



CHIGO
CENTRAL AIR-CONDITIONING



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GUANGDONG CHIGO HEATING & VENTILATION EQUIPMENT CO., LTD.

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Note:All the data in this book maybe changed without notice
for further improvement on quality and performance.

R22 & R410A & R407C
50Hz & 60Hz

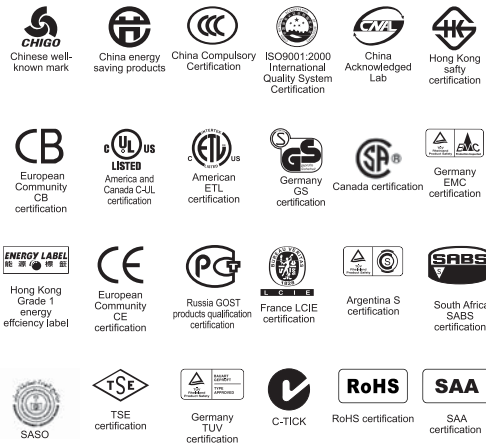
Air-cooled Modular Chiller

Chigo CAC Catalogue **2016**





Chigo Group



GUANGDONG CHIGO AIR CONDITIONING CO., LTD. (Listing members of the Group, Stock Code: 449.HK) established in 1994 and located in a famous Chinese industrial city Foshan. We are a big modern enterprise and mainly engage in designing, R&D, manufacturing AC as well as distributing AC domestically and internationally.

As a leading enterprise in Chinese AC industry, CHIGO's designed annual output is 10 million sets, which includes complete series of AC products. We are one of the biggest AC enterprises which have the most complete refrigeration industrial chain. All-in-one production strategy can meet with the diversity of global market demand and render CHIGO to keep fast development speed over many years.

Till today, CHIGO air conditioners won varies strict certification in all important market, including the ISO9001 Quality System Authentication, the ISO14000 Environmental Management System Authentication, China Inspection-free Product Certificate, China Energy-saving Product Certificate, China Compulsory Certificate (CCC), UL certificate of the USA, CE certificate of EU, GS certificate of German, SAA safety certificate of Australia, etc. We also won the award of "Global Green Environment-Protection Energy-Saving Air-conditioning" from United Nations.

Development History

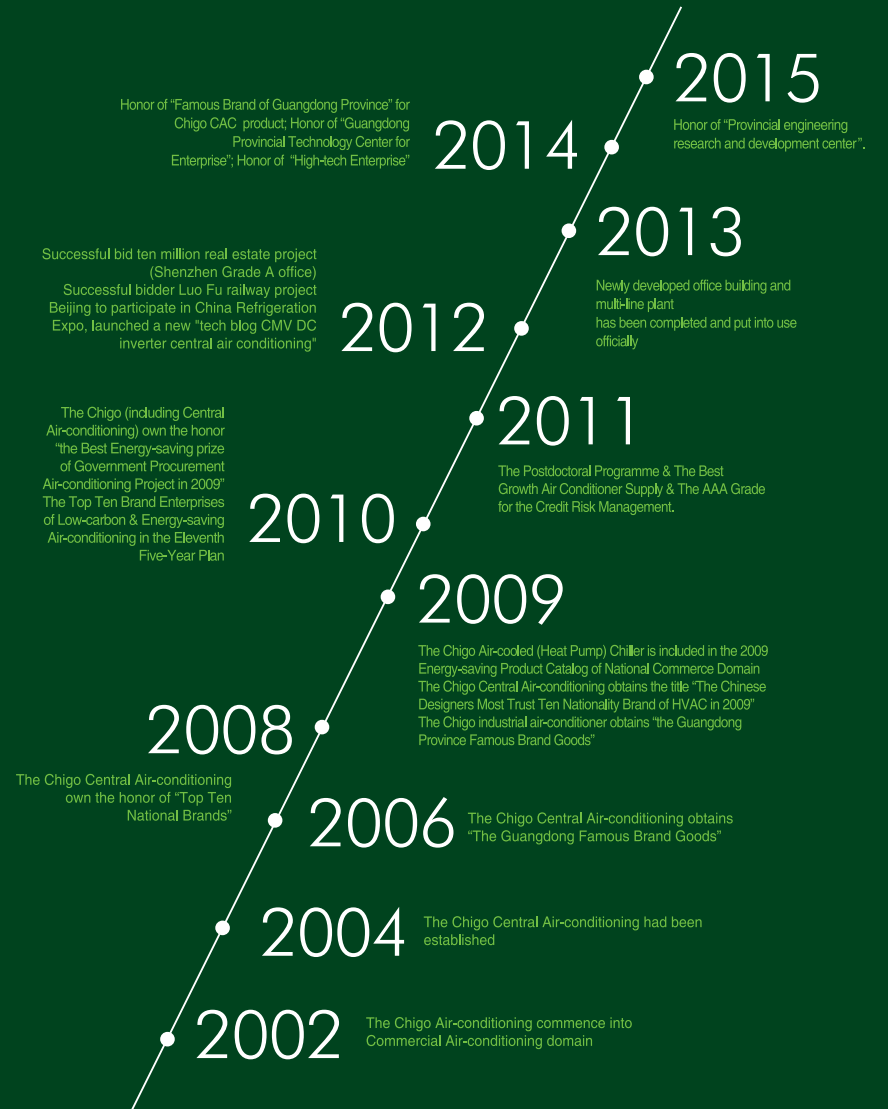


The Chigo Heating & Ventilation Equipment Co., Ltd.

Chigo Central Air-conditioning established in 2002, which belongs to GUANGDONG CHIGO AIR CONDITIONING CO.,LTD, a professional Central AC equipment manufacturing and supplying enterprises, with a net of R&D, production,manufac-turing, sales, design, installation and service.

To "Be Professional Central Air-conditioning Supplier", Chigo Central Air-conditioning dedicate to research,design,manuf- acture and sale Central Air-conditioning. During 13 years developing, it has formed an annual production capacity of 1,000,000 sets, and become the most complete refrigeration industrial chain in China. All-in-one Production strategy can meet the various market demand and enable CHIGO to be the biggest scale, the width product line, the most complete product series central air-conditioning enterprise in China.

Chigo Central Air-conditioning marketing net have covered more than 150 countries and regions all over the world, and set agencies at 31 provinces in China. It has many senior engineers to provide professional design and appropriate service for customers.





Testing Center

The Testing Center is a comprehensive, multi-functional laboratory, mainly used to engage residential and commercial air-conditioner's performance, safety, reliability and authentication testing. It takes 6000 square meters, 50 million RMB permanent assets.

It has 9 Air-enthalpy Labs, 3 Condition operating labs, 1 Noise Testing Lab, 2 Long-term Operating Labs, Security Structure Analysis Lab, Air Volume Lab; and labs in planning, EMC, Wet State, Thermal Equilibrium, Capacity Testing and so on.



Chinese Energy Efficiency Label Management Center's Verification.



Long-term Cooperation with Professional Certification Test Organization.



World-class Professional HR.



Denmark B&K 3560 Acoustics and Vibration Noise Test Analysis System.



15 Engineers, all had got professional training before commencement.

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Air-Cooled Modular Chiller

How to read the models

CL S - F 65 H W / S R1 A

A: New series

Refrigerant
Omit:R22; **R1:**R410A **R2:**R407C

Power supply
S: 380V/3PH/50Hz
Z: 380-415V/3PH/50Hz
K: 380V/3PH/60Hz

Outdoor unit without hydraulic module

Function code
C:Cooling only; **H:**Heat pump

Capacity(kw)

Compressor code
F:Fixed speed; **V:**Inverter

Condenser code

Chigo
Light chiller system

Features



30kW




60/65kW



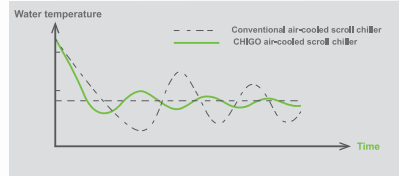
130kW

- Adopts high reliable Copeland compressor

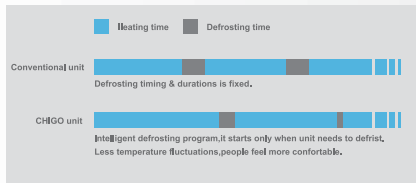
 - Better Liquid Handling**
Radial compliance allows the scroll members to separate in the presence of liquid refrigerant, thus, providing protection against liquid damage.
 - Greater Efficiency**
With axial compliance, optimized force between two scrolls can be obtained, leading to high efficiency over the entire operating range.
 - Unmatched Reliability**
Ability to start under any system load, without start components.
Easy to service and maintain due to their compact size and lightweight, simple design.
Engineered for optimum performance with today's chlorine-free refrigerants.
No complex internal suction and discharge valves for quieter operation and higher reliability.
- 500 steps EXV from Saginomiya (a Famous Japanese brand)

 - Compare to TXV:**
It controls refrigerant flow as per operation mode and temperature condition, because EXV has faster load reaction speed, bigger regulation range, higher refrigerant control accuracy, so the water outlet temperature can be controlled more precisely.
- Optimized structure and compact size provided a larger loading quantity, 65kW unit can be loaded 12 sets, 130kW unit can be loaded 6 sets.

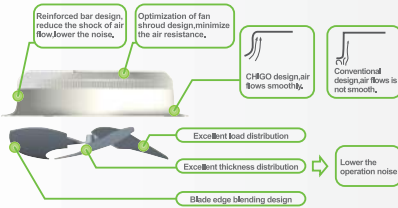
- 4 Precisely water temperature control, keeps room temperature stable.
Compressors in each units auto respond to the real capacity needs, system provides precisely water temperature controls.



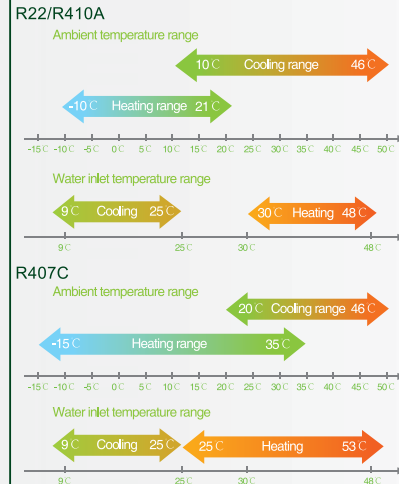
- 5 Intelligent defrosting program, it starts only when unit needs to.
Defrosting program starts according to a) ambient temperature, b) heat exchanging efficiency & capacity change due to the frost, whereas conventional unit's defrosting timing & duration is fixed, causing fluctuations in temperature and personal comfort.



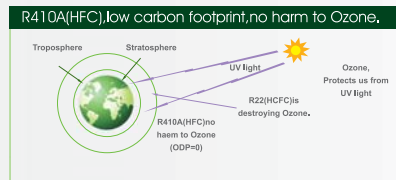
- 6 Optimization of fan blade and fan shroud design, bigger the air flow, lower the noise.



- 7 Wide operation range.



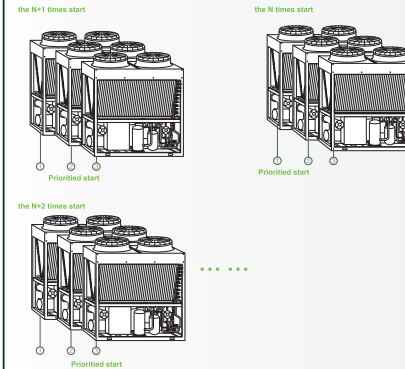
- 8 ECO friendly R410A(HFC), low carbon footprint, no harm to Ozone.



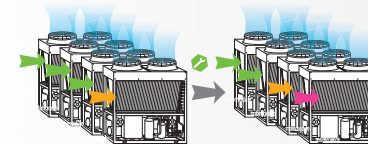
- 9 Modular design concept, a good solution for agencies to make stocks.
Excellent flexibility in installation, max. 16 units can be combined in group, max. capacity can be up to 2080kW.



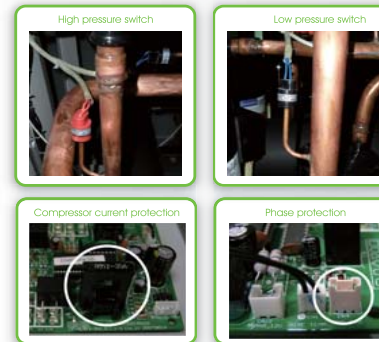
- 10 Balance operation program, it balances the operation time of every unit according to unit's accumulated operation time.



- 11 If master unit fails, all the units will stop.
When the master unit fails, any one of the slave units can be set as master unit manually.
If one slave unit fails, this unit will stop but others keep running.



- 12 Using varieties of protection devices to guarantee the system more safe and reliable.



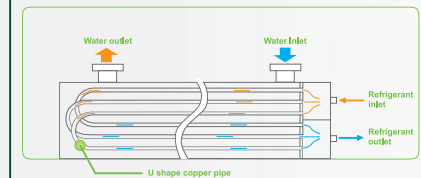
- 13 Comprehensive protections to guarantee system's safety.

NO.	Protections
1	Compressor high pressure protection
2	Compressor low pressure protection
3	Compressor malfunction protection
4	Compressor overload protection
5	Condenser fan overload or overheat protection
6	Phase sequence protection
7	Water flow cut-off protection

- 14 Ant-aging PP(polypropylene) plastic air shroud, long life span design.
Panels are galvanized steel with epoxy coating, double anti-corrosion guarantee.



- 15 High efficiency shell & tube evaporator
Fouling factor is 0.086m² · °C/kW, high fouling tolerance
High Heat Transfer Efficiency copper pipes are used in the heat exchanger.



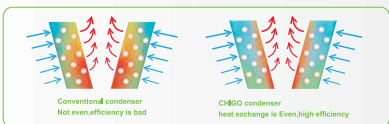
16 The refrigerant flow in traditional bow-shaped turn-back flow heat exchanger moves in "Z" path. The new spiral flow design in spiral turn-back plate heat exchanger changes the status and form of refrigerant, thus increasing heat exchange efficiency.

The main characteristics of spiral turn-back plate heat exchanger are as below:

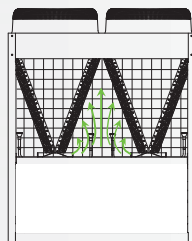
1. High heat transfer coefficient (20%-40% increase);
2. Full coverage of heat exchange. Without Dead Heat;
3. Obvious decrease of pressure drop in the shell (around 45% drop pressure under the same flow velocity);
4. Few impurities as no retention area in the shell;
5. Better anti-vibration.



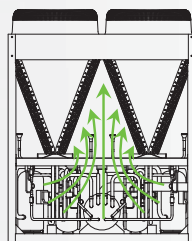
17 High efficiency condenser
Refrigerant flow paths are optimized design, especially for the lower part of condenser coil, it evens the heat exchange between upper part and lower part of condenser, to improve the efficiency of whole unit, also improve the defrosting efficiency in cold Winter.



18 Open design, enlarges the air inlet area, increases the heat transfer efficiency by 8%.
Open design, easy for the maintenance.

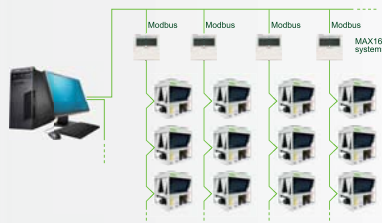


Conventional unit, close design.



CHIGO unit, open design.

19 Modbus gateway is built in the control logical for standard. It can realize BMS control without any device.



Chiller Type		R22/50Hz			
Model		CLS-F30HWSA	CLS-F65HWSA	CLS-F130HWSA	
Power supply	V/ph/Hz	380/3/50	380/3/50	380/3/50	
Capacity					
Cooling	kW	30	65	130	
Heating	kW	32	69	140	
Electrical data					
Power input	Cooling	kW	11.1	22	44
	Heating	kW	10.8	21.3	43
	Max. power input	kW	16	28	56
Rated current	Cooling	A	19	38	78
	Heating	A	18	37	76
	Max. Current	A	29	51	102
Physical data					
Refrigerant	Weight	kg	7	6.5x2	6.2x4
	Refrigerant control		EXV+Capillary	EXV+Capillary	EXV+Capillary
	Type		R22	R22	R22
Compressor	Brand		Copeland	Copeland	Copeland
	Type		Scroll	Scroll	Scroll
	Quantity	pcs	1	2	4
Fan motor	Quantity	pcs	1	2	4
	Air flow volume	m ³ /h	12000	24000	48000
Evaporator (Water side)	Heat-exchanger type		Shell and tube	Shell and tube	Shell and tube
	Water pressure drop	kPa	30	30	40
	Water inlet/outlet diameter	mm	DN40	DN100	DN65
	Water flow volume	m ³ /h	5.16	11.18	22.36
	Max. Pressure	MPa	1.1	1.1	1.1
	Connection type		Flange connection	Flange connection	Flange connection
Dimension (W×H×D)	Net	mm	1160×2090×900	2000×2090×900	2000×2090×1700
	Packing	mm	1240×2250×950	2080×2250×950	2080×2250×1740
Weight	Net	kg	320	530	960
	Gross	kg	330	545	980
Control type			Wired controller	Wired controller	Wired controller
Sound level(semi-anechoic)	dB(A)		62	65	68
Quantity per 20GPI/40GPI/40HQ	Set		10/21/21	6/12/12	3/6/6
Operation range					
Water inlet temperature	Cooling	°C	9~25	9~25	9~25
	Heating	°C	30~48	30~48	30~48
Water outlet temperature	Cooling	°C	5~20	5~20	5~20
	Heating	°C	35~53	35~53	35~53
Ambient temperature	Cooling	°C	10~46	10~46	10~46
	Heating	°C	-10~21	-10~21	-10~21

Remarks(specifications are based on the following conditions):

1. Cooling: water inlet/outlet: 12 °C / 7 °C, outdoor ambient temp. of 35 °C DB.
2. Heating: water inlet/outlet: 40 °C / 45 °C, outdoor ambient temp. 7 °C DB/6 °CWB.
3. Water side fouling factor: 0.086m² /kW.

Chiller Type		R410A/50Hz			R407C/50Hz			
Model		CLS-F30HW/ZR1A	CLS-F65HW/ZR1A	CLS-F130HW/ZR1A	CLS-F30HW/ZR2	CLS-F65HW/ZR2	CLS-F130HW/ZR2	
Power supply	V/ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	
Capacity								
Cooling	kW	30	65	130	30	65	130	
Heating	kW	35	70	140	35	70	140	
Electrical data								
Power input	Cooling	kW	11	22	44	11	22	44
	Heating	kW	10.5	21	42	10.3	21.5	43
	Max. power input	kW	15	26	52	20	40	80
Rated current	Cooling	A	19	38	78	19	38	78
	Heating	A	18	37	76	18	37	76
	Max. Current	A	29	51	102	38	76	155
Physical data								
Refrigerant	Weight	kg	6.5	6.5x2	6.5x4	6.2	6.2x2	6.2x4
	Refrigerant control		EXV+Capillary	EXV+Capillary	EXV+Capillary	EXV+Capillary	EXV+Capillary	EXV+Capillary
	Type		R410A	R410A	R410A	R407C	R407C	R407C
Compressor	Brand		Copeland	Copeland	Copeland	Copeland	Copeland	Copeland
	Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity	pcs	1	2	4	1	2	4
Fan motor	Quantity	pcs	1	2	4	1	2	4
	Air flow volume	m ³ /h	12000	24000	48000	12000	24000	48000
	Heat-exchanger type		Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Evaporator (Water side)	Water pressure drop	kPa	30	30	40	30	30	40
	Water inlet/outlet diameter	mm	DN40	DN100	DN65	DN40	DN65	DN80
	Water flow volume	m ³ /h	5.16	11.18	22.36	5.16	11.18	22.36
	Max. Pressure	MPa	1.1	1.1	1.1	1	1	1
	Connection type		Flange connection	Flange connection	Flange connection	Flange connection	Flange connection	Flange connection
	Dimension (W×H×D)	Net	mm	1160×2090×900	2000×2090×900	2000×2090×1700	1160×2090×900	2000×2090×900
Weight	Packing	mm	1240×2250×950	2080×2250×950	2080×2250×1740	1240×2245×950	2080×2245×950	2080×2250×1740
	Net	kg	320	570	1100	320	570	1100
Control type	Gross	kg	330	600	1120	330	600	1120
			Wired controller	Wired controller	Wired controller	Wired controller	Wired controller	Wired controller
Sound level(semi-anechoic)	dB(A)	62	65	68	62	65	68	
Quantity per 20GP/40GP/40HQ	Set	10/21/21	6/12/12	3/6/6	10/21/21	6/12/12	3/6/6	
Operation range								
Water inlet temperature	Cooling	°C	9-25	9-25	9-25	9-25	9-25	9-25
	Heating	°C	30-48	30-48	30-48	25-53	25-53	25-53
Water outlet temperature	Cooling	°C	5-20	5-20	5-20	5-20	5-20	5-20
	Heating	°C	35-53	35-53	35-53	30-58	30-58	30-58
Ambient temperature	Cooling	°C	10-46	10-46	10-46	20-46	20-46	20-46
	Heating	°C	-10-21	-10-21	-10-21	-15-35	-15-35	-15-35

Remarks(specifications are based on the following conditions):
1.Cooling:water inlet/outlet:12 °C / 7 °C, outdoor ambient temp. of 35°C DB.
2.Heating:water inlet/outlet:40 °C / 45 °C, outdoor ambient temp. 7 °C DB/6 °CWB.
3.Water side fouling factor:0.086m² C /kW.

FCU Type		R22/60Hz			
Model		CLS-F30HW/KA	CLS-F65HW/KA	CLS-F130HW/KA	
Power supply	V/ph/Hz	380/3/60	380/3/60	380/3/60	
Capacity					
Cooling	kW	30	65	130	
Heating	kW	32	69	140	
Electrical data					
Power input	Cooling	kW	11.1	23	45
	Heating	kW	10.8	22	44
	Max. power input	kW	16	30	57
Rated current	Cooling	A	21	40	80
	Heating	A	19	39	78
	Max. Current	A	29	55	105
Physical data					
Refrigerant	Weight	kg	7	6.5x2	6.5x4
	Refrigerant control		EXV+ Capillary	EXV+ Capillary	EXV+ Capillary
	Type		R22	R22	R22
Compressor	Brand		SANYO	SANYO	SANYO
	Type		Scroll	Scroll	Scroll
	Quantity	pcs	1	2	4
Fan motor	Quantity	pcs	1	2	4
	Air flow volume	m ³ /h	12000	24000	48000
	Heat-exchanger type		Shell and tube	Shell and tube	Shell and tube
Evaporator (Water side)	Water pressure drop	kPa	30	30	40
	Water inlet/outlet diameter	mm	DN40	DN100	DN65
	Water flow volume	m ³ /h	5.16	11.18	22.36
	Max. Pressure	MPa	1.1	1.1	1.1
	Connection type		Flange connection	Flange connection	Flange connection
	Dimension (W×H×D)	Net	mm	1160×2090×900	2000×2090×900
Weight	Packing	mm	1240×2250×950	2080×2250×950	2080×2250×1740
	Net	kg	330	550	980
Control type	Gross	kg	340	565	980
			Wired controller	Wired controller	Wired controller
Sound level(semi-anechoic)	dB(A)	62	65	68	
Quantity per 20GP/40GP/40HQ	Set	10/21/21	6/12/12	3/6/6	
Operation range					
Water inlet temperature	Cooling	°C	9-25	9-25	9-25
	Heating	°C	30-48	30-48	30-48
Water outlet temperature	Cooling	°C	5-20	5-20	5-20
	Heating	°C	35-53	35-53	35-53
Ambient temperature	Cooling	°C	10-46	10-46	10-46
	Heating	°C	-10-21	-10-21	-10-21

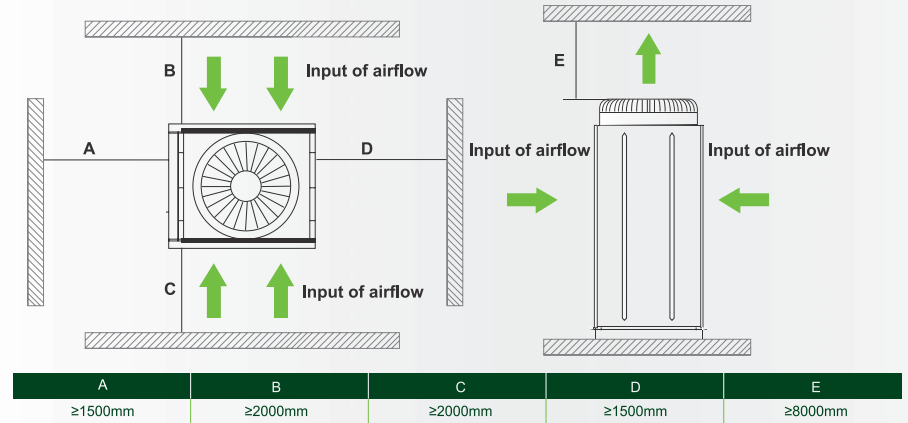
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1.Cooling:water inlet/outlet:12 °C / 7 °C, outdoor ambient temp. of 35°C DB.
2.Heating:water inlet/outlet:40 °C / 45 °C, outdoor ambient temp. 7 °C DB/6 °CWB.
3.Water side fouling factor:0.086m² C /kW.

FCU Type		R410A/60Hz			
Model		CLS-F30HW/KR1A	CLS-F65HW/KR1A	CLS-F130HW/KR1A	
Power supply	V/ph/Hz	380/3/60	380/3/60	380/3/60	
Capacity					
Cooling	kW	30	65	130	
Heating	kW	35	70	140	
Electrical data					
Power input	Cooling	kW	11	22	44
	Heating	kW	10.5	21	42
	Max. power input	kW	15	26	52
Rated current	Cooling	A	21	38	76
	Heating	A	19	36	74
	Max. Current	A	29	51	102
Physical data					
Refrigerant	Weight	kg	6.5	6.5x2	6.5x4
	Refrigerant control		EXV+ Capillary	EXV+ Capillary	EXV+ Capillary
	Type		R410A	R410A	R410A
Compressor	Brand		Danfoss	Danfoss	Danfoss
	Type		Scroll	Scroll	Scroll
	Quantity	pcs	1	2	4
Fan motor	Quantity	pcs	1	2	4
	Air flow volume	m ³ /h	12000	24000	48000
Evaporator (Water side)	Heat-exchanger type		Shell and tube	Shell and tube	Shell and tube
	Water pressure drop	kPa	30	30	40
	Water inlet/outlet diameter	mm	DN40	DN100	DN65
	Water flow volume	m ³ /h	5.16	11.18	22.36
	Max. Pressure	MPa	1.1	1.1	1.1
	Connection type		Flange connection	Flange connection	Flange connection
Dimension (W×H×D)	Net	mm	1160×2090×900	2000×2090×900	2000×2090×1700
	Packing	mm	1240×2250×950	2080×2250×950	2080×2250×1740
Weight	Net	kg	320	570	1100
	Gross	kg	330	600	1120
Control type			Wired controller	Wired controller	Wired controller
Sound level(semi-anechoic)	dB(A)		62	65	68
Quantity per 20GP/40GP/40HQ	Set		10/21/21	6/12/12	3/6/6
Operation range					
Water inlet temperature	Cooling	°C	9-25	9-25	9-25
	Heating	°C	30-48	30-48	30-48
Water outlet temperature	Cooling	°C	5-20	5-20	5-20
	Heating	°C	35-53	35-53	35-53
Ambient temperature	Cooling	°C	10-46	10-46	10-46
	Heating	°C	-10-21	-10-21	-10-21

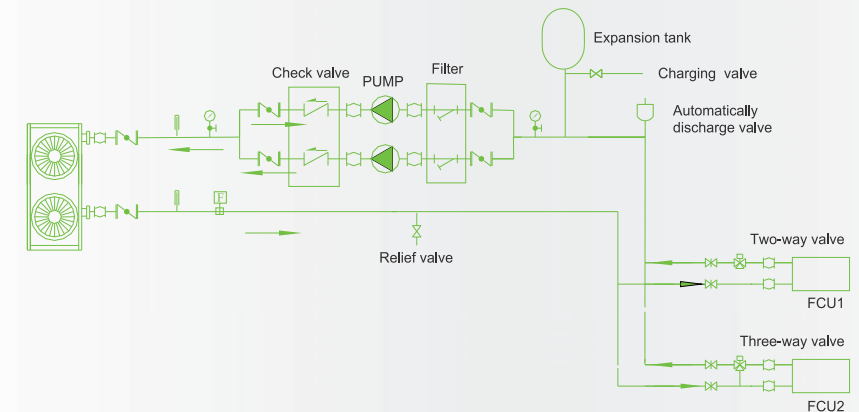
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1.Cooling:water inlet/outlet:12 °C / 7 °C,outdoor ambient temp. of 35°C DB.
2.Heating:water inlet/outlet:40 °C / 45 °C,outdoor ambient temp.7 °C DB/6 °CWB.
3.Water side fouling factor:0.086m² C /kW.

Installation

Installation space requirement



Connection pipeline system



Stop valve	Pressure gauge	Gate valve	Flexible joint	Water flow switch
Y shaped filter	Thermometer	Circulation pump	Check Valve	Automatically discharge valve

Fan Coil Unit

4-Way Cassette



4-way Cassette Type
600~1000CFM



Compact 4-way Cassette Type
300~470CFM

Features:

- Low operation noise.
 - Streamline plate ensures quietness.
 - Creates natural and comfortable environment.
- The adoption of the most advanced 3-Dimensional Screw fan.
 - Reduces the air resistance passing through.
 - Smooths the air flow.
 - Makes air speed distribution to the heat exchange uniform.
- For standard cassette, wired controller and digital display panel are optional.
 
- A full series of controller give you the most suitable solution according to the different requirement from different customers.
- Optimized structure makes the air volume and capacity improved rapidly.
- Improvement for easy installation and maintenance
 - Little space is required for installation into a shallow ceiling.
 - Because of the compactness and weight reduction of the main unit and panel, all models can be installed without a hoist.
- Drainage pump can take up the condenser water to 1200mm.

FCU type		Compact 4-way Cassette Type			
Model		CSQ4-300R	CSQ4-350R	CSQ4-470R	
Power supply	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	
Capacity					
Air-flow volume	Hi/Med/Lo	CFM m ³ /h	300/260/180 500/430/310	350/300/210 600/510/360	470/400/280 800/680/480
Cooling	Hi/Med/Lo	kW	2.8/2.4/1.8	3.5/3.0/2.3	4.5/3.9/2.9
Heating	Hi/Med/Lo	kW	4.2/3.7/2.7	5.3/4.6/3.4	6.8/5.9/4.4
Physical data					
Noise level (High-speed)		dB(A)	40	44	44
Water flow volume		m ³ /h	0.48	0.60	0.78
Water pressure drop		kPa	25	28	30
Indoor coil	Number Of Rows		2	2	2
	Fin type		copper tube, aluminum fin		
Fan motor	Quantity	pcs	1	1	1
	Power Input	W	43	64	65
Indoor unit	Dimension (W×H×D)	mm	580×275×580	580×275×580	580×275×580
	Packing (W×H×D)	mm	745×350×675	745×350×675	745×350×675
	Net/Gross weight	kg	22/24	22/24	22/24
panel	Dimension (W×H×D)	mm	650×30×650	650×30×650	650×30×650
	Packing (W×H×D)	mm	750×95×750	750×95×750	750×95×750
	Net/Gross weight	kg	2.7/4.0	2.7/4.0	2.7/4.0
Pipe	Water-inlet pipe	mm	DN20	DN20	DN20
	Water-outlet pipe	mm	DN20	DN20	DN20
	Drainage pipe	mm	DN25	DN25	DN25
Controller			remote controller(standard)		

Remark:
1. Cooling capacity test condition: air side temperature:27DB °C/19WB °C, water inlet temperature 7 °C, water temperature difference 5 °C,
2. Heating capacity test condition: air side temperature:21DB °C, ater inlet temperature 60 DB °C, water temperature difference 5 °C.

FCU type		4-way Cassette Type				
Model		CSQ-600R	CSQ-760R	CSQ-880R	CSQ-1000R	
Power supply	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	
Capacity						
Air-flow volume	Hi/Med/Lo	CFM m ³ /h	600/510/360 1000/867/612	760/646/456 1300/1098/775	880/748/528 1500/1272/898	1000/850/600 1700/1445/1020
Cooling capacity	Hi/Med/Lo	kW	5.3/4.6/3.4	7.2/6.3/4.7	8.5/7.4/5.5	10.0/8.7/6.5
Heating capacity	Hi/Med/Lo	kW	8.0/7.0/5.2	10.8/9.4/7.0	12.8/11.1/8.3	15.0/13.1/9.8
Physical data						
Noise level (High-speed)		dB(A)	43-48	44-48	45-52	45-53
Water flow volume		m ³ /h	1.10	1.24	1.46	1.55
Water pressure drop		kPa	36	36	38	40
Indoor coil	Number Of Rows		2	2	2	2
	Fin type		copper tube, aluminum fin			
Fan motor	Quantity	pcs	1	1	1	1
	Power Input	W	140	150	160	180
Indoor unit	Dimension (W×H×D)	mm	840×230×840	840×230×840	840×285×840	840×285×840
	Packing (W×H×D)	mm	920×265×920	920×265×920	920×310×920	920×310×920
	Net/Gross weight	kg	23/28	23/28	26/31.5	28/33.5
panel	Dimension (W×H×D)	mm	950×50×950	950×50×950	950×50×950	950×50×950
	Packing (W×H×D)	mm	1030×105×1030	1030×105×1030	1030×105×1030	1030×105×1030
	Net/Gross weight	kg	5.4/8.0	5.4/8.0	5.4/8.0	5.4/8.0
Pipe	Water-inlet pipe	mm	DN20	DN20	DN20	DN20
	Water-outlet pipe	mm	DN20	DN20	DN20	DN20
	Drainage pipe	mm	DN25	DN25	DN25	DN25
Controller			Wired controller(optional), remote controller(standard)			

Remark:
1. Cooling capacity test condition: air side temperature:27DB °C/19WB °C, water inlet temperature 7 °C, water temperature difference 5 °C.
2. Heating capacity test condition: air side temperature:21DB °C, ater inlet temperature 60 DB °C, water temperature difference 5 °C.

Duct Type



200~1400CFM

Features:

- 1 | Nested in the ceiling, space-saving and noble.
- 2 | High capacity of cooling/heating performance, high efficiency and energy-saving.
- 3 | Adjust the indoor temperature rapidly and averagely.
- 4 | Low noise fan direct driven by single phase, 3 speed permanent split capacitor motor.
- 5 | The water pipe connection method is flexible , the right way is standard , the left way is for optional .
- 6 | Unit constructed by electrostatic galvanized sheet.
- 7 | providing maximum protection against corrosion. Heavy gauge zinc coated steel drainage pan with good insulation processing, avoiding sweating and corrosion.
- 8 | Unit tested performance comply with GB4706.32-2004, JB9063-1999 and JB/T4283-1991.
- 9 | Air return box and filter is optional . Air return method from rear and from button is changeable according to the actual installation.



Right way connection (Standard)

Left way connection (Optional)

FCU type		Ducted type (Pro Series)									
Model NO.		CST-200P12	CST-300P12	CST-400P12	CST-500P12	CST-600P30	CST-800P30	CST-1000P30	CST-1200P30	CST-1400P30	
Power supply	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	
		208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	
Capacity											
Air-flow volume	Hi/Med/Lo	CFM	200/170/120	300/250/190	400/340/250	500/410/310	600/490/370	800/680/490	1000/820/590	1200/970/780	1400/1120/840
		m ³ /h	340/290/210	510/420/320	680/580/420	850/700/520	1020/840/620	1360/1150/840	1700/1400/1000	2040/1650/1250	2380/2000/1480
Cooling	Hi/Med/Lo	kW	2.2/1.7/1.1	3.3/2.5/1.6	4.2/3.3/2.0	4.6/3.6/2.2	5.8/4.5/2.8	7.9/6.2/3.8	9.1/7.1/4.4	10.8/8.6/7.0	12.6/10/7.5
Heating	Hi/Med/Lo	kW	3.5/2.7/2.2	5.3/4.1/3.4	6.8/5.2/4.4	7.9/6.1/5.1	10.0/7.7/6.4	13.6/10.5/8.7	16.0/12.3/10.3	16.2/12.9/10.5	18.9/15/11.5
Physical data											
External static pressure	Pa	12	12	12	12	30	30	30	30	30	
Noise level (High-speed)	dB(A)	36	37	40	43	47	47	50	51	52	
Water flow volume	m ³ /h	0.37	0.56	0.72	0.83	1.00	1.36	1.56	1.98	2.24	
Water pressure drop	kPa	14	20	22	24	34	34	40	42	50	
Indoor coil	Number Of Rows	3	3	3	3	3	3	3	3	3	
	Fin type	copper tube, aluminum fin									
Fan motor	Quantity	pcs	1	1	1	1	2	2	2	2	
	Power Input	W	30	39	60	76	106	150	172	210	250
Indoor unit	Dimension (W×H×D)	mm	770×240×472	827×240×472	927×240×472	927×240×472	1140×240×472	1440×240×472	1546×240×472	1835×240×461	1835×240×461
	Packing (W×H×D)	mm	790×265×500	865×265×500	940×265×500	940×265×500	1155×265×500	1475×265×500	1565×265×500	1845×265×500	1845×265×500
Pipe	Net/Gross weight	kg	13/15	15/17	17/20	17/20	20/23	27/31	32/35	36/40	36/40
	Water-inlet pipe	mm	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20
	Water-outlet pipe	mm	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20
	Drainage pipe	mm	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25

Remark:

1. All performance data above are based upon 12Pa ESP(200-500); 30Pa ESP(600-1000).
2. Cooling capacity test condition: air side temperature: 27DB C/19WB C, water inlet temperature 7 C, water temperature difference 5 C.
3. Heating capacity test condition: air side temperature: 21DB C, ater inlet temperature 60 DB C, water temperature difference 5 C.

Accessories



300~470CFM 600~1000CFM

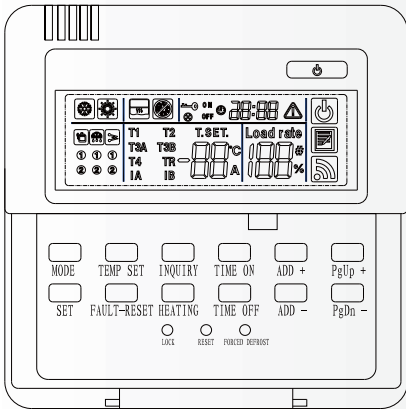
Wireless Controller (for cassette type FCUs)

- ▲ Wireless 8m transmission
- 5 operation modes: Auto, Cooling, Dehumidification, Heating, Fan
- Timer ON/OFF setting up to 24Hr
- Temperature control range 16-32°C
- Three fan speed selection
- Sleep mode function



Wired Controller (Optional for chiller, but one chiller system need one controller)

- ▲ 2 operation modes: Cooling, Heating
- Timer function
- Operation and error information inquiry
- Forced defrosting operation
- Button lock



	Cooling		Heating		Heat water
	Anti Freezing		Running Indication		Check
	Connect Upper Computer		Fault		Timer
	Compressor Condition		Defrost (heating)		Electrical Heater
	Invalid Press		Lock		Load rate
	Data Check & Setting Temp		T1 T2 T3 T3B T4 TR IA IB		T1: System water outlet T2: Module water outlet T3A: System tin temp T3B: System fin temp T4: Ambient temp TR: Heat-recovery hot water temp IA: A comp current IB: B comp current

Sample projects for chiller



Shopping mall in the center of Isfahan, Iran .



Government building in Inner Mongolia , China.



Office building in Istanbul, Turkey.



Office building in Kosice, Slovakia.