



Small and Medium Data Center Room High-efficiency Precision Cooling

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

Kstar StationAirTM 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.



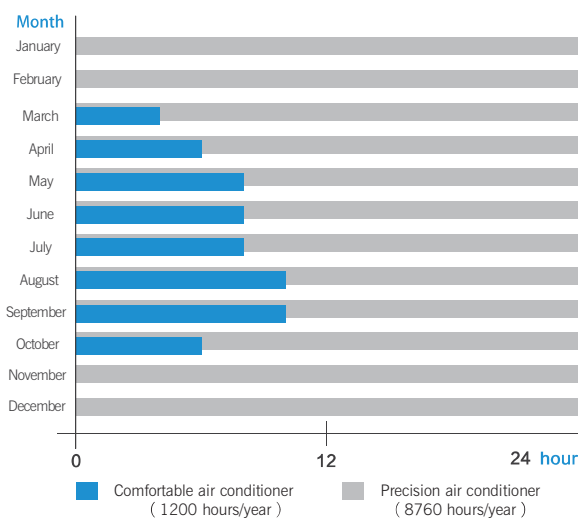
High-efficient and Reliable Cooling Solution

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℃ 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

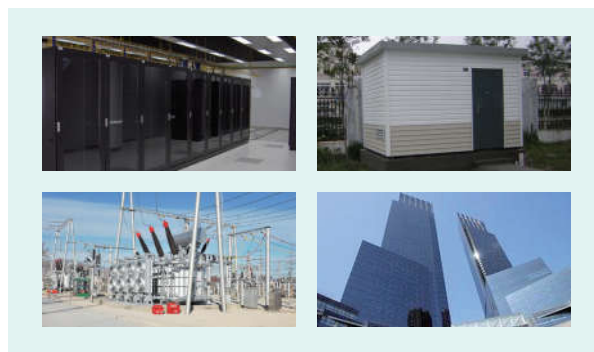
Precision air conditioner unit is flexibly selected and matched according to the project to meet different needs of users.

- 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
- Equipment room and power house
- Outdoor electronic and communication equipment room
- Transformer substation
- Laboratory, testing room and storage 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	Constant temperature and humidity	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
Humidification capacity	kg/h	-	-	2.5	-	-	2.5	-	-	4	4.5	4.5
Number of compressor	pcs		1			1			1		1	1
Number of fan	pcs		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
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
Frequency	Hz		50 / 60			50 / 60			50 / 60		50 / 60	50 / 60
Phase	P		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.