

Large Room Air Conditioner ACA120 Dual Sys.



ACA series large room precision air conditioner is a special precision air conditioner for medium and large IDC rooms, communication rooms, equipment rooms and other places to provide internal environmental temperature and humidity and cleanliness control. It is used to ensure that cabinet equipment, server equipment, etc. have a reasonable temperature and humidity operating environment.

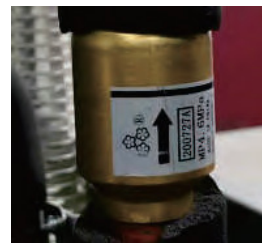


Product Features

- Adopt the design of large air volume, small enthalpy difference and high sensible heat ratio.
- V or A shape evaporator, high heat exchange efficiency.
- High-precision electronic expansion valve, precise regulation of refrigerant flow.
- EC fan with real time adjustment of airflow according to the demand.
- Inverter outdoor fan, variable speed control according to the system pressure, operating efficiently.
- Hermetic scroll or rotor compressor for higher efficiency and more stable operation.

Safe and Reliable

- The main components adopt international famous brands:
 - Fans-tech or EBM EC fan (customized)
 - Schneider contactors
 - Standard G4 filter
- ATP controller & VFD
- Real time monitoring of input voltage and frequency.
- Dual electric control box design, avoiding the interference and easy maintenance.
- Standard oil separator.
- 3-level password protection.
- Modular framework.
- Fan & drive integration of indoor unit.
- Separate outdoor unit's switch & VFD

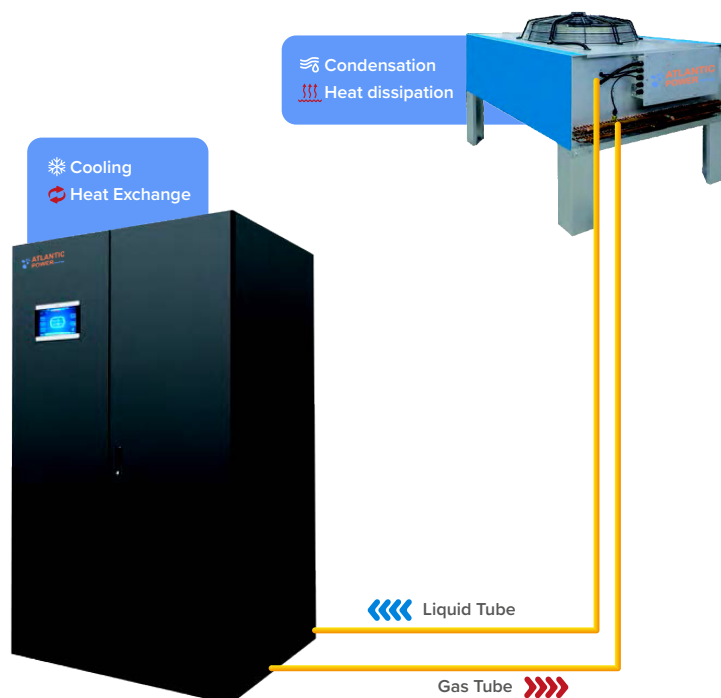


Intelligent Management

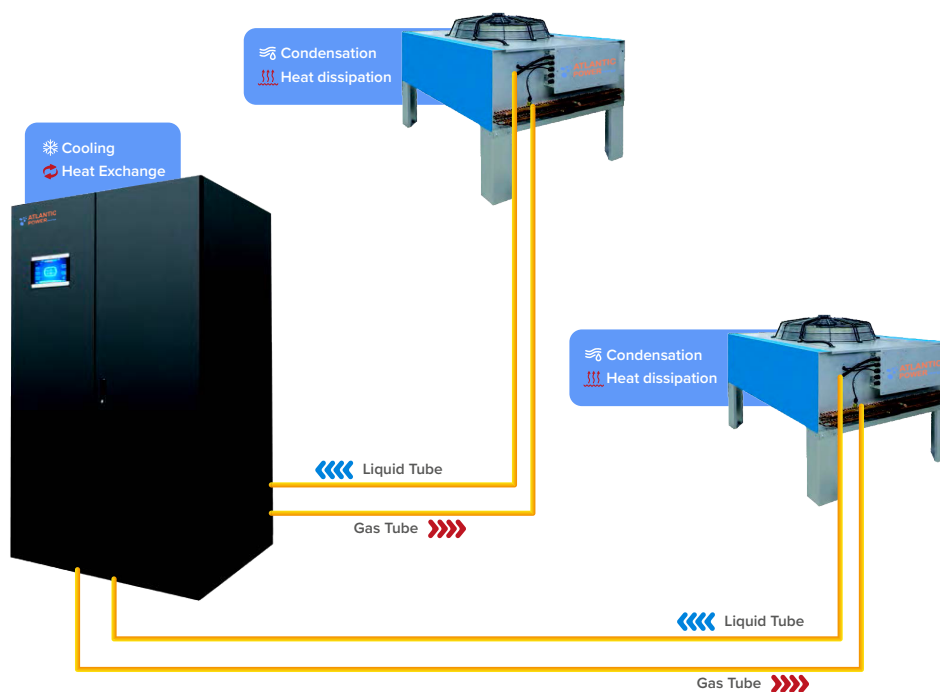
- 10-inch touch screen, free SNMP.
- Standard RS485 for supervision.
- T&H curve display more than 30 days.
- 2000 historical alarm information storage.
- Networking group support up to 64 units. (CAN comm.)

Customizable

- Optional water leakage sensor, hood kit.
- Optional built-in low-temperature component.
- Optional dual input.
- Optional remote T&H sensor.
- Optional anti-corrosion outdoor unit.



Schematic diagram of single compressor system



Schematic diagram of dual compressor system

Applicable Scene



Large-scale server room



Large-scale data centers



Traditional Server Room



High heat density data center

ACP Series Air Conditioner Outdoor Unit

ACP series outdoor unit, a new generation of high-efficiency and energy-saving precision air conditioner outdoor unit designed and developed by our company, is divided into two types: single-system and dual-system. The single system outdoor unit is used to match the single system indoor unit or the single cooling system of the dual system indoor unit. The dual system outdoor unit is used to match the indoor unit of dual system.



Centralized outdoor unit



Centralized outdoor unit
(With Energy-saving module)



Conventional outdoor unit
(Single Fan)



Conventional outdoor unit
(Dual Fans)

Indoor Unit	
Model	ACA120 (Dual Sys.)
Cooling mode	Direct expansion air-cooled

Design Condition	
Indoor return air temperature(°C)	24
Relative humidity(%)	50
Outdoor temperature(°C)	35
Air volume(m³/h)	28000
External Static Pressure(ESP)(Pa)	0-150

Performance at design condition	
Net Total Cooling Capacity (kW)	120
Net Sensible Cooling Capacity (kW)	108
Ton(USA)	34.12
EER	2.65
Max. Power Consumption(kW)	66.5
Full Load Current(A)	116
Gas Pipe Diameter (mm²)	22
Liquid Pipe Diameter (mm²)	19

Compressor	
Compressor brand	Hitachi Scroll
Compressor type	Hermetic compressor
COP (kW/kW)	3.68
Comp.Rated Power Consumption(kW)	34.4

Fan	
Fan type	EC fan
Quantity	2
Air volume(m³/h)	28000

PTC Heater	
Quantity	3
Rated Power Consumption(kW)	2,5
Heating capacity(kW)	12
Power supply(V/ph/Hz)	220/1/50

Filter	
Filter type	G4

Humidifier	
Humidifier type	Electrode humidifier
Capacity(kg/h)	10
Power supply(V/ph/Hz)	380/3/50-60

Weight & dimension	
Weight(kg)	880
Dimension(W*H*D)(mm)	2200×1975×995

Outdoor unit	
Quantity	2
Air Volume (m³/h)	56000
Fan Power Consumption (kW)	1.1
Full Load Current(A)	5
Outdoor Unit Power Cable (mm²)	4*2,5
Outdoor Unit Signal Cable (mm²)	2*0,5
Power Supply(V/ph/Hz)	380/3/50-60
Outdoor SPL(@5m)(dB)	60
Dimension(W*H*D)(mm)	1275*740*2378
Weight(kg)	188

