

StationAir™ Series Precision Air Conditioner

PLUG & POWER
By **ELISE**



Small and Medium Data Center Room High-efficiency Precision Cooling

Kstar **StationAir**TM Series Precision Air Conditioner provides you with perfect solution.

Kstar StationAir™ series precision air conditioner is equipped with constant temperature and humidity function, and it adopts the design of large air volume and high sensible heat ratio (SHR) to meet the needs of professional computer room; The precisely matched high-efficiency cooling system is designed for all-weather operation in full 24 hours of 365 days and is equipped with large-area evaporator to ensure the optimal energy-saving operation of the unit all the time.



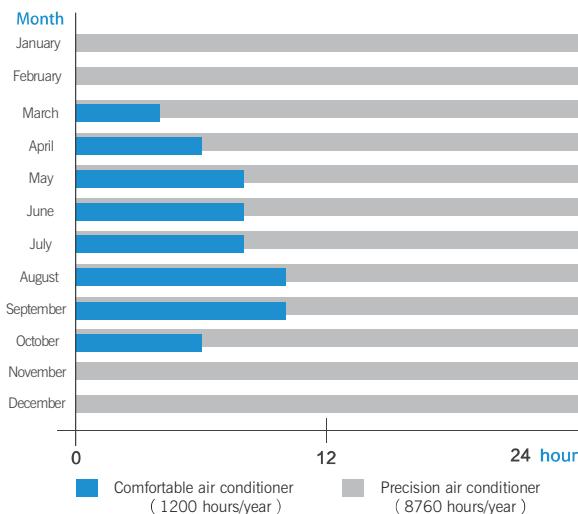
High-efficient and Reliable Cooling Solution

○ Energy saving

- High energy efficiency ratio (EER): Perfectly-matched cooling system ensures super high energy efficiency ratio.
- High heat sensible ratio (HSR): The unit adopts the design of large air volume and small enthalpy difference to ensure high heat sensible ratio.
- Green refrigerant: Standard R410a green refrigerant, and R407C and R22 refrigerants optional

○ High Reliability

- The high-efficient and stable compressor and backward centrifugal fan with famous brands are adopted to guarantee the long service life and high energy efficiency ratio of the unit.
- High-quality components of industry recognized brands are adopted to ensure the high reliability of the unit.
- The product has undergone strict and rigorous test and inspection.



○ All-weather Operation Design

- Precision air conditioner unit is designed in accordance with the principle of all-weather ceaseless high-efficient and reliable operation for 24 hours of 365 days.
- The unit is suitable for severe cold regions and can still run reliably at the low temperature of -40°C after the selection of low temperature kits.
- Stepless speed regulation outdoor fan can adapt to outdoor environmental temperature change.
- Electronic expansion valve ensures system can response to the changing working condition quickly.

○ Intelligent Controller

- Precise microcomputer control system, large-screen display, with multi-level password protection and experts fault diagnosis function.
- Equipped with the standard RS485 communication interface and supported the remote monitoring.
- Wide input voltage design, with self-recovery function after power resume, lack phase protection, faultphase protection and over or low voltage protection function is optional to ensure the unit uninterrupted working.
- It can flexibly switch from the main unit to the backup unit automatically to achieve the automatic switch and rotation.

○ Flexible Application

Precision air conditioner unit is flexibly selected and matched according to the project to meet different needs of users.

- Configuration of unit model at or below 12kW: Quick connector
- Various air supply types: upflow, downflow, front-flow and underflow.
- Various cooling types: Air-cooled type, water-cooled type, chilled water type, ethylene glycol-cooled type and double cooling source type.

- Rich options: EC fan, high-efficiency filter and special humidifier, etc.

- Customization solution: High/low temperature environment solution, low noise solution, high altitude solution, solution for large air volume/high external excess pressure of unit, and long connecting pipe/high drop solution.

- Compact structure, small footprint, 100% front maintenance.

○ Scope of Application

- Small and medium-sized computer room
- Transformer substation
- Equipment room and power house
- Laboratory, testing room and storage room
- Outdoor electronic and communication equipment room
- Computer room in commercial buildings



○ Technical Parameters

▼DX Unit (Air-cooled)

ST***	Unit	005			007			012			017		020	
Unit configuration	-	Single cooling	Constant temperature	Constant temperature and humidity	Single cooling	Constant temperature	Constant temperature and humidity	Single cooling	Constant temperature	Constant temperature and humidity				
Total cooling capacity ¹⁾	kW	5.5				7.5			12.5		17.5		20.5	
Sensible capacity ¹⁾	kW	5.2				6.8			11.3		15.8		18.6	
Air volume	m ³ /h	2000				2250			2850		5000		6200	
Sensible heat ratio (SHR)	/	0.95				0.91			0.90		0.90		0.91	
Heating power	kW	-	3	3	-	3	3	-	4	4	6	6	6	
Humidification capacity	kg/h	-	-	2.5	-	-	2.5	-	-	4	4.5	4.5	4.5	
Number of compressor	pcs	1				1			1		1	1	1	
Number of fan	pcs	1				1			1		1	1	1	
Voltage	Vdc	220 / 230	220 / 230	380 / 400	220 / 230	220 / 230	380 / 400		380 / 400		380 / 400		380 / 400	
Frequency	Hz	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60		50 / 60		50 / 60		50 / 60	
Phase	P	1	1	3	1	1	3		3		3	3	3	
Full load current	A	11.6	26.2	15.5	15.3	29.9	19.2	11.3	18.6	18.6	28.2	29.2		
Unit weight	kg	105	110	120	115	120	130	165	170	180	280	300		
Unit width	mm	550				550			650		750	750		
Unit depth	mm	450				450			550		700	700		
Unit height	mm	1750				1750			1850		1900	1900		

Supporting Outdoor unit

KCS***	Unit	007		010		018		024		028	
Heat exchange capacity	kW	7.6		10.4		18.1		23.8		27.2	
Voltage	V	220 / 230		220 / 230		220 / 230		220 / 230		220 / 230	220 / 230
Frequency	Hz	50 / 60		50 / 60		50 / 60		50 / 60		50 / 60	50 / 60
Phase	P	1		1		1		1		1	1
Full load current	A	0.5		0.7		1.4		2.7		2.7	
Unit weight	kg	38		48		60		117		124	
Unit width	mm	877		967		1014		1400		1400	
Unit depth	mm	340		398		375		975		975	
Unit height	mm	608		807		1244		651		651	
Foot stool Height	mm	-		-		-		455		455	

Notes: 1. Air cooled unit data is based on 24°C and 50%RH indoor return air temperature and humidity.

2. The ST05, ST07 and ST12 units should be pre-filled with refrigerant and equipped with 5m online pipeline and outdoor unit mounting bracket.

3. Power supply type for single phase: 220V&230V/1P/50Hz, 220V&230V/1P/60Hz. Power supply type for 3 phases: 380V&400V/3P/50Hz, 380V&400V/3P/60Hz. The PAC for 50Hz and the PAC for 60Hz is different type. The PAC for 50Hz power is not compatible with 60Hz, and the PAC for 60Hz power is not compatible with 50Hz.

4. Shenzhen Kstar Science & Technology Co., Ltd. reserves the right of final interpretation of the data without prior notice if the data in the table is changed due to technical progress of the product.