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Professional · Value · Trust

Envicool · Data Center and Equipment Thermostat Expert

Data Center Cooling

- CyberMate™ series CRAC
- XRow™ series row-based cooling unit
- XRack™ series micro-modularized solution
- XSpace™ series modularized solution
- XStorm™ series fan wall solution
- XFlex™ series modularized DX solution
- iFreecooling™ series self-adaptive multi-joint energy-saving system
- FHA series data center free cooling system
- ERG series data center heat pipe system
- JS series data center humidifying system

Outdoor Cabinet Cooling

- DC series air conditioner
- EC series air conditioner
- HC series combo air conditioner
- EX series heat exchanger
- MC series air conditioner for power industry outdoor cabinet
- MX series heat exchanger for power industry outdoor cabinet

Energy Saving Solutions

- EC series indoor battery cooler
- ES series heat exchanger
- FX series BTS free cooling unit
- DC series split air conditioner
- SC series combo air conditioner with free cooling
- ERG series heat pipe

Customized Solutions

- Customized air conditioners

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Stock Code: 002837

Cabinet Cooling Solutions

Station Climate Control

Envicool

Save paper for the protection of forest resources



Shenzhen &
Suzhou Facilities







Test Laboratories





Production Line and Warehouse

[Company Profile]

Shenzhen Envicool Technology Co., Ltd. (Stock Code: 002837) is a hi-tech enterprise which specializes in Data Center and Equipment Climate Control technology. The team masters the world class cooling technology, precise control technology, mechanical design technology and has obtained series patents around temperature control.

After years of accumulation, Envicool has formed 4 main product systems including Data Center Cooling, Outdoor Cabinet Cooling, Telecom Site Cooling and Industrial Cooling. These solutions and products are widely used in China & overseas markets.

Outdoor Cabinet Cooling includes DC series air conditioner, EC series air conditioner, EX series heat exchanger, HC series combo air conditioner and customized air conditioners for special application.

Envicool has obtained ISO9001, ISO14001 and OHSAS18001. The products are CCC, CE, UL and TUV certified. Envicool adopts the Integrated Product Development (IPD) process to develop products and technologies, and utilizes the JIT and TQC supply chain management modes to meet the customers' requirement efficiently.

[Certifications]


ISO14001


ISO9001


OHSAS18001


CE


CCC


UL






China Energy-saving Certification


National Hi-Tech
Certification


Shenzhen Hi-Tech
Certification


Patents


Member of CCSA





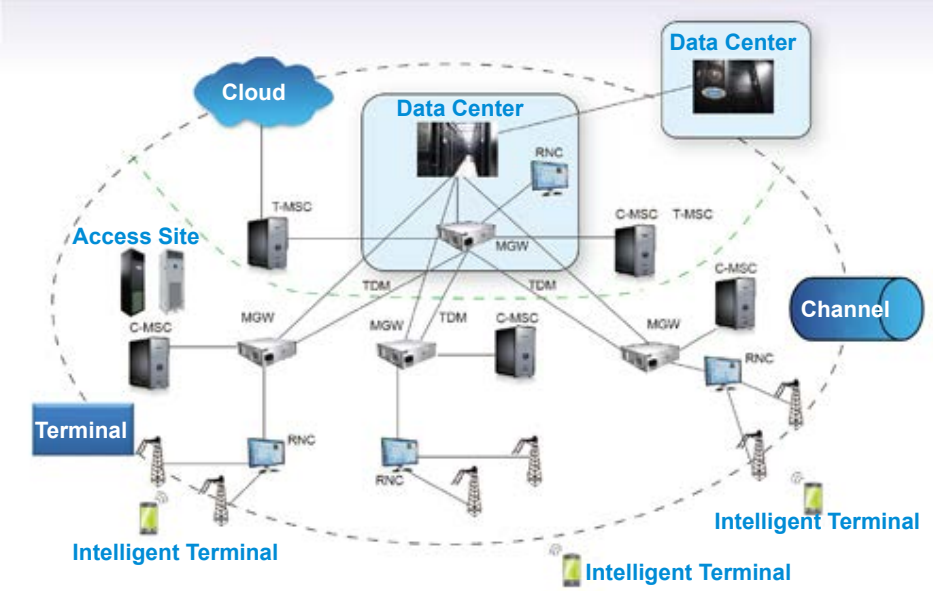


Data Center Awards

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〉〉Cabinet Climate Control Solutions

Future ICT Development – Cloud + Channel + Terminal



Envicool provides reliable and efficient cooling solutions for Cloud + Channel

Envicool Climate Control Solutions

Cabinet Climate Control Solutions



ICT Data Center Cooling & Energy-saving Solutions



High Density Data Center Cooling & Energy-saving Solutions



DC Powered Air Conditioner

Features & Benefits

- Reliable: The unit is powered by -48VDC power, regardless of the unstable AC power grid
- Energy efficiency: Efficient DC fan & Compressor, EER goes up to 4.5
- Low noise: Silently operating system available
- Corrosion protection: Powder coated sheetmetal endures harsh environment
- Easy maintenance: IP55 designed for flushing
- User friendly interface: LCD display with English menu makes convenient operation
- Environment friendly: Using R134a refrigerant and RoHS requirement compliance
- Dedicated design: Delay Start setting in case of big current, especially when multiple units start at one site
- Monitoring: Provide comprehensive alarm and status report through RS485 interface for remote control



Data Sheet

Model	DC03HDNC1A	DC05HDNC1A	DC06HDNC1A	DC10HDNC1C	DC15HDNC1A	DC20HDNC1A	DC30CDNC1B
Height - mm	348	545	545	746	746	746	1300
Width - mm	150	315	315	446	446	446	500
Depth - mm	200	170	170	200	200	250	230
Height with flange - mm	400	583	583	783	783	783	1350
Width with flange - mm	181	352	352	483	483	483	550
Depth with flange - mm	200	170	170	200	200	250	230
Weight - kg	7	15	15	30	30.5	38	60
Mounting	Door Mounted	Door Mounted	Door Mounted	Door Mounted	Door Mounted	Door Mounted	Door Mounted
Working Temp Range - ℃	-40 - +55	-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55
IP Protection Level	IP55	IP55	IP55	IP55	IP55	IP55	IP55
Refrigerant	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Cooling Capacity @L35/L35 - W	300	520	600	1250	1500	2000	3000
Heating (Optional) - W	300	500	500	500	500	600	500
Power Consumption @L35/L35 - W	120	160	200	345	490	624	860
Current @L35/L35 - A	2.50	3.34	4.20	7.20	10.20	13.00	18.00
Internal Airflow - m³/h	100	150	180	380	450	850	850
Voltage – V,DC	-48	-48	-48	-48	-48	-48	-48

Applications

- Outdoor Hybrid Base Station
- Outdoor Battery Cabinet
- Wireless Outdoor Cabinet









DC Series Low-noise Air Conditioner

Datasheet

Model	DC05HDNS1A	DC10HDNS1A	DC15HDNS1A
Height - mm	545	746	746
Width - mm	315	446	446
Depth - mm	170	200	250
Height with flange - mm	583	783	783
Width with flange - mm	352	483	483
Depth with flange - mm	170	200	250
Weight - kg	16	30	38
Mounting	Door Mounted	Door Mounted	Door Mounted
Working Temp Range - ℃	-40 ~ +55	-40 ~ +55	-40 ~ +55
Noise Level - dB(A)	45	50	50
IP Protection Level	IP55	IP55	IP55
Refrigerant	R134a	R134a	R134a
Cooling Capacity @L35/L35 - W	500	1000	1500
Heating (Optional) - W	500	500	500
Power Consumption @L35/L35 - W	200	355	425
Current @L35/L35 - A	4.2	7.4	8.9
Internal Airflow - m³/h	120	250	500
Voltage – V,DC	-48	-48	-48



Applications

- Residential Area or Area with Strict Demand for Low Noise






DC Split 4.3kW Air Conditioner

Datasheet

Sheet	Indoor unit	Outdoor unit
Dimensions, Weight & Mounting		
Height - mm	295	700
Width - mm	900	870
Depth - mm	215	310
Net Weight - kg	13	50
Mounting	Wall mounted	Wall / Floor mounted
Environmental Protection & Performance		
Working Temp Range - ℃	- 40 ~ + 55	- 40 ~ + 55
IP Protection Level	\	IPX4
Refrigerant	R134a	R134a
Cooling / Heating Capacity		
Cooling Capacity @L35/L35 - W	4330	
Power Consumption		
Power Consumption @L35/L35 - W	1042	
Current @ L35/L35 - A	21.70	
Airflow		
Internal Airflow - m³/h	1100	\
Power Supply		
Voltage – V,DC	- 48	- 48

Applications

- Hybrid Energy Powered Base Station Shelter








Indoor Unit



Controller



Outdoor Unit



AC Powered Air Conditioner

Features & Benefits

- Energy saving: Unique external fan control function available for energy - saving as well as emergency working mode
- Low noise: The noise level of unit is reduced according to the heat load, silently operating in most time
- Corrosion protection: Powder coated sheetmetal endures harsh environment
- Easy maintenance: IP55 designed for flushing
- Power grid adaptability: 50/60Hz AC powered compressor can be used in any country
- User friendly interface: LCD display with English menu makes convenient operation
- Environment friendly: Using R134a refrigerant and RoHS requirement compliance
- Dedicated design: Delay Start setting in case of big current, especially when multiple units start at one site
- Monitoring: Provide comprehensive alarm and status report through RS485 interface for remote control



Applications



Datasheet

Model	EC03HDNC1E	EC05HDNC1B	EC06HDNC1B	EC10HDNC1J
Height - mm	545	545	545	746
Width - mm	315	315	315	446
Depth - mm	170	170	170	200
Height with flange - mm	583	583	583	783
Width with flange - mm	352	352	352	483
Depth with flange - mm	170	170	170	200
Weight - kg	17	17	17	32
Mounting	Door Mounted	Door Mounted	Door Mounted	Door Mounted
Working Temp Range - ℃	-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55
IP Protection Level	IP55	IP55	IP55	IP55
Refrigerant	R134a	R134a	R134a	R134a
Cooling Capacity @L35/L35 - W	400	520	600	1100
Heating (Optional) - W	400	400	500	800
Power Consumption @L35/L35 - W	200	240	240	540
Current @L35/L35 - A	0.95	1.15	1.15	2.50
Internal Airflow - m³/h	120	120	140	400
Voltage – V,Hz	220, 50	220, 50/60	220, 50/60	220, 50/60

Model	EC15HDNC1J	EC20HDNC1B	EC30HDNC1B	EC50HDNC1B
Height - mm	746	746	1300	1350
Width - mm	446	446	500	620
Depth - mm	200	200	230	300
Height with flange - mm	783	783	1350	1401
Width with flange - mm	483	483	550	671
Depth with flange - mm	200	200	230	300
Weight - kg	32	37	65	90
Mounting	Door Mounted	Door Mounted	Door Mounted	Door Mounted
Working Temp Range - ℃	-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55
IP Protection Level	IP55	IP55	IP55	IP55
Refrigerant	R134a	R134a	R134a	R134a
Cooling Capacity @L35/L35 - W	1500	2000	3000	5000
Heating (Optional) - W	1000	1000	1000	3000
Power Consumption @L35/L35 - W	600	850	1100	1850
Current @L35/L35 - A	2.90	3.90	5.20	8.5
Internal Airflow - m³/h	400	650	850	1400
Voltage – V,Hz	220, 50/60	220, 50/60	220, 50/60	220, 50/60

EC Series Low-noise Air Conditioner

Datasheet

Model	EC03HDNS1E	EC05HDNS1B	EC15HDNS1J
Height - mm	545	545	746
Width - mm	315	315	446
Depth - mm	170	170	200
Height with flange - mm	583	583	783
Width with flange - mm	352	352	483
Depth with flange - mm	170	170	200
Weight - kg	17	17	34
Mounting	Door Mounted	Door Mounted	Door Mounted
Working Temp Range - ℃	-40 ~ +55	-40 ~ +55	-40 ~ +55
Noise Level - dB(A)	45	50	55
IP Protection Level	IP55	IP55	IP55
Refrigerant	R134a	R134a	R134a
Cooling Capacity @L35/L35 - W	400	520	1500
Heating (Optional) - W	400	400	1000
Power Consumption @L35/L35 - W	200	240	700
Current @L35/L35 - A	0.95	1.15	3.30
Internal Airflow - m³/h	120	120	400
Voltage – V,Hz	220, 50	220, 50	220, 50



Applications

- Residential Area or Area with Strict Demand for Low Noise









HC Series Combo Air Conditioner

Features & Benefits

- Reliable: Air conditioner and thermosiphon system as backup heat dissipation function
- Energy saving: Different cooling mode for varied ambient, reducing the energy consumption
- Low noise: The noise level of unit can be reduced according to the heat load, silently operating in most time
- Corrosion protection: Powder coated sheetmetal endures harsh environment
- Easy maintenance: IP55 designed for flushing
- DC powered fan & control system, AC compressor 50/60Hz general, applicable to global power
- User friendly interface: LCD display with English menu makes convenient operation
- Environment friendly: Using R134a refrigerant and RoHS requirement compliance
- Dedicated design: Delay Start setting in case of big current, especially when multiple units start at one site
- Monitoring: Provide comprehensive alarm and status report through RS485 interface for remote control

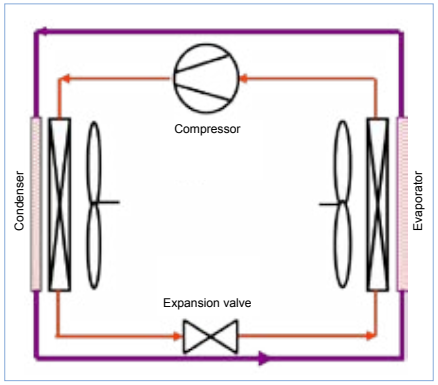


Datasheet

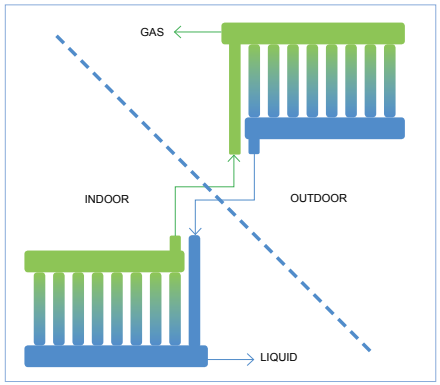
Model	HC1008	HC1508	HC2010	HC3012
Height - mm	945	945	945	1300
Width - mm	505	505	505	505
Depth - mm	200	200	200	250
Height with flange - mm	1001	1001	1001	1350
Width with flange - mm	561	561	561	550
Depth with flange - mm	200	200	200	250
Weight - kg	42	42	48	70
Mounting	Door Mounted	Door Mounted	Door Mounted	Door Mounted
Working Temp Range - ℃	-40 ~ +55	-40 ~ +55	-40 ~ +55	-40 ~ +55
IP Protection Level	IP55	IP55	IP55	IP55
Refrigerant	R134a	R134a	R134a	R134a
Cooling Capacity @L35/L35 -W	1100	1500	2000	3000
Heat Exchange Capacity - W/K	75	75	100	120
AC Power Consumption @L35/L35 -W	450	520	450	865
DC Power Consumption @L35/L35 -W	70	70	190	200
AC Current @L35/L35 - A	2.1	2.45	2.2	4.26
DC Current @L35/L35 - A	1.5	1.5	3.96	4.17
Internal Airflow - m³/h	400	400	800	850
Rated Operating Voltage - Controller/ Fans - V,DC	-48	-48	-48	-48
Rated Operating Voltage - Heating System - V,Hz	220, 50/60	220, 50/60	220, 50/60	220, 50/60

Model	HC1008D	HC1508D	HC2010D
Height - mm	945	945	945
Width - mm	505	505	505
Depth - mm	200	200	200
Height with flange - mm	1001	1001	1001
Width with flange - mm	561	561	561
Depth with flange - mm	200	200	200
Weight - kg	41	41	44
Mounting	Door Mounted	Door Mounted	Door Mounted
Working Temp Range - ℃	-40 ~ +55	-40 ~ +55	-40 ~ +55
IP Protection Level	IP55	IP55	IP55
Refrigerant	R134a	R134a	R134a
Cooling Capacity @L35/L35 -W	1000	1500	2000
Heat Exchange Capacity - W/K	75	75	100
Heating Capacity (Optional) - W	500	500	500
Cooling Power Consumption @L35/L35 - W	300	450	600
Heat Exchanger Power Consumption - W	70	70	190
Cooling Current @L35/L35 - A	6.25	9.3	12.5
Heat Exchanger Current - A	1.5	1.5	4
Internal Airflow - m3/h	400	400	800
Votage - V,DC	-48	-48	-48

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Working Principle



Thermosiphon Working Principle

Applications

- Wireless Outdoor Cabinet
- Outdoor Power Cabinet
- Outdoor Battery Cabinet





HC Series Low-noise Combo Air Conditioner

Datasheet

Model	HC1508S
Height - mm	945
Width - mm	505
Depth - mm	200
Height with flange - mm	1001
Width with flange - mm	561
Depth with flange - mm	200
Weight - kg	48
Mounting	Door Mounted
Working Temp Range - ℃	-40 ~ +55
Noise Level - dB(A)	55
IP Protection Level	IP55
Refrigerant	R134a
Cooling Capacity @L35/L35 - W	1500
Heat Exchange Capacity - W/K	75
AC Power Consumption @L35/L35 -W	525
DC Power Consumption @L35/L35 -W	70
AC Current @L35/l35 - A	2.45
DC Current @L35/L35 - A	1.5
Internal Airflow - m³/h	450
Rated Operating Voltage - Controller/Fans - V,DC	-48
Rated Operating Voltage - Heating System - V,Hz	220, 50/60



Applications

- Residential Area or Area with Strict Demand for Low Noise







〉〉Cabinet Climate Control Solutions

EX Series Heat Exchanger

Features & Benefits



- Reliable: -48VDC power supply, works well even when AC power fails
- Low noise: The noise level of unit can be reduced according to the heat load, silently operating in most time
- Corrosion protection: Powder coated sheetmetal endures harsh environment
- Easy maintenance: IP55 designed for flushing
- In line with the RoHS requirements
- Dedicated design: Delay Start setting in case of big current, especially when multiple units start at one site
- Monitoring: Provide comprehensive alarm and status report through RS485 interface for remote control
- User friendly interface: LCD display with English menu

Datasheet

Model	EX04CDHC1A	EX08CDHC1C	EX12CDHC1B	EX18CDHC1A
Height - mm	585	746	746	945
Width - mm	355	446	446	505
Depth - mm	125	200	200	200
Height with flange - mm	585	783	783	1001
Width with flange - mm	388	483	483	561
Depth with flange - mm	125	200	200	200
Weight - kg	9	17	20	33
Mounting	Door Mounted	Door Mounted	Door Mounted	Door Mounted
Working Temp Range - ℃	-40 ~ +65	-40 ~ +65	-40 ~ +65	-40 ~ +65
IP Protection Level	IP55	IP55	IP55	IP55
Rated Heat Exchanged Capacity - W/K	40	80	120	180
Heating Capacity (Optional) - W	/	500	1000	1000
Rated Fan Power - W	38	148	190	320
Rated Fan Current - A	0.8	3.1	3.3	6.7
Heater Curent - A	/	2.30	4.50	4.50
Internal Airflow - m^3/h	260	480	700	1200
Rated Operating Voltage - Controller/Fans - V,DC	-48	-48	-48	-48
Rated Operating Voltage - Heating System - V,Hz	220, 50/60	220, 50/60	220, 50/60	220, 50/60

Applications





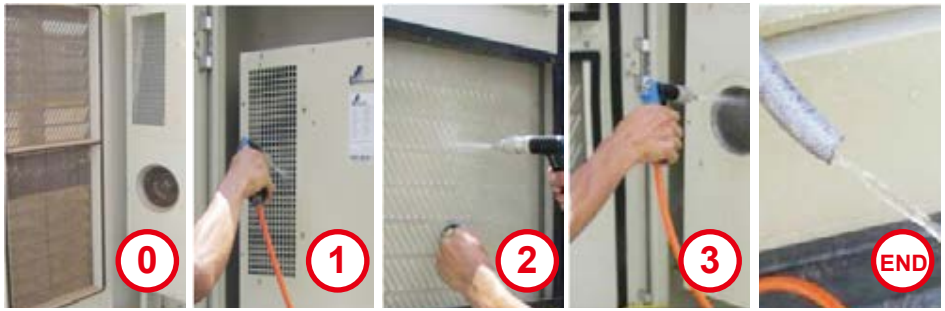


Maintenance Guide

Maintenance Tools



Maintenance Procedures



Before Cleaning	Clean Condenser	Clean Cabinet Filter	Clean Outdoor Fan	Smooth drainage ✓ Clean water discharging ✓