

KSTAR

Data Center Integrated Solution

Precision Cooling Series
(5~300kW)



Company Profile

Founded in 1993, Shenzhen KSTAR Science and Technology Co., Ltd. (Stock code: 002518) is a global leader in the smart energy field. Kstar focused on the R&D and manufacturing of UPS, Precision Cooling and MDC (Modular Data Center), Battery, PV, ESS and EV Charger.



Founded in: 1993 **30+ years**
Listed in: 2010 **Stock Code:002518**



Key Products



UPS



Cooling & MDC



Battery



PV



ESS



EV Charger



Listed

Listed on SZSE



2

R&D Centers



8

Facilities



180+

180+ Markets



670+

R&D Employees



4300+

4300+ Employees

Market Achievement



Global
UPS Supplier

Data source: Omdia 2024



China UPS Selling
Local Brands

Data source: CCID Consulting
Annual Research Report on China's UPS
Product Market in 2023-2024



China Single-rack Modular
Data Center Market Share

Data source: ICT research
Annual Report on China's Modular Data
Center Product Market in 2023-2024



China Lead-acid
Battery Market Share

Data source: ICT research
Report on China's UPS Supporting Lead-Acid
Battery Product Market in 2023-2024

They Are Using Kstar



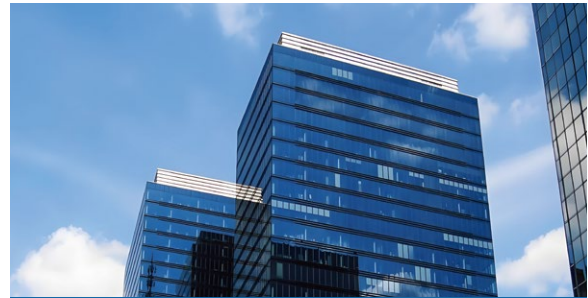
Beijing Olympic Games



Agricultural Bank of China Inner Mongolia Data Center



Shanghai Securities Waigaoqiao Earth Station



China's Leading Internet & E-commerce Giant A



Shanghai Telecom Data Center



Peking University Biomedical Imaging Technology Cluster Large Facility



Jinan Metro



Ruili to Menglian Expressway Electromechanical Project

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MatrixAir™ Series Precision Cooling



How to achieve better precision cooling of data center?

Kstar MatrixAir™ Series Precision Cooling, provides you with perfect solution.

Reliability·High Efficiency·Environmentally Friendly·Flexibility



- ◆ Severe test
- ◆ Well designed cooling system
- ◆ High-quality components
- ◆ Advanced and reliable intelligent control system



- ◆ High-efficient configuration
- ◆ Accurate refrigerant flow regulation
- ◆ Intelligent humidification control
- ◆ Electronic expansion valve
- ◆ EC fan
- ◆ Adjustable heating capacity



- ◆ Personalized and customized design
- ◆ Wide range cooling capacity
- ◆ Modular structure design
- ◆ Seven cooling types

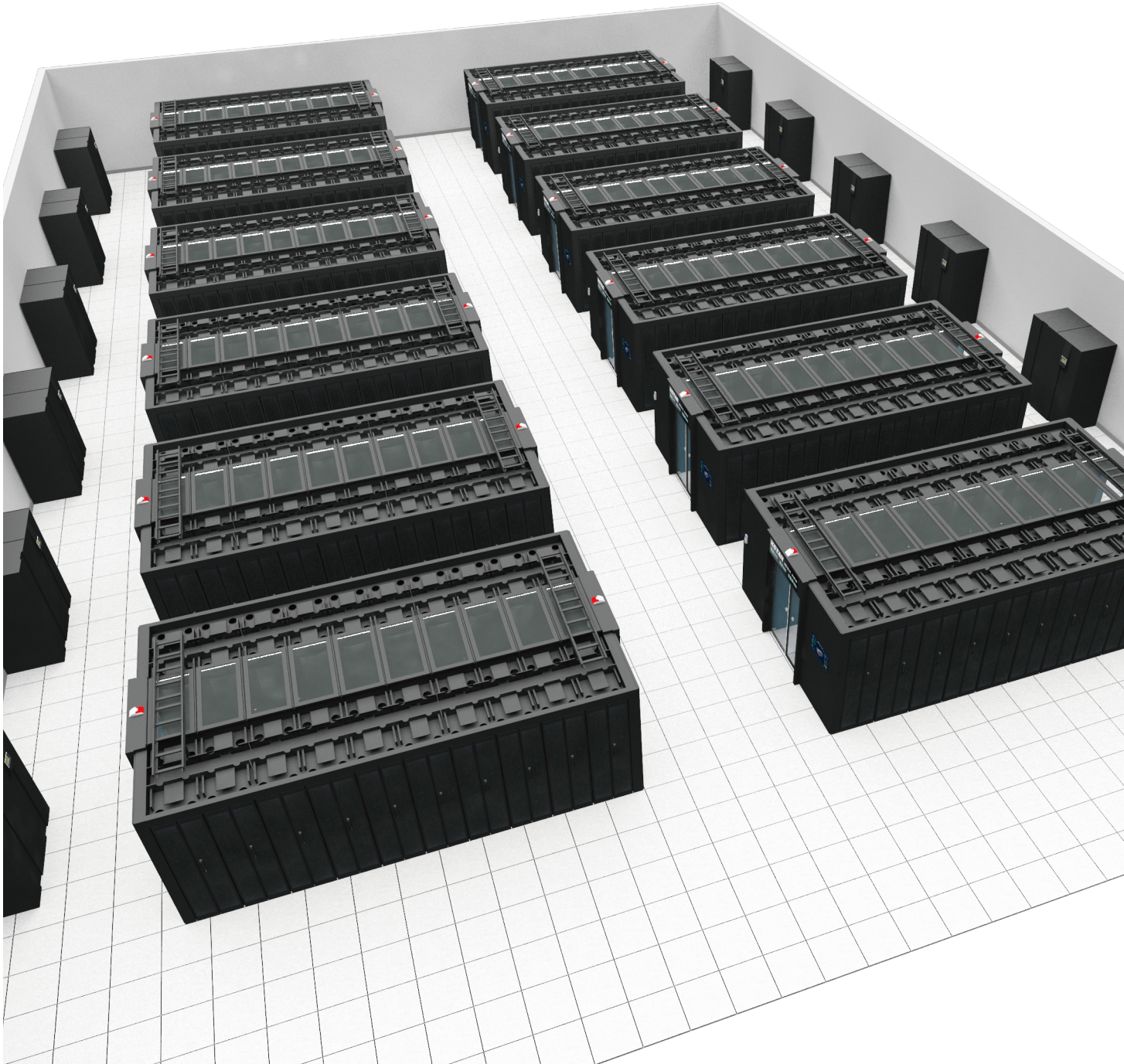


- ◆ Refrigerant: R410A

Characteristics of MatrixAir™ Series Precision Cooling Solution

High Reliability

Kstar's MatrixAir™ series precision cooling integrates advanced energy-saving and environmentally friendly technology in the industry, relies on comprehensive development tools and technical resources and is carefully designed according to high standards. It can ensure the high reliability of unit with high-quality system design. It is a new generation of advanced, reliable, high-efficient, energy-saving, safe and environmentally friendly products in key cooling industry. It can guarantee the continuous, high-efficient and reliable operation of the key IT equipment of the data center 24 hours of 365 days in the whole year.



◆ Severe Test Verification

MatrixAir™ series precision air conditioner has undergone the comprehensive and severe test in Kstar's performance test laboratory to ensure that the unit can still run reliably under harsh conditions.

◆ Well designed cooling system

Higher heat exchange efficiency, more stable and reliable flow control, more reliable air distribution and layout, can realize the high energy efficiency and high reliability of MatrixAir™.

◆ High-quality Components

MatrixAir™ adopts high-quality components that have been strictly designed and selected. Compressor, fan, valve, electrical system and heating and humidification system components are recognized brands in the industry. High-quality components can ensure the high reliability and ultra-long life of air conditioner system.



High Reliability



◆ Advanced and Reliable Intelligent Control System

MatrixAir™ adopts powerful professional precision air conditioner intelligent control system to realize high-efficient, energy-saving, stable and reliable control of the unit with superior performance.

- ◆ Standard RS485 intelligent communication interface, SNMP optional
- ◆ Graphical state display and temperature & humidity curve display
- ◆ Alarm notification and it can record more than 3000 alarm logs
- ◆ Multi-level password protection
- ◆ Auto restart when mains recovers
- ◆ 7" color touch screen, friendly HMI



Characteristics of MatrixAir™ Series Precision Cooling Solution

High Efficiency & Energy Saving

Energy saving comes from efficiency, and high which requires intelligent coordination. MatrixAir™ series precision air conditioner system consists of high-efficiency components and intelligent control system that can quickly and accurately adjust the output. It can intelligently coordinate all outputs, achieve better efficiency and realized more energy-saving operation.

◆ High-efficiency Configuration

▼ High-efficiency EC Fan

Compared with belt-driven frontward centrifugal fan, backward centrifugal fan means lower power consumption, less maintenance and better air distribution, which can improve cooling efficiency; EC fan with efficiency up to 90% will provide a wide range of air volume regulation and lower energy consumption.



▼ High-efficiency Compressor

Its excellent quality guarantees the high efficiency, high reliability, low noise and ultra-long life of the unit.

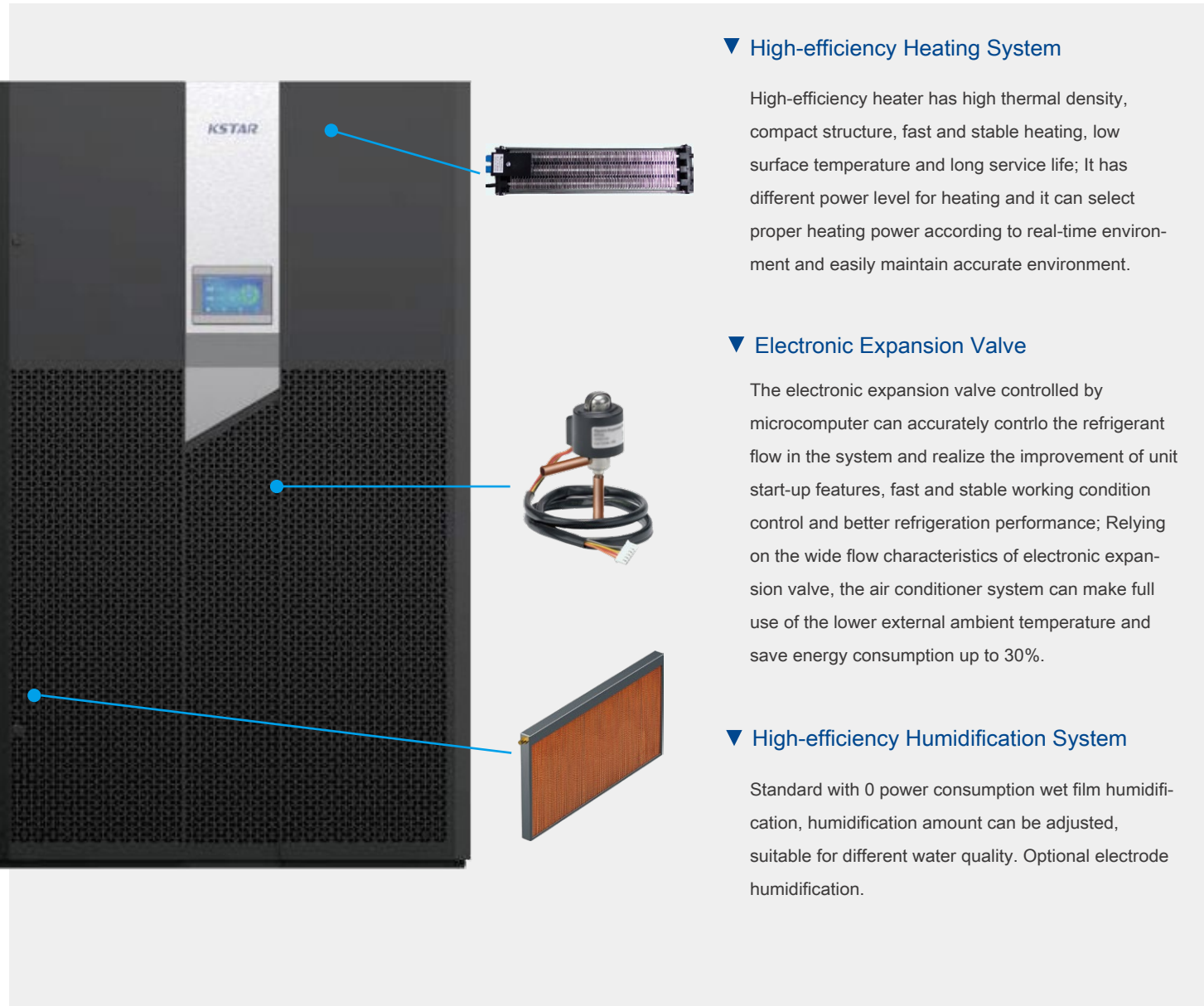


◆ Intelligent Humidification Control

Cooling system can respond quickly to output requirements; Humidification capacity is adjustable.

◆ Dynamic Airflow

EC fan can respond quickly to output requirements; EC fan can save up to 30% energy than AC fans.



▼ High-efficiency Heating System

High-efficiency heater has high thermal density, compact structure, fast and stable heating, low surface temperature and long service life; It has different power level for heating and it can select proper heating power according to real-time environment and easily maintain accurate environment.

▼ Electronic Expansion Valve

The electronic expansion valve controlled by microcomputer can accurately control the refrigerant flow in the system and realize the improvement of unit start-up features, fast and stable working condition control and better refrigeration performance; Relying on the wide flow characteristics of electronic expansion valve, the air conditioner system can make full use of the lower external ambient temperature and save energy consumption up to 30%.

▼ High-efficiency Humidification System

Standard with 0 power consumption wet film humidification, humidification amount can be adjusted, suitable for different water quality. Optional electrode humidification.

◆ Adjustable heating power

Adjustable heating power can make it intelligently choose heating power level according to real-time environment and easily maintain accurate environment.

◆ High-efficiency Flow Control

The valve can accurately and quickly make the output suitable for various states and improve the performance and efficiency of air conditioner system; The electronic expansion valve controlled by microcomputer can save energy consumption up to 30%.

MatrixAir™ Series Precision Cooling Solution

Flexibility

Seven cooling types, Up-flow type and down-flow type, wide cooling range and personalized and customized design are available for Kstar MatrixAir™ series precision cooling system, which can flexibly meet different needs of users.

◆ Modular Components with High Adaptability

Kstar MatrixAir™ series precision cooling is composed of high-quality modular components that can be flexibly applied and applicable to different needs of data center.

- ◆ Fans
- ◆ Humidifier
- ◆ Electronic expansion valve
- ◆ Heater
-



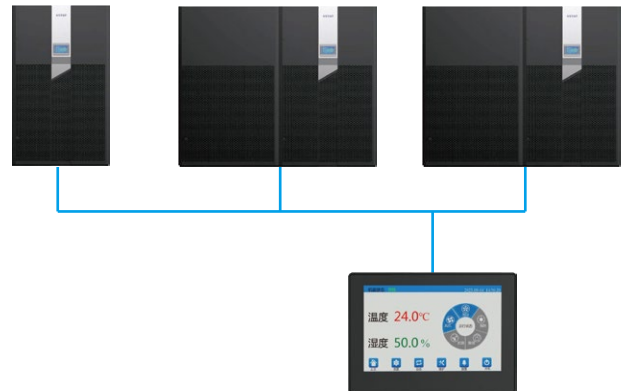
Plenum	Large-power heater	Power Supply Protection
Remote temperature & humidity sensor	G4 filter	Low temperature kits
Dual Power Supply	Water leakage detection system	High static pressure

◆ Rich and Flexibly-matched Options

Kstar's professional engineers can flexibly combine a refrigeration solution that accurately matches the project from multiple options according to the needs of users.

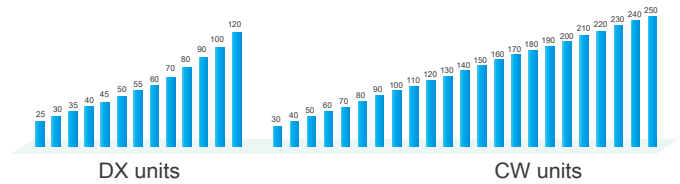
◆ Flexible Expansion Capacity

Kstar MatrixAir™ series precision cooling adopts modular structure, and each unit has an independent intelligent control system, which supports group control of multiple units and can be flexibly arranged in a centralized or decentralized mode so as to meet the expansibility demand of growing data center on cooling capacity.



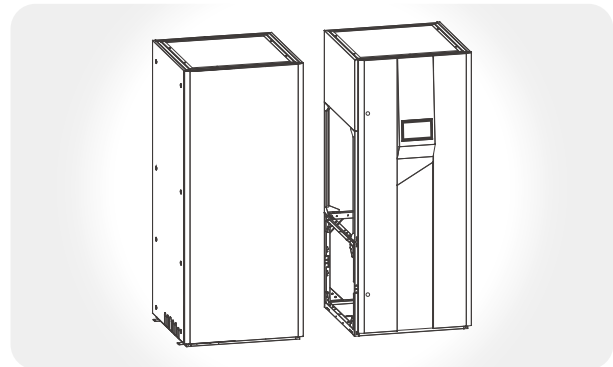
◆ Wide Cooling Range

The cooling capacity range provided by Kstar MatrixAir™ series precision cooling is 25kW-250kW, which can fully meet the requirements of data center.



◆ Modular Structure Design

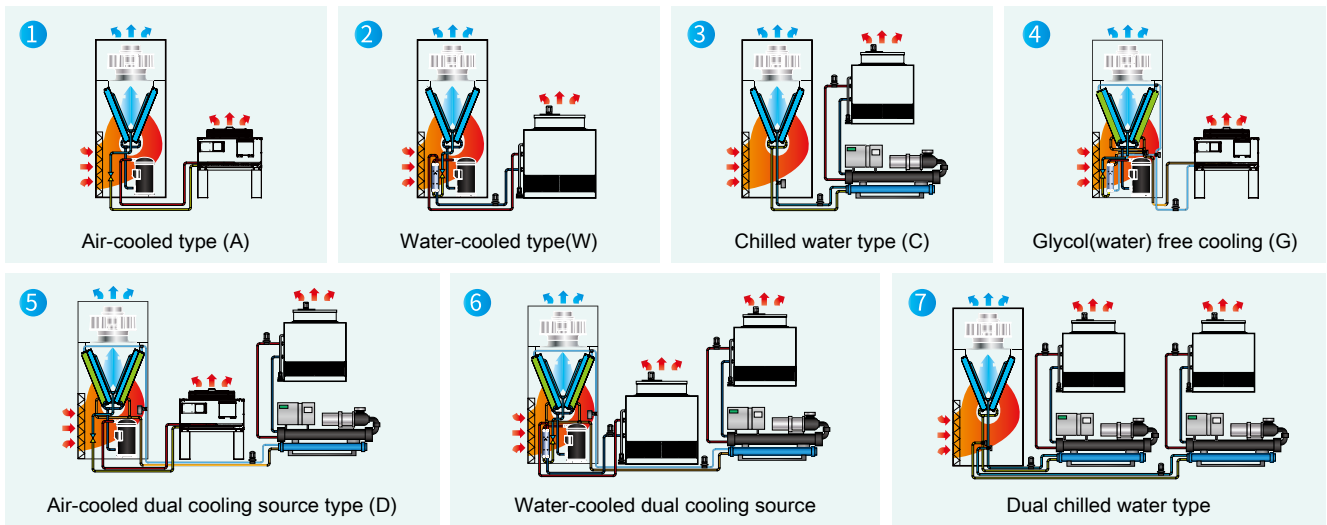
Kstar MatrixAir™ series precision cooling adopts modular structure design, with more compact unit structure and smaller footprint; moreover, it supports modular split and solves the difficult problem in the handling and maintenance of compact space. Full frontal maintenance is available, and lateral and rear parts can also be opened for maintenance.



◆ Seven Cooling Types

Seven kinds of cooling systems include ① Air-cooled type (A), ② Water-cooled type (W), ③ Chilled water type (C), ④ Glycol(water) free cooling (G), ⑤ Air-cooled dual cooling source type (D), ⑥ Water-cooled dual cooling source ⑦ Dual chilled water type. They can meet different needs of users.

The dual cooling system of Kstar MatrixAir™ series precision cooling is designed, with better redundancy and strong ability to cope with faults.



Technical Parameters

▼DX Unit (Inverter Compressor)

MT****	Unit	025	030	035	040 (Single)	050 (Single)	040 (Dual)	050 (Dual)	060	080	100	120
Total cooling capacity ¹⁾	kW	27.0	32.0	36.5	42.0	52.5	44.5	53.0	63.0	84.0	105.0	123.0
Sensible capacity ¹⁾	kW	27.0	32.0	36.5	42.0	52.5	44.5	53.0	63.0	84.0	105.0	123.0
Air volume	m ³ /h	8500	10000	11000	12000	13500	12500	13500	18700	21600	26000	26500
Heating capacity	kW	9	9	9	9	9	9	9	12	12	12	12
Number of compressors	pcs	1	1	1	1	1	2	2	2	2	2	2
Humidification capacity (Wet film humidification)	kg/h	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Humidification capacity (Electrode humidification)	kg/h	6.0	8.0	8.0	8.0	8.0	3.5	3.5	10.0	10.0	12.0	12.0
Number of fan	pcs	1	1	1	1	1	1	1	2	2	2	2
Fan type	/	EC fan										
Full load current (Cooling only)	A	23	25	32	36	42	37	40	50	72	84	86
Full load current (With heater and humidifier)	A	32.5	36.3	39.2	41.5	50.4	45.5	54.3	60.1	71.3	86.3	100.5
Unit weight	kg	350	370	380	390	410	490	510	680	700	790	800
Unit width	mm	1128	1128	1128	1128	1128	1178	1178	2228	2228	2228	2228
Unit depth	mm	995	995	995	995	995	995	995	995	995	995	995
Unit height	mm	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975
Condenser	KCS	032	042	048	054	064	028*2	032*2	042*2	054*2	064*2	084*2

▼DX Unit (Fixed Speed Compressor)

MT****	Unit	025	030	035	040 (Single)	045	050 (Single)	040 (Dual)	050 (Dual)	060	070	080	090	100
Total cooling capacity ¹⁾	kW	26.9	32.7	37.2	41.8	45.9	51.7	42.6	52.8	61.7	71.1	81.8	92.1	101.3
Sensible capacity ¹⁾	kW	25.0	31.4	35.0	39.7	44.1	49.6	40.5	50.7	59.2	66.8	78.5	87.5	96.2
Air volume	m ³ /h	7800	8600	9500	12000	13000	13500	12500	13500	18700	19300	21600	24000	26000
Heating capacity	kW	9	9	9	9	9	9	9	9	12	12	12	12	12
Number of compressors	pcs	1	1	1	1	1	1	2	2	2	2	2	2	2
Humidification capacity (Wet film humidification)	kg/h	3	3	3	3	3	3	3	3	6	6	6	6	6
Number of fan	pcs	1	1	1	1	1	1	1	1	2	2	2	2	2
Fan type	/	EC fan												
Full load current	A	28.8	32.7	35.1	40.5	43.8	49.0	43.8	51.5	58.7	63.5	67.0	73.5	83.7
Unit weight	kg	300	350	360	380	400	410	470	490	660	670	680	720	730
Unit width	mm	928	928	928	928	928	928	1378	1378	1828	1828	1828	1828	1828
Unit depth	mm	995	995	995	995	995	995	995	995	995	995	995	995	995
Unit height	mm	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975
Condenser	/	KCS032	KCS036	KCS042	KCS048	KCS054	KCS064	KCS028*2 or KCD048*1	KCS032*2 or KCD064*1	KCS036*2 or KCD072*1	KCS042*2 or KCD084*1	KCS048*2 or KCD096*1	KCS054*2 or KCD106*1	KCS064*2 or KCD128*1

▼CW Unit (Chilled Water Type)

MT****	Unit	030	040	050	060	070	080
Total cooling capacity ²⁾	kW	33.7	42.6	50.1	61.6	73.7	86.6
Sensible capacity ²⁾	kW	33.7	42.6	50.1	60.6	70.1	81.4
Air volume	m ³ /h	9500	10500	12300	13900	14700	17000
Water flow	m ³ /h	4.2	5.5	6.5	10.6	12.9	14.9
Water pressure drop	kPa	40	50	60	60	65	70
Rated cooling power consumption	kW	1.6	2.3	2.7	2.8	3.1	3.2
Heating capacity	kW	9	9	9	9	9	12
Humidification capacity (Wet film humidification)	kg/h	4.5	4.5	4.5	4.5	4.5	9
Number of fan	pcs	1	1	1	1	1	2
Fan type	/	EC fan					
Full load current (With heater and humidifier)	A	18	18	18	18	18	36
Full load current (Cooling only)	A	6	6	6	6	6	12
Inlet and outlet pipe diameter	mm	G1-1/2	G1-1/2	G1-1/2	G1-1/2	G1-1/2	G1-1/2
Unit weight	kg	340	350	360	450	460	535
Unit width	mm	928	928	928	1128	1128	1828
Unit depth	mm	995	995	995	995	995	995
Unit height	mm	1975	1975	1975	1975	1975	1975

▼CW Unit (Chilled Water Type)

MT****	Unit	100	120	150	170	200	250
Total cooling capacity ²⁾	kW	104.0	128.0	151.0	170.0	200.0	258.0
Sensible capacity ²⁾	kW	100.0	120.0	143.0	165.0	187.0	239.0
Air volume	m ³ /h	22000	24800	29400	36900	38400	48000
Water flow	m ³ /h	17.9	22.0	26.0	29.2	34.3	44.3
Water pressure drop	kPa	62	72	85	95	110	135
Rated cooling power consumption	kW	4.8	5.6	6.4	7.5	9.3	10.0
Humidification capacity (Wet film humidification)	kW	12	12	12	12	12	12
Humidifying capacity	kg/h	9	9	9	9	9	12
Number of fan	pcs	2	2	2	3	3	4
Fan type	/	EC fan					
Full load current (With heater and humidifier)	A	36	36	36	42	42	50
Full load current (Cooling only)	A	12	12	12	18	18	24
Inlet and outlet pipe diameter	mm	G2	G2	G2	G2	G2	DN65 flange
Unit weight	kg	560	580	640	730	760	1150
Unit width	mm	1828	1828	2228	2728	2728	3828
Unit depth	mm	995	995	995	995	995	995
Unit height	mm	1975	1975	1975	1975	1975	1975

Notes:

1. Parameter table

1) Air/water cooled unit data is based on indoor return air temperature 24°C and 50%RH, outdoor ambient temperature 35°C;

2) Chilled water unit data is based on indoor return air temperature 28°C and 40%RH, chilled water in/out temperature 10°C/15°C.

2. 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.

StationAir™ Series Precision Cooling



Small and Medium Data Center Room High-efficiency Precision Cooling

Kstar StationAir™ Series Precision Cooling, provides you with perfect solution.

Kstar StationAir™ series precision cooling adopts the design of large air volume and high sensible heat ratio (SHR) to meet the needs of 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

- ◆ Wet-film humidification, 0 power consumption.
- ◆ Stepless fan speed regulation, air volume adjusted as needed.
- ◆ Three-direction return air design to increase the return air area and improve the return air efficiency.
- ◆ The design of small enthalpy difference in large air volume ensures that the sensible heat ratio (SHR) $\geq 90\%$.
- ◆ Intelligent unit control avoids the competitive operation of multiple coolings and configures the cooling capacity as needed.
- ◆ High-efficiency and high-quality components match the well-designed refrigeration system, and annual energy efficiency ratio (AEER) is up to 4.19.
- ◆ Standard R410A environmentally friendly refrigerant.

◆ High Reliability

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
- ◆ Refrigerant leakage or insufficient detection function.
- ◆ Water leakage detection function.
- ◆ Dual power supply and lightning protection functions supported.
- ◆ Wide input voltage design, optional phase loss and error protection, over-voltage and under-voltage protection functions.
- ◆ The unit is designed for uninterrupted, efficient and reliable operation 365 days×24 hours a day.
- ◆ The unit is suitable for severely cold areas, and can operate reliably at a low temperature of -40°C after optional low-temperature components.

◆ 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



◆ All-weather Operation Design

- ◆ Precision cooling 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

◆ Flexible Application

- ◆ Precision cooling 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, and underflow
- ◆ Various cooling types: Air-cooled type, water-cooled type, chilled water type, ethylene glycol-cooled type and dual cooling source type
- ◆ 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 room
- ◆ Outdoor telecom equipment room
- ◆ Laboratory, testing room and storage room
- ◆ Computer room in commercial buildings



◆ Technical Parameters

▼DX Unit (Air-cooled Type)

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	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			16.1			19.1	
Air volume	m ³ /h		2000			2250			3000			5000			5000	
Heating capacity	kW	-	2	2	-	2	2	-	2	2	-	4	4	-	4	4
Humidification capacity (Wet film humidification)	kg/h	-	-	1.5	-	-	2	-	-	2	-	-	2.5	-	-	2.5
Number of compressor	pcs		1			1			1			1			1	
Number of fan	pcs		1			1			1			1			1	
Voltage	V		220			220			380			380			380	
Frequency	Hz		50/60			50/60			50/60			50/60			50/60	
Full load current	A	11.0	20.5	21.0	16.2	25.3	25.8	8.4	15.7	16.2	15.5	29.5	30.0	18.0	31.5	32.0
Unit weight	kg	94	96	107	104	106	108	134	136	138	158	160	162	167	168	170
Unit width	mm		600			600			600			750			750	
Unit depth	mm		500			500			500			650			650	
Unit height	mm		1850			1850			1850			1850			1850	

▼Outdoor unit

KCS***	Unit	007		010		018		024		028	
Heat exchange capacity	kW		7.6		10.4		18.1		23.8		27.2
Full load current	A		0.5		0.7		1.4		1.7		1.7
Unit weight	kg		38		48		60		118		135
Unit width	mm		905		944		988		1118		1118
Unit depth	mm		346		420		440		480		480
Unit height	mm		611		803		1257		1560		1560

Notes:

- 1.The above parameters are based on indoor return air conditions of 24 °C, 50% RH, and outdoor ambient temperature of 35 °C;
- 2.The outdoor unit needs to be powered from the indoor unit;
- 3.The minimum working environment temperature for standard outdoor units is -20 °C, and with low-temperature kits, the minimum working environment temperature is -40 °C;
- 4.If there is a demand for customized products, please contact us.
- 5.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.

FocusAir™ Series Precision Cooling



Data Center Inrow High-efficiency Precision Cooling Solution

Kstar FocusAir™ Series Precision Cooling,
provides you with perfect solution.

- ◆ Kstar FocusAir™ series precision cooling is elaborately designed for the specific cooling needs of the new generation of high heat density data center racks
- ◆ The design is close to heat source application. It adopts brand-new airflow distribution method and serves the data center with high reliability, high efficiency, energy saving, accurate measurability and flexibility
- ◆ It solves intractable problems in practice with technologies such as real-time monitoring, dynamic coordinated output, cabinet size design and no need for raised floor to ensure the uninterrupted, high-efficient and reliable operation of key equipment for 24 hours of 365 days



◆ Accurate and Measurable Cooling

FocusAir™ series Inrow precision cooling directly deals with the hot air discharged from the server, shortens airflow path, prevents cold and hot air from mixing together, minimizes airflow loss and eliminates the uncertainty of airflow and cooling through the design of closeness to hot source. Through real-time monitoring on heat source load change and accurate adjustment of cooling capacity output and fan output, the cooling capacity and air volume can be accurate and predictable so that more targeted accurate cooling can be achieved and the problem of high-density heat dissipation of data center can be perfectly solved.



◆ Inrow Cooling Features

▼ More Reasonable and Accurate Air Distribution

FocusAir™ series can accurately predict airflow path, and the generated airflow is reasonably distributed in the inlet of front door of the cabinet so that cold airflow can be delivered to the desired place precisely; Moreover, the unit adopts fan and air volume automatically matches the load change of the server.

- ◆ Reasonable and accurate airflow control can minimize the loss of cooling capacity and make the planning of cooling system more reasonable
- ◆ Unique air distribution naturally achieves the containment effect of cold aisle



▼ Real-time Monitoring of the Heat Load

FocusAir™ series unit is compatible with multiple temperature sensors, monitoring the heat load change real-time, and directly control the supply air temperature (the inlet air temperature of servers), that is safe, reliable, and energy saving, making sure that the inlet air temperature of servers conform to the requirements and the equipment running in the best state.

▼ Flexibility and Compatibility of the Space Application

FocusAir™ series unit is compatible with main manufacturers' racks, suitable for concrete or raised floor room. Rack size modular frame, 4 air supply types, 3 cooling types. Flexible to expand as business grows.

▼ Dynamic Coordination Output

The IT equipments of data center run all year around, and the operation condition is constantly changing. The FocusAir cooling system works based on the change of the heat load, dynamic coordinates cooling capacity output and air volume output of the unit, realizes real-time matching with the load change to keep the unit running in the best condition.

▼ Precise Air Volume Control

FocusAir™ series units are standard with the EC fan that can rapidly response to the output requirements; the effect of energy saving in the part load mode is remarkable, up to 30% higher than the conventional AC fan.

▼ Stepless Speed Regulation Compressor

FocusAir™ series unit adopts inverter stepless speed regulation compressor, which can accurately control cooling capacity output by regulating the rotational speed of compressor, match the heat load change of heat source in real time, and achieve accurate cooling and high energy efficient operation.

◆ Inrow Cooling Features

▼ Electronic Expansion Valve

The electronic expansion valve controlled by microcomputer can quickly and accurately control the refrigerant flow in the system with the change of cooling demand. It can always ensure the high reliability and high energy efficiency of air conditioner system and realize the improvement of unit start-up features, fast and stable working condition control and better refrigeration performance; Relying on the wide flow characteristics of electronic expansion valve, the cooling system can make full use of the lower external ambient temperature and save energy consumption up to 30%.



◆ Advanced Functional Design



High Return Air Temperature Design

FocusAir™ series are designed in 100% sensible heat ratio with the high return air temperature and it makes the data center operating in the state of more energy saving.



Multiple Sets of Temperature Sensor

Compatible with multiple sets of temperature sensor, real-time monitoring the heat load changes of the cabinet, accurate judging for refrigeration output.



G4 Filtrating System

The G4 filter system of FocusAir™ series with the filter jamming switch is safe and reliable.



Water Leaking Detection System

Equipped with the water leaking detection system can avoid the water leakage and make the system reliability.



Monitoring

To monitor the unit status, manage and control the data center in a better way.



Rack Size Design, Compatible with the IT Environment

The compact design and compatibility conforming to different manufacturer make the FocusAir™ series unit suitable for different data centers.



No Need Raised Floor

The unique style of the FocusAir™ series is the ideal choice for the data center without the raised floor.



Humidifying/Heating System

It can deal with the temperature and humidity of the equipment room without the room level humidifying.



Cold Aisle Containment Effect

Without adding additional air restraint accessory, the unique airflow design has realized the effect of Cold Aisle Containment.



Avoiding the Water Leakage Trouble

Equipped with the condensing water pump, avoid the water leakage hidden trouble and make the system reliability.

◆ FocusAir™ Series Unit Configuration

▼ Advanced Intelligent Controller

FocusAir™ series adopts powerful professional precision cooling intelligent control system to realize high-efficient, energy-saving, stable and reliable control of the unit with superior performance.

- ◆ Standard RS485 intelligent communication interface
- ◆ Graphical state display and temperature & humidity curve display
- ◆ Alarm notification and it can record more than 3000 alarm events

- ◆ Optional external remote temperature & humidity sensor
- ◆ Optional water leakage detector

▼ Multiple Sets of Temperature Sensors

They monitor regional environment in real time, and the fan is adjusted according to temperature requirements in real time; The rotational speed of compressor or chilled water valve opening is adjusted in real time according to temperature requirements.

▼ Convenient Installation and Maintenance

- ◆ Maintenance can be carried out from the front and rear parts
- ◆ Pipeline can be connected from bottom and top.

▼ Three Cooling Types

Three kinds of cooling systems are available (A air-cooled type, W water-cooled type and C chilled water type).

▼ Four Kinds of Air Supply Modes

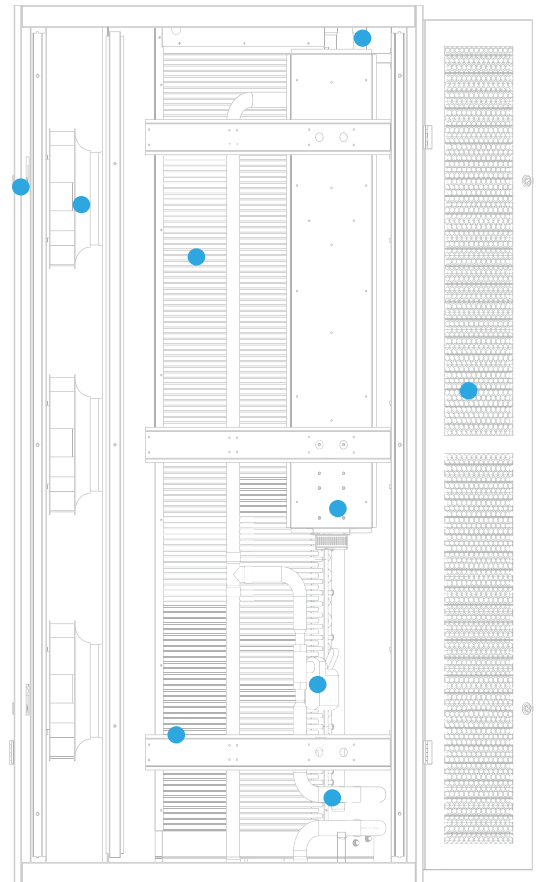
FocusAir™ series can provide four different air supply options, including bilateral air supply, air supply on the right side, air supply on the left side, and forward air supply.

▼ Cooling Configuration of Compressor

- ◆ Inverter compressor
- ◆ EC fan
- ◆ Electronic expansion valve
- ◆ Intelligent controller
- ◆ Air filter
- ◆ High-efficiency heat exchanger
- ◆ Optional humidifier
- ◆ Optional heater

▼ Cooling Configuration of Chilled Water

- ◆ EC fan
- ◆ Intelligent controller
- ◆ Air filter
- ◆ High-efficiency heat exchanger
- ◆ Two-way valve (Optional three-way valve)
- ◆ Optional humidifier
- ◆ Optional heater



Technical Parameters

▼DX Unit (Air-cooled Type)

FS***	Unit	007		012		007		012	
Compressor type	-	Fix speed compressor				Inverter compressor			
The unit configuration	/	Constant temperature	Constant temperature and humidity	Constant temperature	Constant temperature and humidity	Constant temperature	Constant temperature and humidity	Constant temperature	Constant temperature and humidity
Total cooling capacity ¹⁾	kW	7.5	7.5	12.5	12.5	7.5	7.5	12.5	12.5
Sensible capacity ¹⁾	kW	7.5	7.5	12.5	12.5	7.5	7.5	12.5	12.5
Air volume	m ³ /h	3400	3400	3600	3600	3400	3400	3600	3600
Number of fan	pcs	4	4	4	4	4	4	4	4
Fan type	-	AC Fan				EC Fan			
Direction of air supply	-	Side air supply/return				Side air supply/return			
Heating capacity	kW	2	2	2	2	2	2	2	2
Humidification capacity (Wet film humidification)	kg/h	-	2	-	2	-	2	-	2
Voltage	V	220	220	380	380	220	220	220	220
Full load current	A	23.5	24.0	19.5	20.0	32.8	33.3	40.5	41.0
Unit weight	kg	208	210	223	225	208	210	223	225
Unit width	mm	300	300	300	300	300	300	300	300
Unit depth	mm	1200/1400	1200/1400	1200/1400	1200/1400	1200/1400	1200/1400	1200/1400	1200/1400
Unit height	mm	2000	2000	2000	2000	2000	2000	2000	2000
Outdoor unit model	KCS	010		018		010		018	

▼DX Unit (Air-cooled Type)

FS***	Unit	025	025	030	030	040	050	060	070
Compressor type	-	Inverter Compressor							
Total cooling capacity ¹⁾	KW	25.5	25.5	30.5	30.5	42.8	52.0	65.0	70.0
Sensible capacity ¹⁾	KW	25.5	25.5	30.5	30.5	42.8	52.0	65.0	70.0
Air volume	m ³ /h	5050	7000	5050	8000	9500	11000	12500	14200
Fan type	-	EC Fan							
Heating capacity	kW	3.5	3.5	3.5	6.0	6.0	9.0	9.0	9.0
Humidification capacity (Wet film humidification)	kg/h	2.5	2.5	2.5	3.5	3.5	3.5	3.5	3.5
Number of compressors	pcs	1	1	1	1	1	1	1	1
Voltage	V	380	380	380	380	380	380	380	380
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Full load current (Cooling only)	A	20.0	20.0	30.0	30.0	32.0	35.0	46.0	50.0
Full load current (With heater and humidifier)	A	30.0	30.0	36.5	36.5	38.5	46.0	55.0	60.0
Unit width	mm	300	600	300	600	600	600	600	600
Unit depth	mm	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200	1200
Unit height	mm	2000/2200	2000/2200	2000/2200	2000/2200	2000/2200	2000/2200	2000/2200	2000/2200
Unit weight	kg	230	265	240	290	290	345	360	375
Number of fans	pcs	6	2	6	2	3	3	3	3
Outdoor unit model	KCS	032	032	042	042	054	064	084	096

▼CW Unit (Chilled Water Type)

FS***	Unit	025	030	040	050	065
Total cooling capacity ²⁾	kW	25.1	30.5	40.5	50.2	67.0
Sensible capacity ²⁾	kW	25.1	30.5	40.5	50.2	67.0
Air volume	m ³ /h	5100	5500	9500	11000	12500
Water flow	m ³ /h	4.8	5.3	7.4	9.1	11.0
Water pressure drop	kPa	49	69	34	71	83
Heating capacity	kW	3	3	6	6	6
Humidification capacity (Wet film humidification)	kg/h	1.5	1.5	3.0	3.0	3.0
Voltage	V	380	380	380	380	380
Frequency	Hz	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Fan type	/	EC fan				
Full load current (With heater and humidifier)	A	7.2	7.2	12.1	13.9	13.9
Full load current (Cooling only)	A	2.8	2.8	4.9	6.7	6.7
Inlet and outlet pipe diameter	mm	G1	G1	G1-1/2	G1-1/2	G1-1/2
Unit weight	kg	192	196	209	226	235
Unit width	mm	300	300	600	600	600
Unit depth ⁵⁾	mm	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200
Unit height	mm	2000	2000	2000	2000	2000

Notes:

1. Parameter table

1) Air/water cooled unit data is based on indoor return air temperature 37°C and 25%RH, outdoor ambient temperature 35°C;

2) Chilled water unit data is based on indoor return air temperature 37°C and 25%RH, chilled water in/out temperature 10°C/15°C.

2. 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.

InsertAir™ Series Rack-mounted Precision Cooling



Inverter compressor



EEV

◆ Flexibility and compatibility of space

- ◆ Compatible with different cabinet, rack-mounted installation
- ◆ Occupy less space in racks

◆ Accurate airflow

- ◆ Unique airflow distribution, it forms cold aisle at front
- ◆ "V" shape evaporator have large surface for air, low air resistance, and it makes cooling more high-efficient

◆ Accurate air volume control

- ◆ Standard stepless regulation EC fan, optimal airflow distribution, power saving fan

◆ Environmental friendly

- ◆ Environmental friendly R410A refrigerant

◆ High efficient dynamic output

- ◆ Inverter compressor, it can be adjusted according to the thermal load in real time
- ◆ High efficient EC fan, it can adjust the air volume according to the thermal load in real time
- ◆ High return air temperature design, high sensible cooling and high power efficiency
- ◆ Stepless regulation outdoor unit, smooth running, power-consumption, low noise, high reliability
- ◆ Professional low load dehumidification design, it can control the humidity and temperature in the cabinet when the thermal load is very low
- ◆ Standard configuration of electronic expansion valve with strong adaptability, allows better energy saving effect in winter

◆ Technical Parameters

▼ DX Unit (Air-cooled Type)

IS***FA	Unit	003		007		012	
Configuration	-	Constant temperature	Constant temperature and humidity	Constant temperature	Constant temperature and humidity	Constant temperature	Constant temperature and humidity
Total cooling capacity ¹⁾	kW	3.5	3.5	7.0	7.0	12.5	12.5
Sensible capacity ¹⁾	kW	3.5	3.5	7.0	7.0	12.5	12.5
Air volume	m ³ /h	700	700	1350	1350	2300	2300
Heating capacity	kW	1.0	1.0	2.5	2.5	5.0	5.0
Humidification capacity (Wet film humidification)	kg/h	-	0.5	-	0.6	-	1
Number of compressor	PCS	1	1	1	1	1	1
Type of compressor	/	Inverter compressor					
Voltage	V	220	220	220	220	220	220
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Full load current	A	17.2		28.2		50.2	
Unit weight	kg	30		41		54	
Unit width	mm	440	440	440	440	440	440
Unit depth	mm	800	800	800	800	800	800
Unit height	mm	222	222	310	310	444	444
	U	5	5	7	7	10	10

▼ Supporting Outdoor unit

KCS***	Unit	005	010	018
Voltage	V	220	220	220
Frequency	Hz	50/60	50/60	50/60
Unit weight	kg	38	53	75
Unit width	mm	898	935	981
Unit depth	mm	340	422	440
Unit height	mm	606	807	1256

Notes:

1) Data above is based on indoor return air temperature 37°C and 25%RH, outdoor ambient temperature 35°C.

Refrigerant Pump Assisted Free Cooling Energy-saving Precision Cooling



Refrigerant Pump Assisted Free Cooling Energy-saving precision cooling provides you with perfect solution.

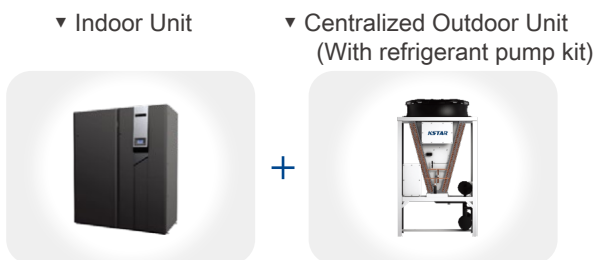
KSTAR Refrigerant Pump Assisted Free Cooling products, it can fully use of natural cold source to reduce the power consumption. Based on the KSTAR standard natural cooling unit, it can achieve the cooling function using the compressor system or the Refrigerant Pump system through the refrigerant cycle.

◆ Composition

Refrigerant Pump Assisted Free Cooling products is consisted of three parts, including indoor unit, outdoor unit and energy-saving module; it has the same installation and using mode as standard air cooling unit, which can also has the advantages of simple installation and maintenance.



Indoor unit + flat outdoor unit + energy saving module



Indoor unit+Centralized Outdoor Unit(With refrigerant pump kit)

Advantages/Technical Parameters

◆ Operation Features

Compressor Mode

When it has no condition of opening Refrigerant Pump Assisted Free Cooling energy-saving system at high outdoor ambient temperature, the compressor should be started for conventional cooling of compressor.

Refrigerant Pump

When it has condition of opening Refrigerant Pump Assisted Free Cooling energy-saving system at low outdoor ambient temperature, the compressor cooling system should be closed and Refrigerant Pump energy-saving system should be started for cooling.

Mixed Mode

When the outdoor ambient temperature is lower but the cooling capacity of refrigerant pump fails to meet the full load of the load, the refrigerant pump and compressor should run simultaneously to dig out the maximum efficiency of compressor and realize energy-saving operation.

◆ High-efficiency and Energy Saving

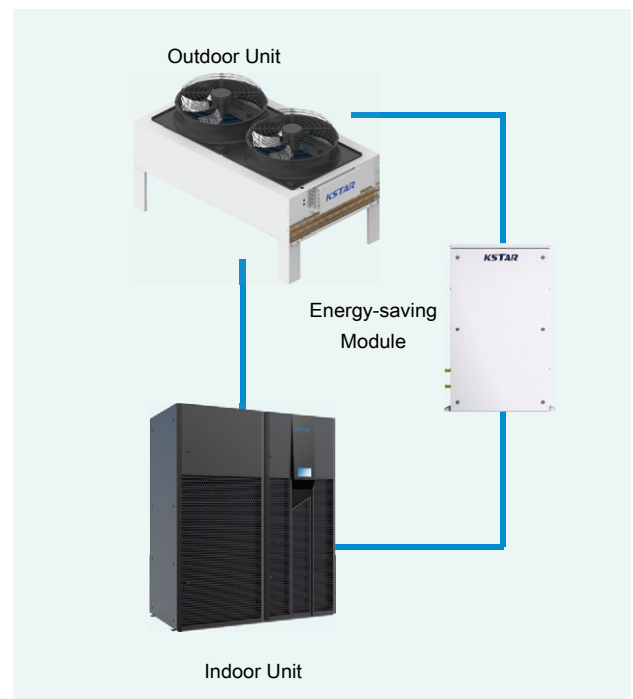
- ◆ When outdoor ambient temperature is high, high energy efficiency compressor should be adopted for cooling and realizing high efficiency and energy saving
- ◆ When outdoor ambient temperature is low, the compressor should be turned off and Refrigerant Pump energy-saving system should be adopted for cooling, which greatly reduces the power consumption of the unit
- ◆ Mixed mode ensures that the refrigerant pump and compressor work simultaneously, enabling energy-saving operation during transition season
- ◆ Single compressor cooling system is equipped with one refrigerant pump free cooling energy-saving module, and dual compressor cooling system is equipped with two Refrigerant Pump Assisted Free Cooling energy-saving modules to ensure that all the compressors can be turned off when outdoor ambient temperature is low so as to make full use of natural cooling source and reduce energy consumption
- ◆ Intelligent energy-saving controller ensures high-efficient and stable operation of the unit

◆ High Reliability

- ◆ It uses high-quality parts and components that have gone through market test for long time
- ◆ The advanced and reliable controller ensures that the unit automatically and accurately switches cooling operation mode, and it provides a variety of protection functions to ensure the safe and reliable operation of the unit
- ◆ It has intelligent control system with real-time fault diagnosis and alarm prompt

◆ Easy to use

- ◆ Highly integrated and modular design, simple installation and easy maintenance are available
- ◆ 100% full frontal maintenance
- ◆ Standard RS485 interface is provided for remote monitoring



Technical Parameters

▼ MatrixAir™ Refrigerant Pump Assisted Free Cooling Energy-saving Precision Cooling

MT****A	Unit	025	030	035	040 (Single)	045	050 (Single)	040 (Dual)	050 (Dual)	060	080	100	120
Total cooling capacity ¹⁾	kW	27.0	32.0	36.5	42.0	47.5	52.5	44.5	53.0	63.0	84.0	105.0	123.0
Sensible capacity ¹⁾	kW	27.0	32.0	36.5	42.0	47.5	52.5	44.5	53.0	63.0	84.0	105.0	123.0
Air volume	m ³ /h	8500	10000	11000	12000	13000	13500	12500	13500	18700	21600	26000	26500
Heating capacity	kW	9	9	9	9	9	9	9	9	12	12	12	12
Compressor quantity	pcs	1	1	1	1	1	1	2	2	2	2	2	2
Humidification capacity (Wet film humidification)	kg/h	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	9.0	9.0	9.0
Number of fans	pcs	1	1	1	1	1	1	1	1	2	2	2	2
Fan type	/	EC fan											
Full load current (Cooling only)	A	23	25	32	36	40	42	37	40	50	72	84	86
Full load current (With heater and humidifier)	A	32.5	36.3	39.2	41.5	46.6	50.4	45.5	54.3	60.1	71.3	86.3	100.5
Unit Weight	kg	350	370	380	390	400	410	490	510	680	700	790	800
Unit Width	mm	1128	1128	1128	1128	1128	1128	1128	1128	2228	2228	2228	2228
Unit Depth	mm	995	995	995	995	995	995	995	995	995	995	995	995
Unit Height	mm	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975

Notes:

- 1.Data above is based on indoor return air temperature 28°C/40%RH, outdoor ambient temperature -40°C~35°C.
2. 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.

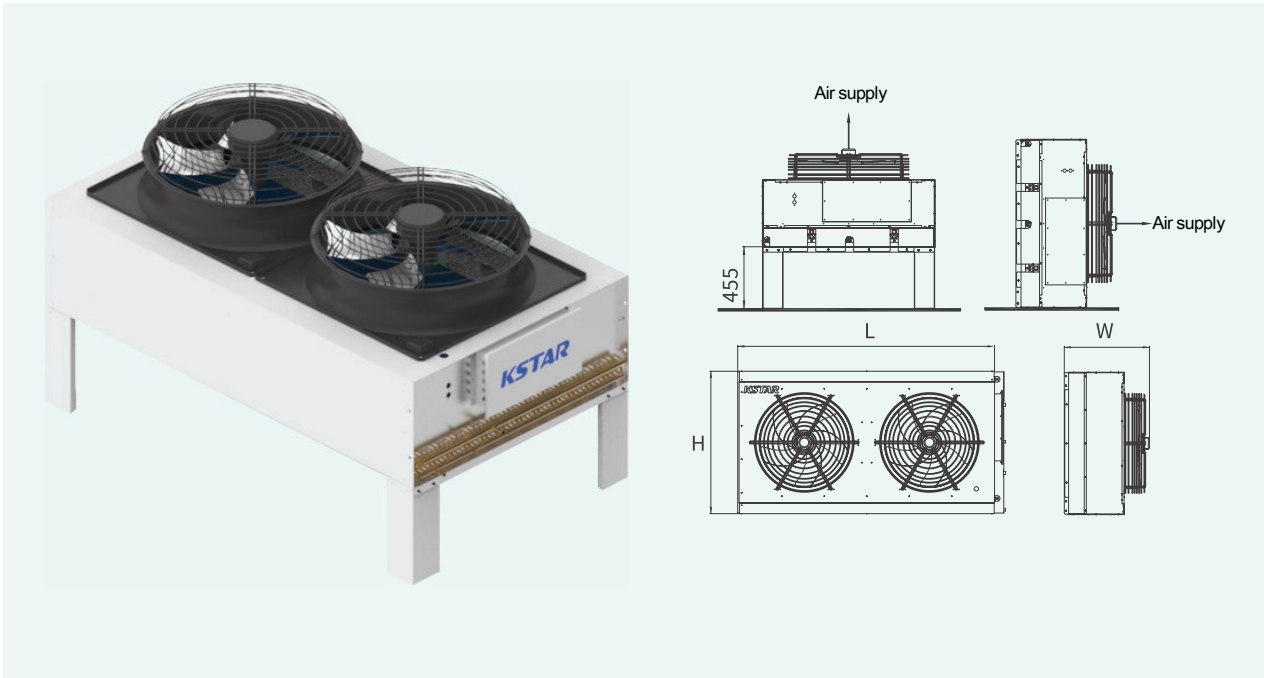
▼ FocusAir™ Refrigerant Pump Assisted Free Cooling Energy-saving Precision Cooling

FS***	Unit	025	025	030	030	040	050	060	070
Total cooling capacity ¹⁾	kW	25.5	25.5	30.5	30.5	42.8	52.0	65.0	70.0
Sensible capacity ¹⁾	kW	25.5	25.5	30.5	30.5	42.8	52.0	65.0	70.0
Air volume	m ³ /h	5050	7000	5050	8000	9500	11000	12500	14200
Unit weight	kg	230	265	240	290	290	345	360	375
Unit width	mm	300	600	300	600	600	600	600	600
Unit depth	mm	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200	1100/1200
Unit height	mm	2000/2200	2000/2200	2000/2200	2000/2200	2000/2200	2000/2200	2000/2200	2000/2200

Notes:

- 1.Data above is based on indoor return air temperature 37°C and 25%RH, outdoor ambient temperature -40°C~35°C.
2. 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.

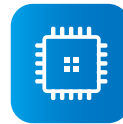
KC Series Flat Plate type Outdoor Unit



- ▼ Dual Anti-corrosion
- High-quality corrosion-resistant aluminum alloy
 - Surface high temperature coating protection



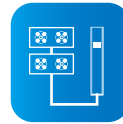
- ▼ Enhanced Heat Transfer
- Enhanced heat transfer internal rifled copper tube
 - High-quality corrugated heat exchange fin



- ▼ Intelligent Control System
- Highly sensitive pressure sensor
 - Intelligent variable frequency stepless speed regulation controller



- ▼ High-quality Fans
- Industry recognized axial fan is of high quality and maintenance-free.
 - Variable frequency speed regulation high-efficiency fan is more energy saving and has lower noise



- ▼ Single/Dual System Design,with Heat Exchange Capacity of 24kw~96kw
- Flexibly matched with indoor unit 1+1 and indoor unit 1+2
 - The combined heat exchange capacity can be expanded to 192kw



- ▼ Positive Pressure Seal Maintained among All Fans



- ▼ Standard IP55 Electrical Box Configuration

Technical Parameters

▼ KC Single System Flat Plate Outdoor Unit

KCS**	Unit	024	028	032	036	042	048	054	064	072	084	096
Voltage	V	380±10%										
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Full-load current	A	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.0	5.0	5.0	5.0
Weight	kg	115	115	124	134	138	138	152	178	192	245	265
Unit length	mm	1330	1330	1330	1330	1530	1730	1730	1930	2130	2130	2130
Unit width	mm	721	721	721	715	715	715	715	721	721	715	715
Unit height	mm	975	975	1050	1050	1220	1220	1220	1220	1220	1220	1245
Foot stool height	mm	455	455	455	455	455	455	455	455	455	455	455

▼ KC Dual System Flat Plate Outdoor Unit

KCD**	Unit	048	054	064	072	084
Voltage	V	380±10%				
Frequency	Hz	50/60	50/60	50/60	50/60	50/60
Full load current	A	2.5	2.5	5.0	5.0	5.0
Weight	kg	138	152	178	192	245
Unit length	mm	1730	1730	1930	2130	2130
Unit width	mm	715	715	721	721	715
Unit height	mm	1220	1220	1220	1220	1220
Foot stool height	mm	455	455	455	455	455

Notes:

- 1.The minimum operating environment temperature of standard unit is -20°C, and the minimum operating environment temperature of low-temperature unit is -40°C;
- 2.Low-noise and customized products can be provided. For more data, please contact Shenzhen Kstar Science & Technology Co., Ltd;
- 3.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.

KC Series V type Outdoor Unit



▼ Less footprint

KC series V type condenser, under the same heat exchange condition, the unit's ground occupation can be reduced by more than 50%. It is especially suitable for occasions where the outdoor unit needs to be saved or the space for placing outdoor units is insufficient.

▼ More heat transfer area

"V" type heat exchanger design, compared with the traditional "U" type condenser, heat exchange area is larger, heat exchange performance is higher, heat dissipation performance is better.

▼ Modular design

The modules are designed in a unified way and can be quickly assembled on site as required, which is especially suitable for expansion data centers with small reserved outdoor space and new data centers with small available outdoor unit area.

▼ Intelligent control system

- High precision pressure sensor
- Intelligent frequency conversion stepless speed control

▼ High quality fan

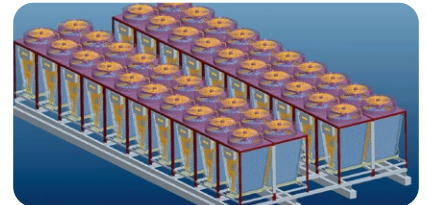
- Well-known fans recognized by the industry, high quality and maintenance-free
- High efficiency fan with frequency conversion and speed regulation, large size, more energy saving and lower noise

▼ More options

- Refrigerant Pump energy-saving option
- EC fan option
- Ultra-low temperature operation option
- Ultra mute option
- Spray option



Application scenario of KC V type condenser



KC V type condenser assembly diagram

Technical Parameters

▼ KC Single System Centralized Outdoor Unit

KCS**	Unit	032	036	042	048	054	064	072	084	096	
Voltage	V	380±10%									
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	
Unit weight ¹⁾	kg	168	168	176	184	192	226	226	234	256	
Unit weight ²⁾	kg	224	224	232	240	248	282	282	290	312	
Unit dimension ¹⁾	(L×W×H)mm	1125×1100×1960									
Unit dimension ²⁾	(L×W×H)mm	1125×1100×1960					1125×1100×2150				

▼ KC Dual System Centralized Outdoor Unit

KCD**	Unit	054	064	072	084	096	108	128	150	170
Voltage	V	380±10%								
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Unit weight	kg	196	230	230	238	260	370	450	460	466
Unit width	mm	1125	1125	1125	115	1125	2250	2250	2250	2250
Unit depth	mm	1100	1100	1100	1100	1100	2200	2200	2200	2200
Unit height	mm	1960	1960	1960	1960	1960	1960	1960	1960	1960

Notes:

1. The lowest working environment temperature of standard unit is -20°C, and can reach -40°C with the low temperature kit;
2. Unit weight¹⁾, unit dimension¹⁾ is standard V type outdoor unit; unit weight²⁾, unit dimension²⁾ is V type outdoor unit with refrigerant pump;
3. KCD series V type outdoor unit does not support built-in refrigerant pump;
4. Can provide customized products, if you need more parameters, please contact Shenzhen Kstar Technology Co., LTD.
5. If the parameters in the table are changed without prior notice due to the technical progress of the product, Shenzhen Kstar Technology Co., LTD reserves the right of final interpretation of the parameters.

Customization Solution



▼ High Temperature Environment Solution

It can support operation at 45°C or higher outdoor ambient temperature.



▼ Low Temperature Environment Solution

It can support operation at -40°C outdoor ambient temperature.



▼ Low Noise Solution

It can support low noise operation in environment with higher noise requirement.



▼ High Altitude Solution

It can support operation in high altitude areas above 1,000m.



▼ Large Air Volume Solution

It can provide users with large air volume solution support.



▼ Long Connecting Pipe/High Drop Solution

It can support the installation environment with equivalent length of above 30m and outside standard drop.



▼ Solution for High External Excess Pressure of the Unit

It can support pressure above the standard external excess pressure of the unit to adapt to on-site requirements.



▼ Cold and Hot Air Channel Containment Solution

It can provide users with application solutions to cold and hot air channel containment.

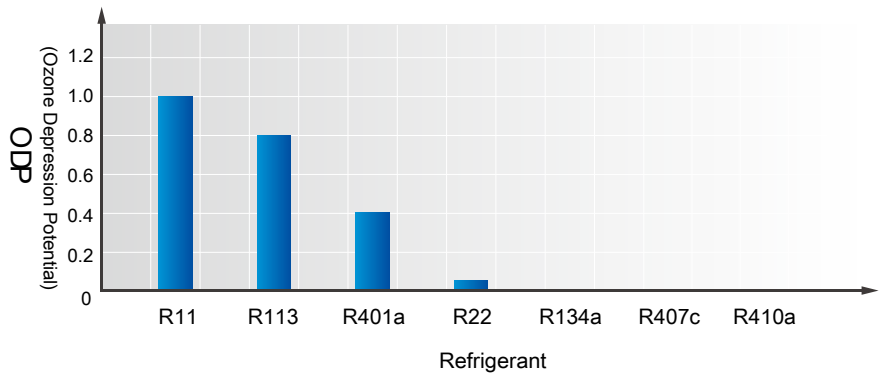
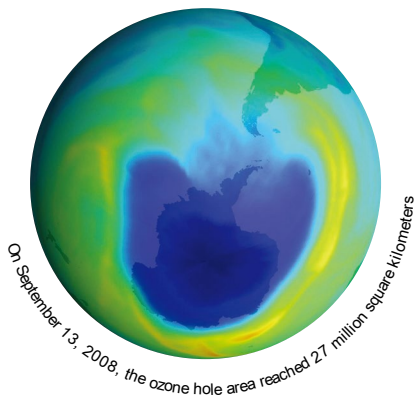


▼ Accurate Air Supply Solution

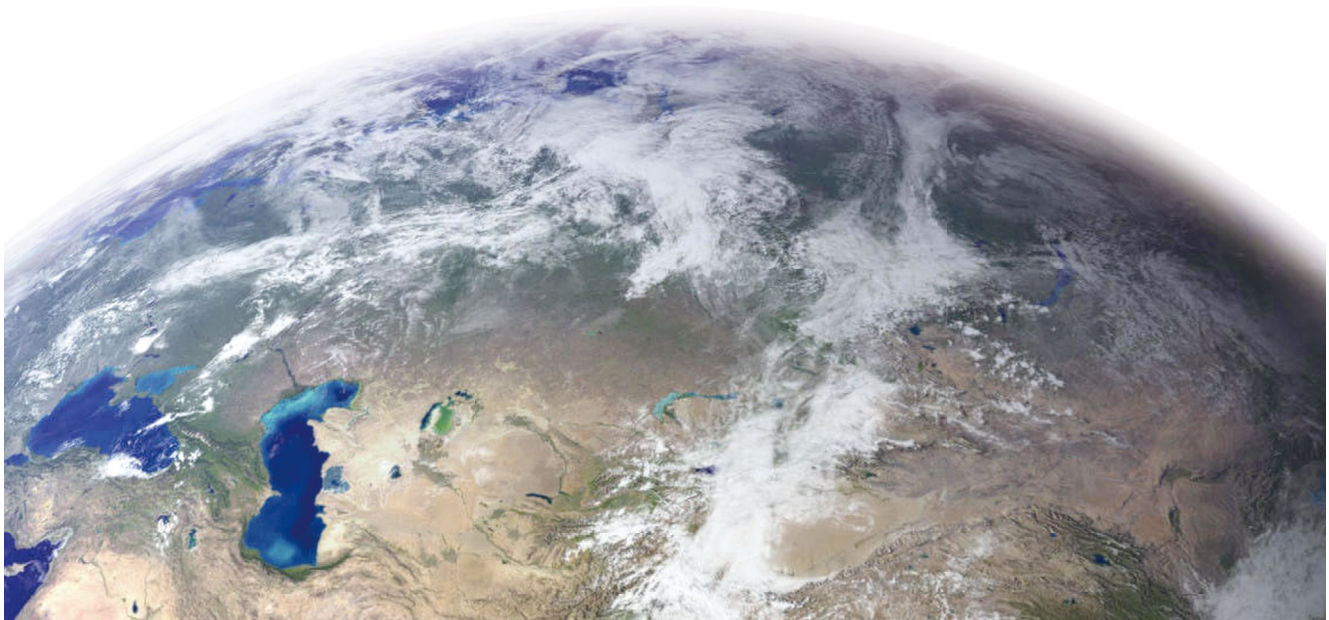
It can provide users with accurate air supply solution.

◆ Green Earth, Our Beautiful Home

Kstar promotes the healthy development of China's green data center industry with smart technology, joins hands with you and shares the green future with you. As a corporate citizen, Kstar is fully aware of the impact of environment on the sustainable development of enterprises and the future life of human beings. Therefore, Kstar is committed to reducing pollution to the environment by various means, and it promises to provide customers with innovative, high-quality and environmentally friendly products and services, conduct business in an environmentally responsible manner and achieve the sustainable development of our company and society.



Kstar precision air conditioner uses green R407c, R410a or R134a refrigerants, and ODP is 0. Kstar strives to build green data center and fulfill its environmental protection responsibility.



Our Solution

UPS Solution Transformer-less Memopower Series

1~40kVA



UPS Solution Transformer-less HPM3300E Series

30~1200kVA



UPS Solution Robust Transformer-based UPS Series

1~800kVA



Precision Cooling Series

5~300kW



Data Center Integrated Solution

IDU/IDM/IDB/IOU Series



Lead-acid Battery Series

3.5~250Ah (12V)
200~3000Ah (2V)



UPS Solution Line Interactive UPS Series

0.4~3kVA



UPS Solution Transformer-less YDC3300 Series

10~200kVA



UPS Solution Transformer-less UL Products Series

1~100kVA



KSTAR



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HEADQUARTERS

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FACTORIES ADDRESS

Add: Kstar Industrial Park, Guangming High-tech Zone, Shenzhen
Add: Kstar Industrial Park, Zhongkai High-tech Zone, Huizhou, Guangdong
Add: Kstar Industrial Park, Fuyuan Industrial Zone, Guanlan, Shenzhen
Add: CATL-KSTAR Science and Technology Co., Ltd.
Add: Jiangxi Changxin Golden Sunshine Power Co., Ltd.
Add: Jiangsu Kstar Energy Technology Co., Ltd.
Add: KSTAR (Vietnam) Co., Ltd.