

Large Room Air Conditioner

ACA Series



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.

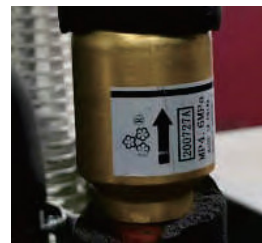


Product Features

- 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

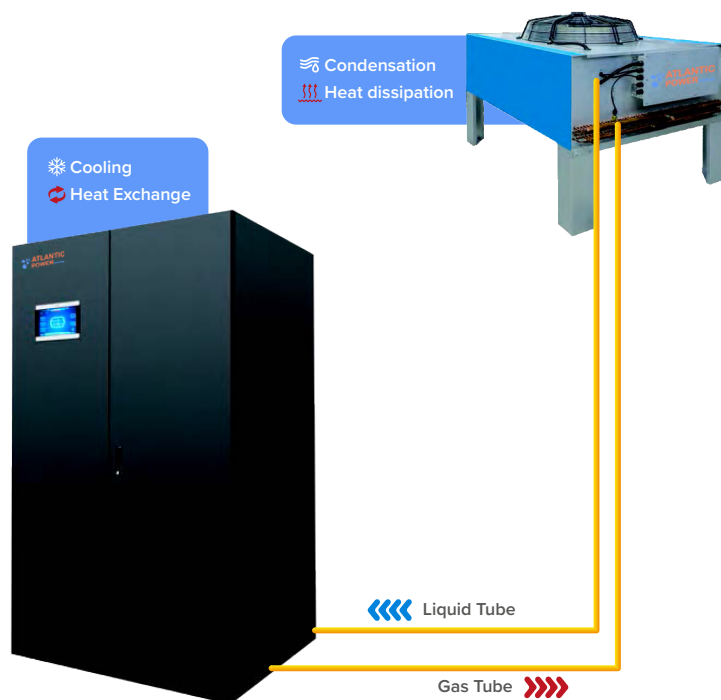


Intelligent Management

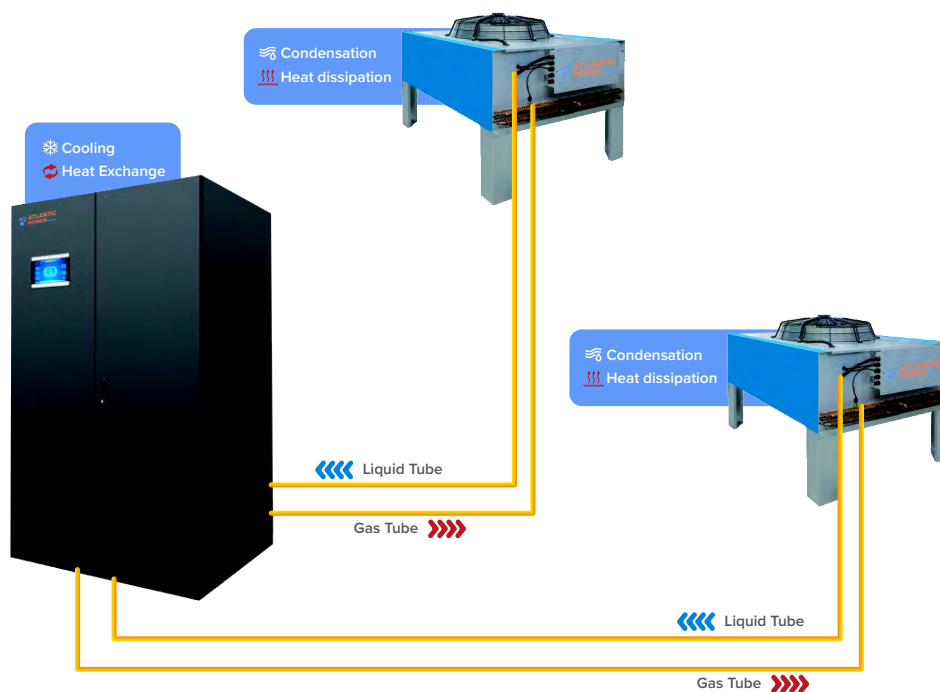
- 10-inch touch screen, free SNMP.
- Standard RS485 for supervision.
- T&H curve display more than 30 days.
- 2000 historical alarm information storage.
- Networking group support up to 64 units. (CAN comm.)

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

Model	ACA025	ACA030	ACA035	ACA040	ACA045	ACA050	ACA050 Dual Sys	ACA060 Dual Sys	ACA070 Dual Sys	ACA080 Dual Sys	ACA090 Dual Sys	ACA100 Dual Sys
Configuration	Constant Temp&Humidity											
Total cooling capacity (kW)	27.5	31.2	38	40	45.6	50	51.2	62.4	76	80	91.2	100
Sensible cooling capacity(kW)	25.8	28.3	35.1	38	39.9	46	44.5	56.6	70.3	76	79.8	92
Air volume (m³/h)	8000	9000	10000	12000	12500	13500	13500	18000	20000	24000	25000	276000
Heating capacity (kW)	6	6	6	10	10	10	10	10	10	12	12	12
Humidification capacity	6	6	6	10	10	10	10	10	10	10	10	10
AEER (W/W)	4	4	4	4	4	4	4	4	4	4	4	4
Compressor type	Hermetic Scroll Refrigerant Compressors											
Fan type	EC Fan											
Refrigerant	R410A											
Power supply	380V/50Hz 3N											
Full-load current(A)	42	45	48	48	56	56	60	70	78	78	88	88
Width (mm)	900	900	900	900	1100	1100	1200	1800	1800	1800	2200	2200
Depth (mm)	995	995	995	995	995	995	995	995	995	995	995	995
Height (mm)	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975
Weight(kg)	320	325	350	370	450	470	550	600	650	690	850	880

Note

1. Test conditions: indoor return air temperature 24°C, relative humidity 50%, outdoor temperature 35°C.
2. AEER test conditions: indoor return air temperature and humidity: 24°C/50%RH, outdoor temperature 35°C/25°C/15°C/5°C/-5°C respectively.
3. The upflow supply fan set supports two different air outlet methods: vertical top air supply (with on-site air duct) and top front supply.
4. Top front supply mode, can add front up flow kit on site (height increase) or standard height top front supply (factory prefabricated).
5. In order to save fan consumption, efficient cooling, downflow supply air conditioner standard products for the fan sink type, electrostatic floor height recommended $\geq 450\text{mm}$.
6. In case of special circumstances at the site, the downflow supply air conditioner can support the customization of the optional fan unsinking, or other ways of air supply and return, etc.

