# VCA Series Small Room Air Conditioner

VCA series small room precision air conditioner of INVT is a special precision air conditioner for small and medium-sized server rooms, power distribution rooms, battery rooms, communication base stations and other places, providing indoor environment temperature and humidity and cleanliness control.



## Product Features **v**

## **Energy Efficient**

- · Large air volume, small enthalpy difference and high sensible heat ratio design, meet the temperature control needs of the server room.
- · High energy-efficient compressor with electronic expansion valve as standard for fast response and more accurate flow adjustment.
- · High efficiency backward tilting centrifugal fan with low energy consumption and high air volume to ensure uniform temperature and humidity distribution in the server room.
- · The use of high-efficiency internally threaded copper tubes and hydrophilic layer-plated open-window aluminum fin evaporators for higher heat transfer efficiency.
- · Outdoor fan with infinitely adjustable speed control, matching condensing pressure operation, energy saving and noise reduction
- · Standard with electrode humidifier, higher humidification efficiency and wider application range.

#### Safe and reliable

- · Using of rigorously certified and high-quality devices to enhance reliability.
- delivery.
- 365 x 24 hours non-stop operation, long life design and low maintenance costs.
- · Ultra-wide grid adaptability to avoid frequent start/stop of air conditioners.
- · Highly efficient and environmentally friendly refrigerant R410A as standard.
- · Threaded quick coupling design for no welding on site.

## Intelligent control

- 4.3-inch true color touch screen, multi-level password authority, system self-test diagnostic function, more intelligent;
- · Comprehensive monitoring and display of power supply voltage, frequency, phase sequence, cooling capacity, air volume, temperature and humidity curve and other key information, real-time control of the normal state of the system;
- Up to 64 air conditioners can be rotated patrol group control to achieve scheduled rotation, fault rotation, cascading, demand synchronization, anti-competitive operation, etc;
- Support power-on self-start and timer on/off functions, easy to manage air conditioners;
- · Local storage of not less than 1000 history records, easy to view and trace;
- Standard RS485 interface, support optional SNMP interface.



## Customizable

- · Standard with electrode humidifier, support optional wet film humidifier;
- 100% full frontal maintenance and more flexible installation;
- · Support optional upper pipe / upper drainage to meet the needs of different scenarios;
- · Support AC/EC fans optional according to actual needs;
- · Optional dual power input;
- · A variety of air supply methods to meet a variety of applications;
- · Optional phase tolerance function to better protect the power of air conditioners.



· Products are subjected to rigorous and repeated testing and verification, with high standards required for high quality

				Sensor Status
Retn Air Temp.(°C)	29.3	Retn Air Hum.(%)		Equip Status
Retn Air Temp.1(°C)	29.2	Retn Air Temp.2(°C)		
Sply Air Temp.(°C)		Sply Air Hum.(%)		
Sply Air Temp.1(°C)		Sply Air Temp.2(°C)		
Sply Air Temp.3(°C)		Suct Temp.(°C)		
		<b>+</b> 1/	′6 →	
Home	State	Data A	larm	Set WWW

30

## Technical parameters **v**

#### Fixed frequency small room air conditioner

	Unit	VCA005	VCA007	VCA012	VCA017	VCA020		
Configuration	_	Refrigeration type / Constant Temp&Humidity type						
Total cooling capacity	kW	5.5	7.5	12.5	17	20.5		
Sensible cooling capacity	kW	4.95	6.75	11.25	15.3	18.45		
Ton(USA)		1.56	2.13	3.55	4.83	5.83		
Refrigerant Type	—	R410A						
Expansion valve Type	—		Elect	ronic expansion	valve			
Air volume	m³/h	2000	2300	3200	5000	5500		
Heating capacity	kW	3	3	3	6	6		
Humidification capacity	kg/h	3	3	3	3	3		
Width	mm	520	520	600	700	700		
Depth	mm	420	420	520	700	700		
Height	mm	1750	1750	1800	1900	1900		
Grid type	-	208-220V/50Hz 3P 380V/50Hz 3P						
Refrigeration type FLA	А	11.3	14.8	10.79	14.28	16.11		
Constant T&H type FLA	А	22.66	26.16	22.15	25.65	27.47		
Weight	kg	67	70	105	125	135		
Outdoor unit								
Model	-	VCP007SF	VCP010SF	VCP018SF	VCP024SF	VCP028SF		
Air volume	m³/h	2800	3500	5000	7000	7000		
Grid type	-		220V/50Hz					
Width	mm	840	830	832	1050	1050		
Depth	mm	285	311	330	400	400		
Height	mm	606	720	1246	1560	1560		
Weight	kg	33	37	55	95	95		

#### Remarks:

1. The above performance parameters are based on, indoor return air 24°C, relative humidity 50%, outdoor temperature 35°C 2. The small room precision air conditioner is divided into two different air supply methods: top front air supply and downflow air supply 3.Small room precision air conditioner under the fan type is divided into two forms of fan sinking and not sinking

4. Working temperature: -20~45°C, less than -20°C need to add low temperature components.

#### Variable frequency small room air conditioner

	Unit	VCA005	VCA007	VCA012	VCA017	VCA020	VCA026	VCA032
Configuration	_		Refrigeration type / Constant Temp&Humidity type					
Total cooling capacity	kW	5.5	7.5	12.5	17	20.5	26	32
Sensible cooling capacity	kW	4.95	6.75	11.25	15.3	18.45	23.4	28.8
Ton(USA)		1.56	2.13	3.55	4.83	5.83	7.38	9.09
Refrigerant Type	—				R410A			
Expansion valve Type	—			Electro	onic expansior	n valve		
Air volume	m³/h	2000	2300	3200	5000	5500	7500	9000
Heating capacity	kW	3	3	3	6	6	6	6
Humidification capacity	kg/h	3	3	3	3	3	3	3
Width	mm	520	520	600	700	700	900	900
Depth	mm	420	420	520	700	700	800	800
Height	mm	1750	1750	1800	1900	1900	1975	1975
Grid type	-	208-2	20V/50Hz-60H	Hz 3P		380V/50Hz	z-60Hz 3P	
Constant T&H type FLA	А	27.77	33.45	26.47	26.32	29.52	36.04	41.61
Refrigeration type FLA	А	16.41	22.09	26.47	14.95	18.16	24.68	30.25
Weight	kg	67	70	105	125	135	165	165
			Outdo	oor unit				
Model	-	VCP007SF	VCP010SF	VCP018SF	VCP024SF	VCP028SF	VCP035SF	VCP040SF
Air volume	m³/h	2800	3500	5000	7000	7000	11000	11000
Grid type	-			22	20V/50Hz-60H	Iz		
Width	mm	840	830	832	1050	1050	1200	1200
Depth	mm	285	311	330	400	400	400	400
Height	mm	606	720	1246	1560	1560	1560	1560
Weight	kg	33	37	55	95	95	115	115
	-	-	-	-	-	-	-	

#### Remarks:

1. The above performance parameters are based on, indoor return air 24°C, relative humidity 50%, outdoor temperature 35°C 2. The small room precision air conditioner is divided into two different air supply methods: top front air supply and downflow air supply 3.Small room precision air conditioner under the fan type is divided into two forms of fan sinking and not sinking

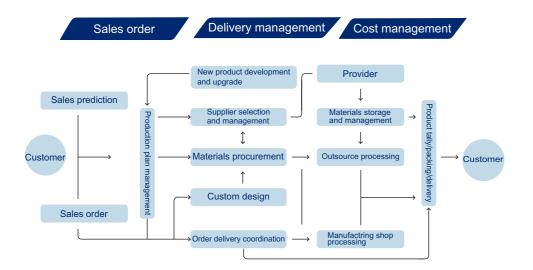


32

# Integrated Service System

#### Excellent operation management **v**

Process-based standardized management realizes high-efficiency, quality and cost management.



Implement a fully integrated service system, with customer demand as the starting point, customer satisfaction as the end point, and carry out product life cycle control.



#### Applications **v**

#### Education Industry

- Nanjing University of Posts and Telecommunications
- Xinchang College, Zhejiang Radio and Television University
- Xinchang County Chengdong Experimental School
- Xicheng Kindergarten, Jintan District, Changzhou City
- Hebei Dingxing Middle School
- Taiyuan University of Technology
- Harbin Songjiang Education Bureau
- Nanjing Agricultural College
- Fangshan Branch of Nanjing Foreign Language School
- Shaanxi University of Technology
- Taiyuan Normal University
- Sinan Middle School of Guizhou Province
- Tianjin No. 100 Middle School

#### Medical Industry

- Heilongjiang Cancer Hospital
- Shantou Chenghai Maternity and Child Health Hospital
- Yangchun Gangqiao Hospital of Yangjiang City
- Xiangtan County Maternal and Child Health Hospital
- Haicheng Central Hospital
- Pingtang County People's Hospital
- The First People's Hospital of Wuhu
- Shanxi Cancer Hospital
- Shanwei City Health and Family Planning Bureau
- Zhangjiakou Maternity and Child Health Hospital
- Baishui County Hospital of Traditional Chinese Medicine
- People's Hospital of Zheng'an County, Zunyi City
- Beishan Hospital, Wuzhou Workers' Hospital









