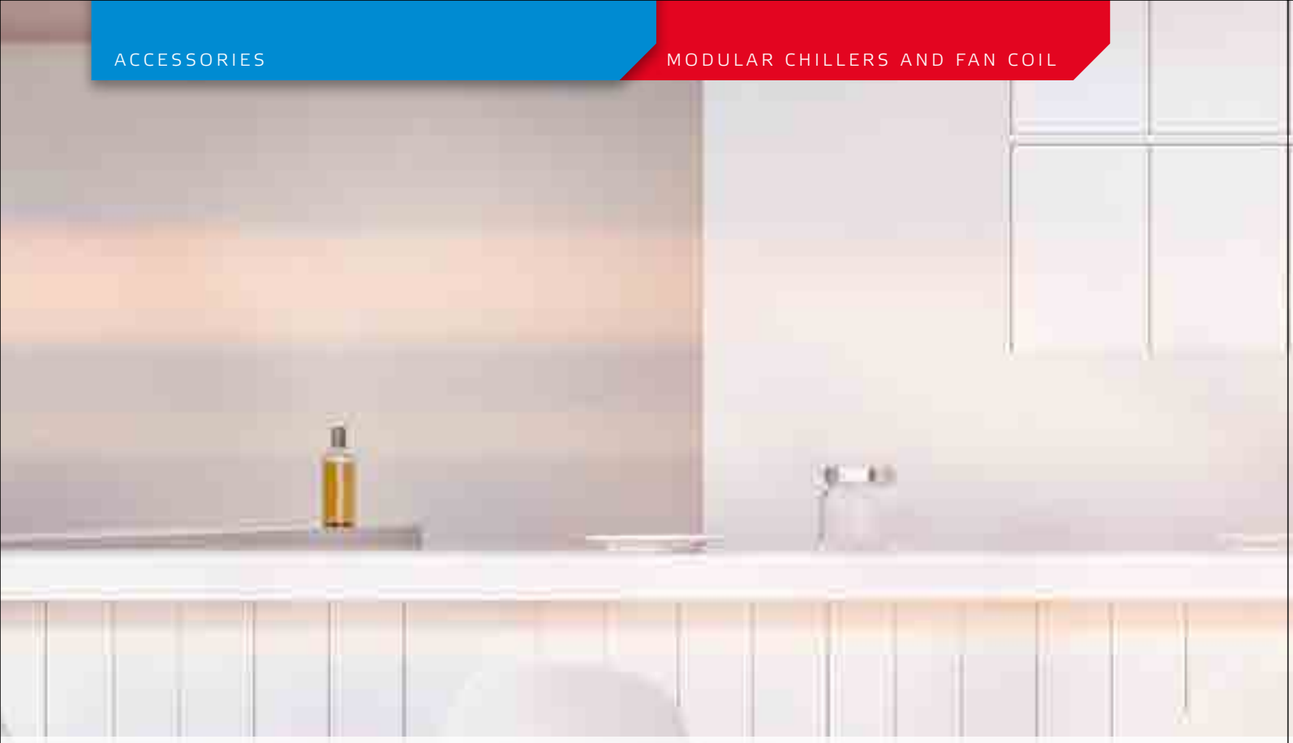
NEW

OPTIONAL WIRED CONTROLLER KJRP-75A
FOR FLOOR CEILING FAN COIL UNITS

Model			SF-250F3	SF-350F3	SF-500F3	SF-700F3	SF-800F3
Power supply		V/Ph/Hz	220-240/1/50				
Air flow (H/M/L)		m^3/h	400/315/190	595/470/340	790/580/410	1190/855/505	1360/1015/685
		CFM	235/185/112	350/276/200	465/341/241	700/503/297	800/597/403
Cooling	Capacity (H/M/L)	kW	2,35/1,94/1,19	3,5/2,89/2,22	4,3/3,48/2,71	5,60/4,47/3,14	7,35/6,12/4,57
	Water flow rate (H/M/L)	m^3/h	0,41/0,35/0,23	0,61/0,51/0,40	0,77/0,73/0,62	1,01/0,80/0,56	1,28/1,10/0,81
	Water pressure drop (H/M/L)	kPa	13,3/9,98/4,59	34,1/24,63/15,39	54,2/36,22/22,78	50,7/33,38/17,73	44,1/33,7/19,41
Heating	Capacity (H/M/L)	kW	2,6/2,11/1,34	3,5/2,87/2.19	4,3/3,4/2,6	6,00/4,77/3,36	8,05/6,46/4,71
	Water flow rate (H/M/L)	m^3/h	0,47/0,39/0,24	0,68/0,56/0,43	0,85/0,81/0,68	1,14/0,92/0,64	1,40/1,14/0,84
	Water pressure drop (H/M/L)	kPa	14,3/10,33/4,5	35,1/24,41/14,82	54,3/36,9/22,3	55,5/37,66/19,27	46,9/31,9/18,16
Max. power input		W	17	26	50	96	113
Sound pressure level	(H/M/L)	dB(A)	29/24/18	38/32/23	46/38/30	50/42/31	51/44/33
Fan motor	Type		DC Motor	DC Motor	DC Motor	DC Motor	DC Motor
	Quantity		1	1	1	1	1
Fan	Type		Centrifugal, forward-curved Blades				
	Quantity		2	2	2	3	3
Coil	Row		3	3	3	3	3
	Max. working pressure	MPa	1,6	1,6	1,6	1,6	1,6
	Diameter	mm	Φ7,94	Φ7,94	Φ7,94	Φ7,94	Φ7,94
Body	Net dimensions (WxHxD)	mm	1020x495x200	1240x495x200	1240x495x200	1360x495x200	1360x591x200
	Packing size (WxHxD)	mm	1125x595x300	1345x595x300	1345x595x300	1465x595x300	1465x695x300
	Net weight	kg	21,5	25,5	25,5	28,5	32,5
	Gross weight	kg	27,5	32,5	32,5	36	41
Water inlet/outlet pipe		inch	G3/4	G3/4	G3/4	G3/4	G3/4
Drain pipe		mm	Φ18,5	Φ18,5	Φ18,5	Φ18,5	Φ18,5

Floor ceiling with 2 pipes doesn´t include 3 or 2-way valve in the package.
The valve uses the characteristics of NC (normally closed) and power supply 230V from fan coil unit. SINCLAIR doesn´t offer valves.

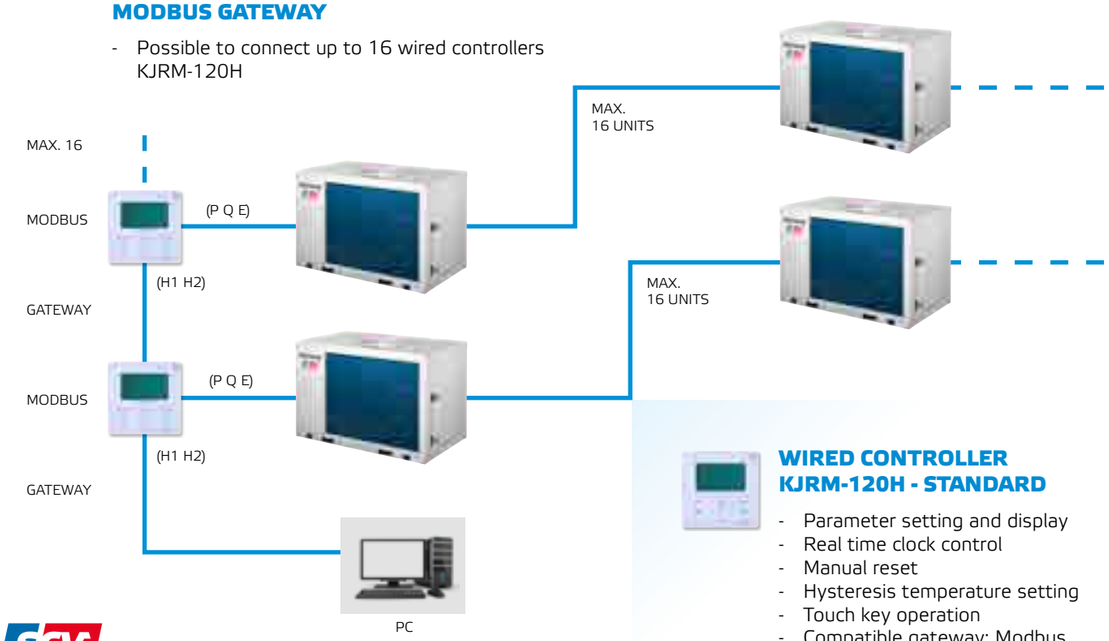
1. H: High fan speed; M: Medium fan speed; L: Low fan speed.
2. Cooling conditions: Entering water 7 ºC, leaving water 12 ºC, Entering air temperature 27 ºC DB/19 ºC WB.
   Heating conditions: entering water 50 ºC, entering air temperature 20 ºC DB/15 ºC WB, the same water flow as the cooling conditions.
3. Noise is tested in a semi-anechoic test room.



Modular Chillers Accessories

MODBUS GATEWAY

- Possible to connect up to 16 wired controllers KJRM-120H



WIRED CONTROLLER KJRM-120H - STANDARD

- Parameter setting and display
- Real time clock control
- Manual reset
- Hysteresis temperature setting
- Touch key operation
- Compatible gateway: Modbus

Fan Coil Units Accessories

CONTROLLERS FOR FAN COIL UNITS

R05
Infrared controller for cassettes and wall-mounted fan coil units.

KJR-29B
Wall mounted wired controller with modern design including temperature sensor. Possible to use ºC or ºF. For cassettes and wall-mounted fan coil units.

KJR-18B
Wall mounted wired controller for duct SF-xxxD3 and floor-ceiling SF-xxxF fan coil units.

NEW

SWC-86A
Wall mounted digital wired controller for duct SF-xxxD3 supports MODBUS RTU.

KJRP-75A
Wired controller for floor-ceiling SF-xxxF3 fan coil units.

FCUKZ-03
Connection kit including wired controller KJR-90D and infrared sensor which allows to connect CCMxx, IMM or BMS. Used for duct SF-xxxD3.

CCM09, CCM10
Central wired controller with cooling/heating priority setting (CCM09 with weekly timer).

CCM30
Central wired controller with modern design and touchpads.

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AIR CONDITIONING

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