CIAC
Air conditioning

R32 All Inverter

Commercial Modular Chiller

Main Features

Environment friendly

- R32 refrigerant with low GWP
- Zero impact on ozone layer
- Less carbon emission

All DC Inverter

- High efficiency for energy saving
- Quick start-up and less frequent start/stop
- Precise consumption on real load

Silence

- Multiple silence modes
- Adapt to the noise requirements at different times of the day

High reliability

- Multi anti-freeenze protection
- Alternative cycle duty/defrosting operation
- Back-up function

Comfort

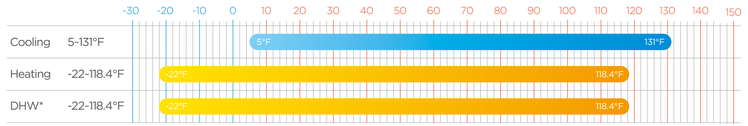
- Automatically adjust the target outlet temperature
- Stable and comfortable outlet temperature

High-efficiency

- Efficient plate heat exchanger
- High energy efficiency ratio

Application

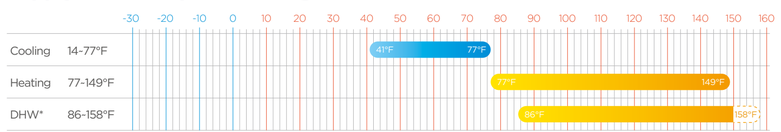
Operating temperature range



* Only for 20T

Note For 380V Modular Chiller Cooling 5-118.4°F; Heating -13-109.4°F; DHW -4-109.4°F

Supply water temperature range

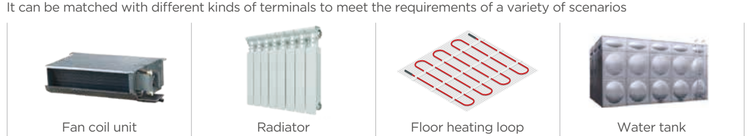


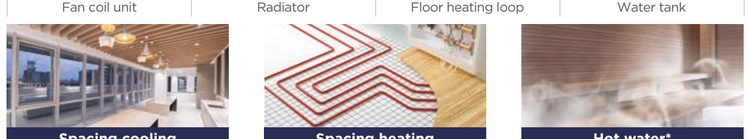
Note: high temperature DHW mode (need auxiliary electric heater)

* Only for 20T; 158°F can be set by wired controller

Note For 380V Modular Chiller Cooling 41-68°F

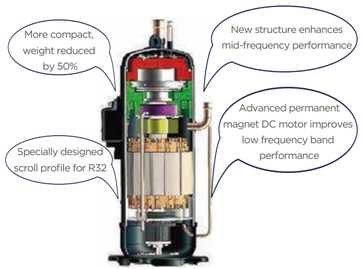
It can be matched with different kinds of terminals to meet the requirements of a variety of scenarios





Advanced Configurations

DC EVI* Inverter compressor



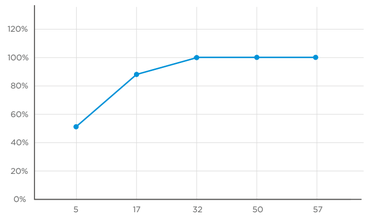
*Enhanced Vapor Injection

Strong heat in low temperature

100% heating capacity at 32°F

≥ 80% heating capacity at 17°F

≥ 56% heating capacity at 5°F*



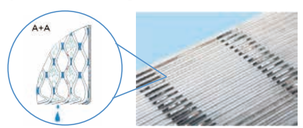
Note ≥75% heating capacity at 23°F for 380V unit

Double-wall PHE*

· 316L stainless steel;

· Double gap between water and refrigerant;

· Water and refrigerant will not mix, ensuring the safety of the water usage Modular Chiller 20T.



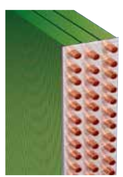
Refrigerant will not mix with water

Refrigerant leak window

*For 20T

RTPF condenser coil with anticorrosive treatment

Special heavy anti-corrosion treatment of heat exchanger provides great resistance against acid rain and salt corrosion against corrosive air to extend overall useful life.



Easy maintenance & installation

Modular design, up to 8 units can be connected in parallel, easy to install.

All surrounding panels of the unit can be disassembled, facilitating daily maintenance.

LCD touch wire controller

- Dot matrix LCD screen
- Weekly time, daily time
- Double temperature point setting
- Mute mode setting
- Master/slave wire controller settings
- Buzzer sound and alarm function
- Modbus function

When heating/cooling/DHW (domestic hot water) modes coexist, DHW mode can be set to operate with priority.
When multiple units are cascade installed, each unit can be set DHW mode individually.

Specifications

Model			CR8-1A-D020-V5N1H	CR8-1A-D030-V6N1H	CR8-1A-D040-V6N1H
Power Supply		V/PH/Hz	208-230/3/60	460±10%/3/60	460±10%/3/60
Cooling[1]	Capacity	TR	19.9	28.4	37.8
	Input Power	kW	23.73	35.51	47.53
	EER	Btu/W*h	10.06	9.59	9.55
	IPLV	Btu/W*h	20.15	19.96	19.76
Heating(A47W105)	Capacity	kBtu/h	255.9	370.55	493.73
	Input Power	kW	19.48	28.2	37.97
	COP	Btu/W*h	13.13	13.14	13.00
Heating(A17W105)	Capacity	kBtu/h	204.7	295.5	394.1
	Input Power	kW	24.49	33.9	45.65
	COP	Btu/W*h	8.35	8.71	8.63
Heating(A47W120)	Capacity	kBtu/h	255.9	364.1	485.5
	Input Power	kW	22.06	31.8	42.86
	COP	Btu/W*h	11.60	11.44	11.32
Heating(A17W120)	Capacity	kBtu/h	204.7	295.5	394.1
	Input Power	kW	27.27	38.6	52.02
	COP	Btu/W*h	7.50	7.65	7.57
Sound Pressure[2]	Cooling	dB(A)	67.0	74.0*	75.0*
	Heating	dB(A)	69.5	76.0*	78.0*
Refrigerant[3]	Refrigerant Name	lbs	R32/ 12.57 × 2	R32/ 24.25 × 2	R32/ 24.25 × 2
Compressor	Type	-	Inverter Scroll		
Condensor	Type	-	RTPF heat exchanger		
Evaporator	Type	-	Plate Heat Exchanger		
Fan	Type	-	BLDC		
	Number of Fans	-	2	2	2
Net Weight		lbs	1192	2315	2315
Net Dimensions	W*H*D	inch	78-3/4*74-1/64*37-13/16	90-3/16*98-7/16*61-13/16	90-3/16*98-7/16*61-13/16
Operating Ambient Temperature Range	Cooling	°F	5-131	5-131	5-131
	Heating	°F	-22-118.4	-22-118.4	-22-118.4
	DHW	°F	-22-118.4	/	/
Supply Water Temperature Range	Cooling	°F	14-77	41～77	41～77
	Heating	°F	77-149	77～149	77～149
	DHW	°F	77-149	/	/

1.AHRI 550-590 cooling capacity conditions: 95°F ambient air, 54°F EWT and 44°F LWT;Full load heating performance tested to AHRI standard 550/590;
2.Sound pressure tested at 5 feet;
3.This product contains fluorinated greenhouse gases (R32, GWP(Global Warning Potential : 675));
4.Some specifications may change, for reference only.

* The parameter will be provided upon official production of the product.
/ Not available

Model			CR8-1A-D020-V9N1H	CR8-1A-D030-V9N1H	CR8-1A-D040-V9N1H
Power Supply		V/Ph/Hz	380-415/3/50		
Cooling(A95W44.6)	Capacity	kBtu/h	238.80	341.20	443.50
	Input	kW	26.80	32.78	50.00
	EER	Btu/W·h	8.91	10.41	8.87
Heating(A44.6W95)	Capacity	kBtu/h	262.70	382.10	484.50
	Input	kW	19.74	27.00	38.17
	COP	Btu/W·h	13.31	14.15	12.69
Heating(A44.6W131)	Capacity	kBtu/h	225.10	361.60	429.90
	Input	kW	22.15	35.30	49.22
	COP	Btu/W·h	10.16	10.24	8.73
Heating(A19.4W95)	Capacity	kBtu/h	165.40	312.80	341.20
	Input	kW	19.40	34.73	39.22
	COP	Btu/W·h	8.53	9.01	8.70
Heating(A19.4W131)	Capacity	kBtu/h	146.00	258.60	274.60
	Input	kW	22.06	37.92	42.16
	COP	Btu/W·h	6.62	6.82	6.51
Fan	Type		BLDC		
	Quantity		2	2	2
Condensor	Type		RTPF heat exchanger	RTPF heat exchanger	RTPF heat exchanger
Evaporator	Type		Plate heat exchanger	Plate heat exchanger	Plate heat exchanger
Refrigerant system	Type	lbs	R32/19.84	R32/34.17	R32/34.17
Sound pressure level (A44.6W113)[1]		dB(A)	69	64	73
Net Weight		lbs	970	1478	1478
Net dimensions(W×H×D)		inch	78-47/64×69-11/16×37-51/64	87-13/32×90-35/64×44-11/16	87-13/32×90-35/64×44-11/16
Ambient temperature range	Cooling	°F	5 to 118.4	5 to 118.4	5 to 118.4
	Heating	°F	-13 to 109.4	-13 to 109.4	-13 to 109.4
	DHW	°F	-5 to 109.4	-5 to 109.4	-5 to 109.4
Water outlet temperature range	Cooling	°F	41 to 68	41 to 68	41 to 68
	Heating	°F	77 to 149	77 to 149	77 to 149
	DHW	°F	86 to 158	86 to 158	86 to 158

1. Sound pressure tested at 3.28feet

Model Number Description