10C202311

Midea

AirBoost Air Cooled Screw Chiller

T1/ T3/ LA/ FC

Midea Building Technologies Division

Midea Group

Add.: Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China

Postal code: 528311

mbt.midea.com www.midea-group.com tsp.midea.com

Midea reserves the right to change the specifications of the product, and to withdraw or replace products without prior notification or public announcement. Midea is constantly developing and improving its products.

Quality Assurance ISO 9001

Environmental Management ISO 14001

Occupational Health and Safety Management ISO 45001

Screw INVERTER

2024

MAKE A BEAUTIFUL TOMORROW

Midea MBT

Midea MBT(Midea Building Technologies) is a key division of the Midea Group, a leading provider of comprehensive solutions of intelligent building, involving energy sources, elevators, control systems, and heating, ventilation & air conditioning. Midea MBT has continued with the tradition of innovation upon which it was founded and emerged as a global leader in the HVAC and building management industry. A strong drive for advancement has resulted in an extensive R&D department that has placed Midea MBT at the forefront of a competitive -edge. Through these independent projects and joint-cooperation with other global enterprises, Midea has supplied thousands of innovative solutions to customers worldwide.

Several production bases are situated on Shunde, Chongqing, Hefei, and Italy.

MBT Shunde: 38 product lines focusing on VRF, Split Products, Heat Pump Water Heaters and AHU/FCU.

MBT Chongqing: 14 product lines focusing on Water Cooled Centrifugal/Screw/Scroll Chillers, Air Cooled Screw/Scroll Chillers and AHU/FCU.

MBT Hefei: 11 product lines focusing on VRF, Chillers and Heat Pump Water Heaters.

Clivet S.p.A: 50,000m2 workshop in Feltre and Verona, covering products such as ELFO system, hydronic, WHLP, packaged, split and close control and so on.

FORTUNE GLOBAL 500 2023

1999
Entered the MBT field

2001
The R134a (LC) series centrifugal chiller was named as a key national product

2004
Acquired MGRE entered the chiller industry

2006
Launched the first VFD (Variable Frequency Drive) centrifugal chiller

2007
Won the first Midea centrifugal chiller project overseas

2008
Developed the Smart Star new-generation semi-hermetic centrifugal chiller

2015
• Launched the inverter direct-drive centrifugal chiller and magnetic bearing centrifugal chiller
• An international strategic platform has brought Midea Group, Carrier Corporation and Chongqing General Industry Group together in the chiller business

2016
Acquired 80% stake in Clivet

2017
Developed the large capacity air cooled scroll chiller

2019
Launched the Midea self-developed magnetic bearing centrifugal chiller

2020-2021
• Acquired the Chinese national brand Linvol Elevator and entered the elevator industry
• Launched the inverter air cooled screw chiller (free cooling)

2022
Launched the evaporative cooling scroll chiller

MBT Learning Academy

Objective

MBT Learning Academy aims to provide training to the sales personnel as well as technical personnel in order to increase the utilization for your MBT equipment. Once you have purchased equipment from MBT, taking care of the equipment is topmost priority. MBT Learning Academy offers training courses to learn firsthand from the manufacturer what it takes to get the best out of your MBT product. The goal of MBT Learning Academy is to provide product specific training, safe work procedures and expertise in carrying out the installation and maintenance of MBT products as well as teaching the main selling points in order to help the sales people sell the MBT products with ease.

Training Centers

Our world class training centers provide knowledge and skills necessary to efficiently deploy MBT technologies.

The training centers include dedicated laboratories to provide hands-on experiences with various systems, components and controls to refresh and enhance the skills of your sales, design and installation and service teams. Right now we operate our trainings from the below two locations:

1. MBT Training Center

Address: MBT Training Center, 2nd Floor, Building 6, Midea Global Innovation Center, Beijiao , Shunde, Foshan, China Pin-528311

The Midea MBT Training Center is situated 70 kilometers from Baiyun Guangzhou International Airport.

Products: VRF, M thermal

2. Chongqing Midea Training Center

Address: No. 15, Qiangwei Road, Nan'an District, Chongqing, China

Chongqing Midea Training Center is 35 kilometers from Chongqing International Airport.

Products: Centrifugal Chiller, Screw/Scroll Chiller and Terminals

VRF training

M thermal training

Chiller training

Global Technical Trainings

The training courses by MBT Learning Academy are divided into the following two categories with different targeted audiences for each.

Design and Application Trainings: The design and application trainings for various products are basically for the sales personnel selling MBT products in order to give them basic understanding about the main features. The trainings are conducted on a global level inviting sales engineers, technical engineers, consultants and project designers from different parts of the world.

After Sales- Service Trainings: These trainings are dedicated for the After Sales/ Service personnel in order for them to better carry out the installation, commissioning and maintenance of MBT products. Technical person and engineers from different parts of the world are invited to take part in these trainings.

Online Trainings: The trainings to the Global customers can also be done online with the help of Team and Midea Meeting software. This way, the customers do not need to be physically present for the training. Amid the COVID-19 pandemic, MBT Learning Academy has conducted a lot of online trainings. The training videos are available on the TSP system and can be downloaded by using QR codes.

Midea Meeting

Products: VRF, M thermal, Chillers and Terminals

Highly Skilled Trainers: The trainers for various courses by MBT Learning Academy are expert people with vast experiences in their field. Most of them have a deep insight about the global HVAC market and help the attendees to better understand the MBT products.

Training Certificates:

The attendees for Global trainings are provided a training certificate highlighting the courses discussed in the training, signed by Mr. Henry Cheng, General Manager of MBT Overseas Sales Company.

Registration:

You can contact your respective Midea contact point to provide you with the complete schedule about the global technical trainings as well as how to register for these trainings.

For further enquiries about the Global Trainings conducted by MBT Learning Academy, please send email at the following email address: peeyush@midea.com

Chiller After Sales Courses

Chiller Introduction Courses

MBT Learning Academy

Midea Global Spare Parts Center

Midea Global Spare Parts Center

The global spare parts center provides high quality and fast spare parts supply. Midea online system (https://tsp.midea.com) can query and purchase spare parts with one click, further shortening the supply time of spare parts.

The "2 (HQ Spare parts center) +10 (Regional Spare parts center) +N (Country Spare parts inventory)" Spare Parts Layout can ensure the timely supply of global after-sales spare parts.

Technical Support Platform (TSP)

TSP is a platform for customers to provide professional technical support. Through TSP, you can inquire product information, documentation, spare parts and troubleshooting, initiate technical questions and quality complaint process, and also support self-service spare parts order.

Website address: https://tsp.midea.com/

My order

Inquire spare parts from exploded view and place spare parts order directly in TSP.

Document inquiry and download

View or download product technical documentation online, such as catalogs, images, training PPTs, etc.

Technical inquiry & FAQ

Initiate technical questions online, and our technicians answer them online in time. Find a quick solution in the FAQ.

Troubleshooting

Query the error code and solution by SN, model name, error code or product type.

Complain

Initiate the product quality complaint process online, and our after-sales engineers handle related complaints in time.

Mobile Intelligence Service App (MISA)

MISA is the mobile terminal of TSP, with the same functions as TSP. The mobile service makes technical support more timely and convenient.

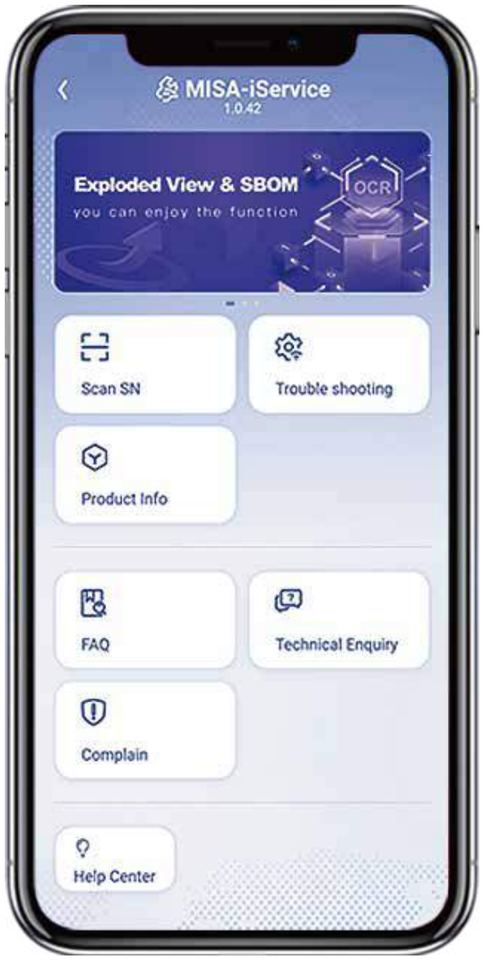
https://link.midea.com

FAQ

Complain

Technical Enquiry

Search product manuals



Trouble shooting

Spare Parts list

Download

Scan above to download the mobile app

Feedback

Thank you very much for your attention and advice

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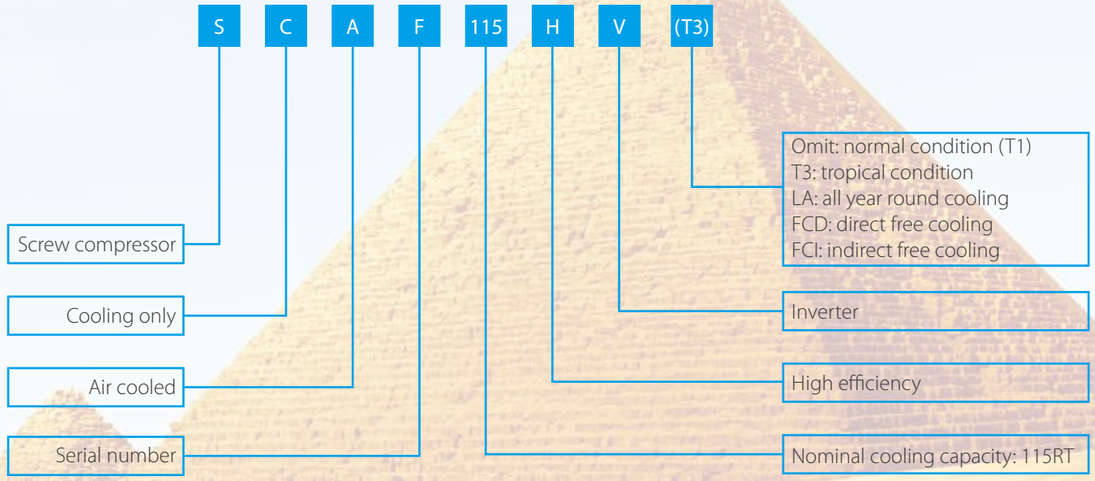
Overview

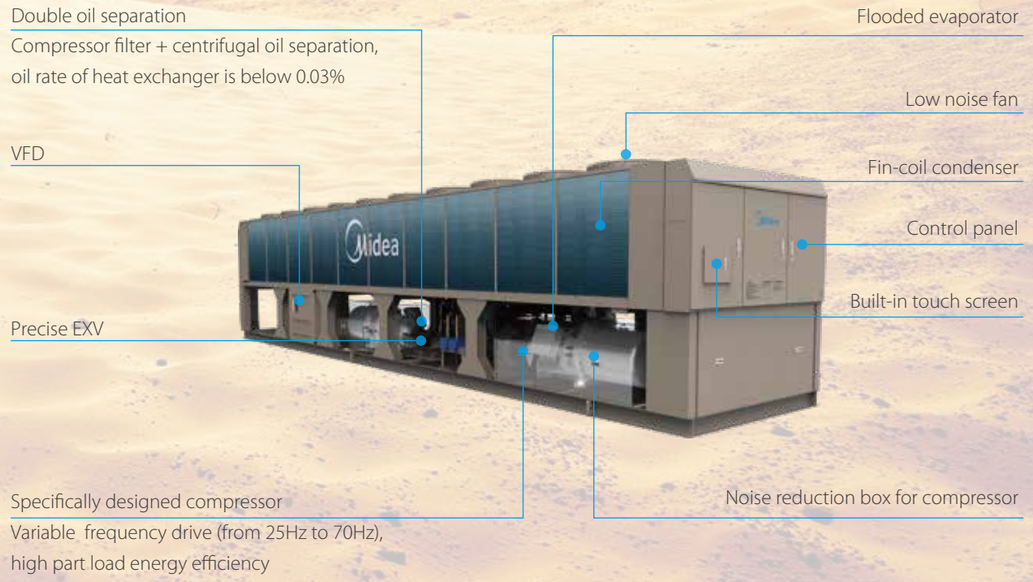
AirBoost air cooled screw chiller is designed to realize peak efficiency under all operating conditions, all year round cooling, free cooling, quick start and low noise operation.

It can be widely used in large and medium-sized commercial, civil or industrial buildings and is ideal for data centers, cold storages, temperature sensitive operations such as pharmaceutical labs, hospitals, and manufacturing facilities require constant cooling for equipment and processes, places where the chillers will probably be installed near noise sensitive places such as guest room and meeting room, etc.

Nomenclature



Unit member



Features

High efficiency screw compressor

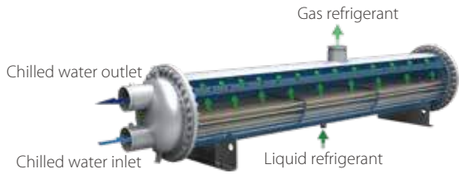
- The screw rotor adopts the optimized compression process profile design, not only ensures excellent volume efficiency, but also reduces the leakage of the compressor. The twin screw rotor adopts five teeth to six teeth asymmetrical design, the machining accuracy is as high as micron level, stable and reliable.
- Refrigerant cooled large capacity inverter motor design, high motor efficiency. The screw rotor is driven by motor directly, less moving parts and wearing parts, high mechanical efficiency.
- The compressor is specifically designed to run with the newest variable frequency technology. Running freely from 25Hz to 70Hz, high part load energy efficiency.

High efficiency air side heat exchanger

- High efficiency and low noise axial flow fan. The fan impeller design is optimized by professional flow field software to ensure that the impeller has good aerodynamic performance, which ensures that the fan operates with low noise and at the same time obtains larger air volume and improves the heat transfer effect of the air side.
- Inverted M-type air-side heat exchanger, the airflow is evenly distributed to achieve high efficiency heat exchange.
- High efficiency inner-threaded pipes and high quality arc-shaped window aluminum fins are closely combined by mechanical expansion pipe to improve heat transfer efficiency, reduce pressure loss and wind noise.
- Professional temperature field simulation, optimized design.

High efficiency flooded evaporator

- The refrigerant distributor can distribute refrigerant evenly, optimize the temperature field and improve the evaporation temperature, so as to improve the operating efficiency.
- Specially designed baffle plate to avoid the compressor suction with liquid, improving the reliability of the unit.
- The water box at both ends can be disassembled to facilitate maintenance.



High precision EXV

- Internationally renowned brands, stable and reliable quality.
- Responsive, no hysteresis, improve unit energy efficiency.
- PID high-precision adjustment to ensure that the whole situation is stable and efficient operation.

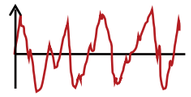
High precision EXV

VS

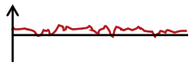
Traditional thermal expansion valve

0.1Hz inverter technology

- International leading inverter regulation technology can achieve 0.1Hz frequency regulation, so as to achieve high-precision water temperature control, trend prediction, self-diagnosis, advance regulation, avoid frequent temperature fluctuations and even shutdown, improve user comfort and reduce energy consumption.



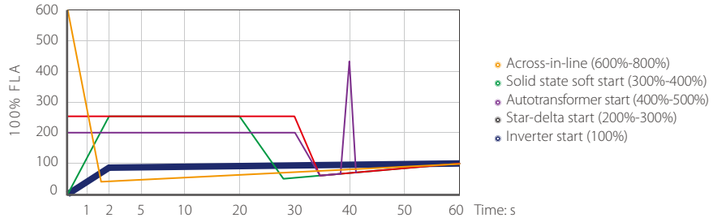
Temperature change under conventional control



Temperature change under prospective control

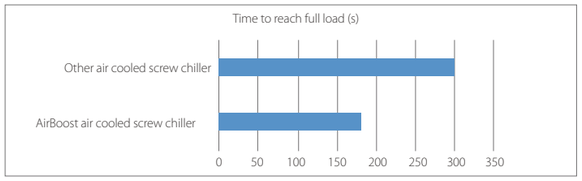
Zero in-rush current

- The unit adopts inverter starting mode, which produces zero in-rush current during the starting process and enables a stable operation from 0A to FLA.



Quick start

- It takes only 180s to return to 100% capacity while other comparable chillers need at least 300s to reach full load. Ideal for temperature sensitive applications such as data centers, manufacturing processes and hospitals where need the unit to restart quickly after a power failure.



Reliable and easy installation

- Modular design, maximum 8 units can be combined.
- Each unit adopts 1 or 2 compressors and each compressor is equipped with an independent refrigeration circuit.
- The compressors of the 2-circuit unit can be used as backup for each other. The running time of each compressor of a 2-circuit unit and each unit in a whole system can both be balanced and the service life of the whole system is extended.
- No need for a dedicated equipment room or purchase cooling tower and other accessories.

Quiet operation

- Optimized system design, eliminate abnormal noise caused by flow.
- 5~10dBA noise reduction (standard with sound insulation box and low noise fan).

The inner wall of the box is made of highly effective silencing materials

Low noise fan

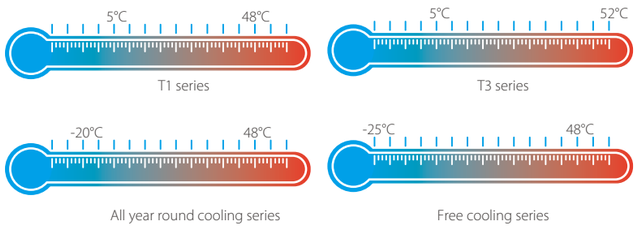
Features

Eco-friendly

R134a refrigerant has zero ozone depletion potential and has no elimination cycle for now.
The refrigerant complies with the Montreal Protocol.

Wide ambient temperature range

The unit can operate stably under extreme conditions, ranging from -25°C to 52°C.



Intelligent control

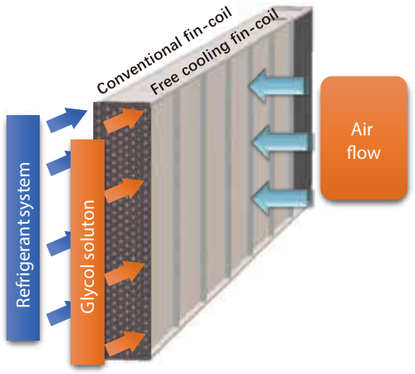
- 7-inch colorful touch screen.
- Real-time operating parameters (temperature, pressure etc.) display.
- Three-level password setting to prevent misoperation.
- Detailed fault information record.
- Power-off memory function.
- Timed ON/OFF.
- Master & Slave, Back-up, Duty cycling.
- Compatible with QuickView, M-Cloud, Midea Chiller Plant Control and M-BMS.

Free cooling solutions

For industrial or civil applications where cooling capacity required is stable in any outdoor condition and it is not effected by outdoor temperature, using solutions that exploit low outdoor temperatures for supplying cooling capacity for free is strongly suggested.

When the outdoor temperature is lower than the temperature of the system's return water, the free cooling system recovers cold from the external environment and reduces the operation of the compressors until they stop completely.

Midea solution is: Built-in free cooling heat exchanger, less space; Free cooling and compressor refrigeration sharing a set of fans, energy saving and easy maintenance.



Two configurations

Direct free cooling

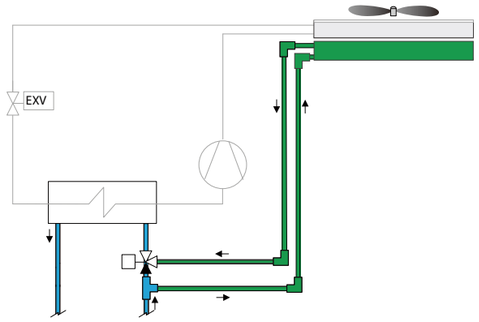
Circulating water in the project system is with glycol.

Free cooling fin + electric three-way valve, achieve free cooling at low ambient temperature.

Direct heat exchange, high heat exchange efficiency.

Overall project circulating water is anti-freeze liquid, strong anti-freezing ability.

Client requires consideration of glycol system design.



Indirect free cooling

Circulating water in the project system is conventional water.

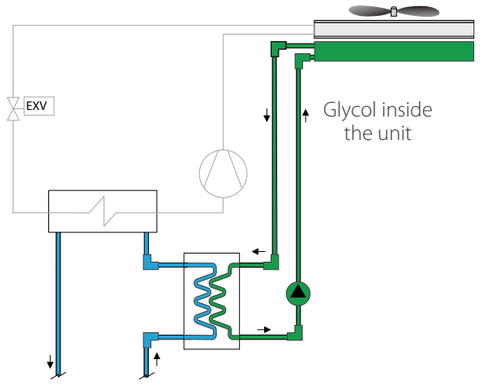
Free cooling fin, plate heat exchanger and glycol circulating pump to form a closed system.

Equipped with plate heat exchanger, transfer free cooling energy to the whole project.

The terminal system and the water pump do not need to consider the performance attenuation and water resistance increase caused by antifreeze liquid.

Two-stage heat exchange can reduce heat exchange requirements of the compressor.

No need for special water system design.



No-Glycol inside the project system

Three operating modes

Summer

Free cooling is off.
Compression cycle is on.

Middle season

Free cooling is on.
Compression cycle is on.

Winter

Free cooling is on.
Compression cycle is off.

Specifications

T1, T3, LA

T1 series		Model	SCAF115HV	SCAF140HV	SCAF175HV	SCAF205HV	SCAF240HV
T3 series		Model	SCAF115HV(T3)	SCAF140HV(T3)	SCAF175HV(T3)	SCAF205HV(T3)	SCAF240HV(T3)
All year round cooling series		Model	SCAF115HV(LA)	SCAF140HV(LA)	SCAF175HV(LA)	SCAF205HV(LA)	SCAF240HV(LA)
Nominal parameter	Cooling capacity	kW (Ton)	397.0 (112.9)	493.0 (140.2)	618.2 (175.8)	723.9 (205.9)	844.6 (240.2)
	Power input	kW	116.5	143.6	181.3	212.3	247.5
	Cooling COP	kW/kW (kW/Ton)	3.41 (1.03)	3.43 (1.02)	3.41 (1.03)	3.41 (1.03)	3.41 (1.03)
	IPLV	kW/kW (kW/Ton)	5.015 (0.7011)	5.072 (0.6958)	5.037 (0.6981)	5.037 (0.6981)	5.009 (0.7019)
Compressor	Type	/	Semi-hermetic twin-rotor screw compressor, inverter				
	Quantity	/	1	1	1	1	1
Energy regulation mode		/	Stepless control (Single compressor 10%-100%, Dual compressor 5%-100%)				
Refrigerant	Type	/	R134a				
	Charge amount	kg (lb)	126 (277.8)	148 (326.3)	168 (370.4)	192 (423.3)	225 (496)
Power supply		/	380V-3Ph-50Hz				
Air side heat exchanger	Type	/	Fin-coil				
	No. of fan	/	6	8	10	12	14
	Moter power input	kW	2.0				
Water side heat exchanger	Type	/	Shell and tube				
	Water flow	m^3/h (US gpm)	68.04 (299.6)	84.49 (372.0)	105.9 (466.4)	124.0 (546.2)	144.7 (637.2)
	Water side pressure drop	kPa (ftH_2O)	42.0 (14.0)	43.5 (14.5)	72.6 (24.3)	68.5 (22.9)	79.6 (26.6)
	Water pipe connection	mm (in)	150 (5.9)	150 (5.9)	150 (5.9)	150 (5.9)	150 (5.9)
	Max. working pressure	MPa	1.0				
Unit dimensions	Length	mm (in)	4440 (174.8)	5240 (206.3)	6245 (245.87)	7250 (285.43)	8255 (325)
	Width	mm (in)	2300 (90.55)	2300 (90.55)	2300 (90.55)	2300 (90.55)	2300 (90.55)
	Height	mm (in)	2460 (96.85)	2460 (96.85)	2460 (96.85)	2460 (96.85)	2460 (96.85)
Unit weight		kg (lb)	4240 (9347.6)	4950 (10912.88)	5500 (12125.42)	6170 (13602.52)	7050 (15542.59)
Operating weight		kg (lb)	4440 (9788.52)	5150 (11353.81)	5720 (12610.44)	6410 (14131.63)	7330 (16159.88)

Note:
1. Performance and efficiency are based on AHRI 551/591.
   Cooling: chilled water inlet/outlet=12℃(53.6℉)/7℃(44.6℉); fouling factor=0.018 m^2·℃/kW(0.000102h-ft^2-℉/Btu), outdoor ambient temperature 35℃(95℉) DB.
2. As a result of the continuous improvement of the product, the above parameters may be changed, please refer to the product nameplate and in-kind.
3. T1, T3 and FC series are AHRI certified.

T1, T3, LA

T1 series		Model	SCAF275HV	SCAF330HV	SCAF385HV	SCAF410HV
T3 series		Model	SCAF275HV(T3)	SCAF330HV(T3)	SCAF385HV(T3)	SCAF410HV(T3)
All year round cooling series		Model	SCAF275HV(LA)	SCAF330HV(LA)	SCAF385HV(LA)	SCAF410HV(LA)
Nominal parameter	Cooling capacity	kW (Ton)	965.1 (274.5)	1161 (330.4)	1368 (389.1)	1448 (412.0)
	Power input	kW	283.7	340.3	401.2	425.0
	Cooling COP	kW/kW (kW/Ton)	3.40 (1.03)	3.41 (1.03)	3.41 (1.03)	3.41 (1.03)
	IPLV	kW/kW (kW/Ton)	5.008 (0.7021)	4.996 (0.7036)	4.988 (0.7049)	5.080 (0.6921)
Compressor	Type	/	Semi-hermetic twin-rotor screw compressor, inverter			
	Quantity	/	1	2	2	2
Energy regulation mode		/	Stepless control (Single compressor 10%-100%, Dual compressor 5%-100%)			
Refrigerant	Type	/	R134a			
	Charge amount	kg (lb)	280 (617.3)	2×168 (2×370.4)	2×200 (2×440.9)	2×200 (2×440.9)
Power supply		/	380V-3Ph-50Hz			
Air side heat exchanger	Type	/	Fin-coil			
	No. of fan	/	16	18	20	20
	Moter power input	kW	2.0			
Water side heat exchanger	Type	/	Shell and tube			
	Water flow	m^3/h (US gpm)	165.4 (728.2)	199.1 (876.5)	234.4 (1032)	248.2 (1092)
	Water side pressure drop	kPa (ftH_2O)	72.3 (24.2)	75.1 (25.1)	73.5 (24.6)	74.8 (25.0)
	Water pipe connection	mm (in)	200 (7.9)	200 (7.9)	200 (7.9)	200 (7.9)
	Max. working pressure	MPa	1.0			
Unit dimensions	Length	mm (in)	9260 (364.57)	10265 (404.13)	11270 (443.7)	11270 (443.7)
	Width	mm (in)	2300 (90.55)	2300 (90.55)	2300 (90.55)	2300 (90.55)
	Height	mm (in)	2460 (96.85)	2460 (96.85)	2460 (96.85)	2460 (96.85)
Unit weight		kg (lb)	7600 (16755.13)	9800 (21605.3)	10980 (24206.76)	10980 (24206.76)
Operating weight		kg (lb)	7940 (17504.7)	10160 (22398.97)	11380 (25088.61)	11380 (25088.61)

Note:
1. Performance and efficiency are based on AHRI 551/591.
   Cooling: chilled water inlet/outlet=12℃(53.6℉)/7℃(44.6℉); fouling factor=0.018 m^2·℃/kW(0.000102h-ft^2-℉/Btu), outdoor ambient temperature 35℃(95℉) DB.
2. As a result of the continuous improvement of the product, the above parameters may be changed, please refer to the product nameplate and in-kind.
3. T1, T3 and FC series are AHRI certified.

Specifications

FCD

Direct free cooling series		Model	SCAF110HV(FCD)	SCAF130HV(FCD)	SCAF165HV(FCD)	SCAF195HV(FCD)
Nominal parameter	Cooling capacity	kW (Ton)	378.9 (107.8)	448.3 (127.5)	571.1 (162.4)	671.6 (191.0)
	Power input	kW	124.4	144.2	186.6	220.6
	Cooling COP	kW/kW (kW/Ton)	3.05 (1.15)	3.11 (1.13)	3.06 (1.15)	3.04 (1.16)
	IPLV	kW/kW (kW/Ton)	4.725 (0.7441)	4.699 (0.7482)	4.699 (0.7483)	4.703 (0.7477)
Free cooling only parameter	Cooling capacity	kW (Ton)	378.9 (107.8)	448.3 (127.5)	571.1 (162.4)	671.6 (191.0)
	Power input	kW	20.00	20.00	25.00	30.00
	COP	kW/kW	18.94 (0.19)	22.42 (0.16)	22.84 (0.15)	22.39 (0.16)
Ambient temperature of free cooling only		℃	1.5	0.0	-0.2	0.0
Ambient temperature of free cooling on		℃	12.1	12.0	12.0	12.0
Compressor	Type	/	Semi-hermetic twin-rotor screw compressor, inverter			
	Quantity	/	1	1	1	1
Energy regulation mode		/	Stepless control (Single compressor 10%-100%, Dual compressor 5%-100%)			
Refrigerant	Type	/	R134a			
	Charge amount	kg (lb)	126 (277.8)	148 (326.3)	168 (370.4)	192 (423.3)
Power supply		/	380V-3Ph-50Hz			
Air side heat exchanger	Type	/	Fin-coil			
	No. of fan	/	8	8	10	12
	Motor power input	kW	2.5			
Water side heat exchanger	Type	/	Shell and tube			
	Water flow	m³/h (US gpm)	70.48 (310.3)	83.39 (367.2)	106.2 (467.8)	124.9 (550.1)
	Water side pressure drop	kPa (ftH_2O)	50.0 (16.7)	47.4 (15.9)	81.6 (27.3)	77.6 (26.0)
	Pressure drop (free cooling is on)	kPa (ftH_2O)	87.18 (29.17)	95.61 (31.99)	165.3 (55.30)	105.7 (35.36)
	Water pipe connection	mm (in)	150 (5.9)	150 (5.9)	150 (5.9)	150 (5.9)
	Max. working pressure	MPa	1.0			
Unit dimensions	Length	mm (in)	5740 (225.98)	5540 (218.11)	6545 (257.68)	7650 (301.18)
	Width	mm (in)	2300 (90.55)	2300 (90.55)	2300 (90.55)	2300 (90.55)
	Height	mm (in)	2460 (96.85)	2460 (96.85)	2460 (96.85)	2460 (96.85)
Unit weight		kg (lb)	5400 (11904.96)	6030 (13293.87)	6580 (14506.42)	7350 (16203.98)
Operating weight		kg (lb)	5900 (13007.27)	6570 (14484.37)	7180 (15829.19)	8050 (17747.21)

Note:
1. Performance and efficiency are based on AHRI 551/591.
   Cooling: chilled water inlet/outlet=12°C(53.6°F)/7°C(44.6°F); fouling factor=0.018 m².°C/kW(0.000102h-ft²-°F/Btu), outdoor ambient temperature 35°C(95°F) DB. Ethylene glycol: 25%.
2. As a result of the continuous improvement of the product, the above parameters may be changed, please refer to the product nameplate and in-kind.
3. T1, T3 and FC series are AHRI certified.

FCD

Direct free cooling series		Model	SCAF225HV(FCD)	SCAF260HV(FCD)	SCAF310HV(FCD)	SCAF370HV(FCD)
Nominal parameter	Cooling capacity	kW (Ton)	779.5 (221.7)	895.5 (254.7)	1068 (304.0)	1282 (364.9)
	Power input	kW	255.1	293.5	347.9	420.9
	Cooling COP	kW/kW (kW/Ton)	3.06 (1.15)	3.05 (1.15)	3.072 (1.14)	3.05 (1.15)
	IPLV	kW/kW (kW/Ton)	4.698 (0.7483)	4.697 (0.7486)	4.816 (0.7300)	4.819 (0.7296)
Free cooling only parameter	Cooling capacity	kW (Ton)	779.5 (221.7)	895.5 (254.7)	1068 (304.0)	1282 (364.9)
	Power input	kW	35.00	40.00	45.00	50.00
	COP	kW/kW	22.27 (0.16)	22.39 (0.16)	23.75 (0.15)	25.66 (0.14)
Ambient temperature of free cooling only		℃	0.1	0.1	-0.4	-1.2
Ambient temperature of free cooling on		℃	12.0	12.0	12.0	11.9
Compressor	Type	/	Semi-hermetic twin-rotor screw compressor, inverter			
	Quantity	/	1	1	2	2
Energy regulation mode		/	Stepless control (Single compressor 10%-100%, Dual compressor 5%-100%)			
Refrigerant	Type	/	R134a			
	Charge amount	kg (lb)	225 (496.0)	280 (617.3)	2×168 (2×370.4)	2×200 (2×440.9)
Power supply		/	380V-3Ph-50Hz			
Air side heat exchanger	Type	/	Fin-coil			
	No. of fan	/	14	16	18	20
	Motor power input	kW	2.5			
Water side heat exchanger	Type	/	Shell and tube			
	Water flow	m³/h (US gpm)	145.0 (638.4)	166.6 (733.4)	198.8 (875.4)	238.6 (1050)
	Water side pressure drop	kPa (ftH_2O)	89.6 (30.0)	81.9 (27.4)	83.8 (28.0)	78.2 (26.2)
	Pressure drop (free cooling is on)	kPa (ftH_2O)	128.9 (43.13)	133.7 (44.73)	151.1 (50.55)	163.6 (54.73)
	Water pipe connection	mm (in)	150 (5.9)	200 (7.9)	200 (7.9)	200 (7.9)
	Max. working pressure	MPa	1.0			
Unit dimensions	Length	mm (in)	8655 (340.75)	9660 (380.31)	10665 (419.88)	11670 (459.45)
	Width	mm (in)	2300 (90.55)	2300 (90.55)	2300 (90.55)	2300 (90.55)
	Height	mm (in)	2460 (96.85)	2460 (96.85)	2460 (96.85)	2460 (96.85)
Unit weight		kg (lb)	8500 (18739.29)	8930 (19687.28)	11380 (25088.61)	12350 (27227.09)
Operating weight		kg (lb)	9300 (20502.99)	9830 (21671.44)	12380 (27293.23)	13350 (29431.71)

Note:
1. Performance and efficiency are based on AHRI 551/591.
   Cooling: chilled water inlet/outlet=12°C(53.6°F)/7°C(44.6°F); fouling factor=0.018 m².°C/kW(0.000102h-ft²-°F/Btu), outdoor ambient temperature 35°C(95°F) DB. Ethylene glycol: 25%.
2. As a result of the continuous improvement of the product, the above parameters may be changed, please refer to the product nameplate and in-kind.
3. T1, T3 and FC series are AHRI certified.

FCI

Indirect free cooling series		Model	SCAF110HV(FCI)	SCAF130HV(FCI)	SCAF165HV(FCI)	SCAF195HV(FCI)
Nominal parameter	Cooling capacity	kW (Ton)	386.8 (110.0)	457.7 (130.2)	583.1 (165.8)	685.7 (195.0)
	Power input	kW	125.4	145.4	188.2	222.5
	Cooling COP	kW/kW (kW/Ton)	3.08 (1.14)	3.15 (1.12)	3.10 (1.14)	3.08 (1.14)
	IPLV	kW/kW (kW/Ton)	4.725 (0.7441)	4.699 (0.7482)	4.699 (0.7441)	4.703 (0.7477)
Free cooling only parameter	Cooling capacity	kW (Ton)	386.8 (110.0)	457.7 (130.2)	583.1 (165.8)	685.7 (195.0)
	Power input	kW	25.10	25.70	31.60	37.60
	COP	kW/kW (kW/Ton)	15.41 (0.23)	17.81 (0.20)	18.45 (0.19)	18.24 (0.19)
Ambient temperature of free cooling only		℃	-1.2	-2.7	-2.9	-2.6
Ambient temperature of free cooling on		℃	9.6	9.5	9.5	9.5
Compressor	Type	/	Semi-hermetic twin-rotor screw compressor, inverter			
	Quantity	/	1	1	1	1
Energy regulation mode		/	Stepless control (Single compressor 10%-100%, Dual compressor 5%-100%)			
Refrigerant	Type	/	R134a			
	Charge amount	kg (lb)	126 (277.8)	148 (326.3)	168 (370.4)	192 (423.3)
Power supply		/	380V-3Ph-50Hz			
Air side heat exchanger	Type	/	Fin-coil			
	No. of fan	/	8	8	10	12
	Motor power input	kW	2.5			
Water side heat exchanger	Type	/	Shell and tube			
	Water flow	m³/h (US gpm)	66.28 (291.8)	78.43 (345.3)	99.91 (439.9)	117.5 (517.3)
	Water side pressure drop	kPa (ftH_2O)	107 (35.9)	97.9 (32.8)	130 (43.8)	128 (43.1)
	Water pipe connection	mm (in)	150 (5.9)	150 (5.9)	150 (5.9)	150 (5.9)
	Max. working pressure	MPa	1.0			
Unit dimensions	Length	mm (in)	6745 (265.55)	6545 (257.68)	6545 (257.68)	7650 (301.18)
	Width	mm (in)	2300 (90.55)	2300 (90.55)	2300 (90.55)	2300 (90.55)
	Height	mm (in)	2460 (96.85)	2460 (96.85)	2460 (96.85)	2460 (96.85)
Unit weight		kg (lb)	6420 (14153.68)	7130 (15718.96)	8320 (18342.46)	9200 (20282.53)
Operating weight		kg (lb)	6920 (15255.99)	7670 (16909.46)	8920 (19665.23)	9900 (21825.76)

Note:
1. Performance and efficiency are based on AHRI 551/591.
   Cooling: chilled water inlet/outlet=12℃(53.6°F)/7℃(44.6°F); fouling factor=0.018 m²·℃/kW(0.000102h-ft²-°F/Btu), outdoor ambient temperature 35℃(95°F) DB.
2. As a result of the continuous improvement of the product, the above parameters may be changed, please refer to the product nameplate and in-kind.
3. T1, T3 and FC series are AHRI certified.

FCI

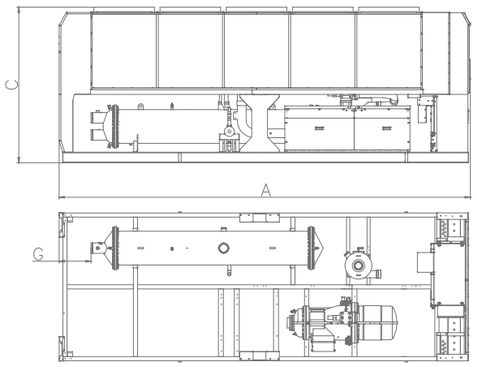
Indirect free cooling series		Model	SCAF225HV(FCI)	SCAF260HV(FCI)	SCAF310HV(FCI)	SCAF370HV(FCI)
Nominal parameter	Cooling capacity	kW (Ton)	795.8 (226.4)	914.3 (260.0)	1091 (310.4)	1309 (372.5)
	Power input	kW	257.2	296.0	350.9	424.5
	Cooling COP	kW/kW (kW/Ton)	3.09 (1.14)	3.09 (1.14)	3.11 (1.13)	3.09 (1.14)
	IPLV	kW/kW (kW/Ton)	4.698 (0.7483)	4.697 (0.7486)	4.816 (0.7300)	4.819 (0.7296)
Free cooling only parameter	Cooling capacity	kW (Ton)	795.8 (226.4)	914.3 (260.0)	1091 (310.4)	1309 (372.5)
	Power input	kW	44.00	51.60	62.00	72.00
	COP	kW/kW (kW/Ton)	18.09 (0.19)	17.72 (0.20)	17.60 (0.20)	18.19 (0.19)
Ambient temperature of free cooling only		℃	-2.5	-2.5	-3.1	-4.0
Ambient temperature of free cooling on		℃	9.5	9.5	9.4	9.4
Compressor	Type	/	Semi-hermetic twin-rotor screw compressor, inverter			
	Quantity	/	1	1	2	2
Energy regulation mode		/	Stepless control (Single compressor 10%-100%, Dual compressor 5%-100%)			
Refrigerant	Type	/	R134a			
	Charge amount	kg (lb)	225 (496.0)	280 (617.3)	2×168 (2×370.4)	2×200 (2×440.9)
Power supply		/	380V-3Ph-50Hz			
Air side heat exchanger	Type	/	Fin-coil			
	No. of fan	/	14	16	18	20
	Motor power input	kW	2.5			
Water side heat exchanger	Type	/	Shell and tube			
	Water flow	m³/h (US gpm)	136.4 (600.4)	156.7 (689.8)	187.0 (823.3)	224.4 (988.2)
	Water side pressure drop	kPa (ftH_2O)	137 (45.9)	131 (44.0)	128 (43.1)	128 (42.9)
	Water pipe connection	mm (in)	150 (5.9)	200 (7.9)	200 (7.9)	200 (7.9)
	Max. working pressure	MPa	1.0			
Unit dimensions	Length	mm (in)	8655 (340.75)	9660 (380.31)	11670 (459.45)	11670 (459.45)
	Width	mm (in)	2300 (90.55)	2300 (90.55)	2300 (90.55)	2300 (90.55)
	Height	mm (in)	2460 (96.85)	2460 (96.85)	2460 (96.85)	2460 (96.85)
Unit weight		kg (lb)	10230 (22553.29)	10920 (24074.48)	14350 (31636.33)	15440 (34039.37)
Operating weight		kg (lb)	11030 (24316.99)	11820 (26058.64)	15350 (33840.96)	16440 (36244)

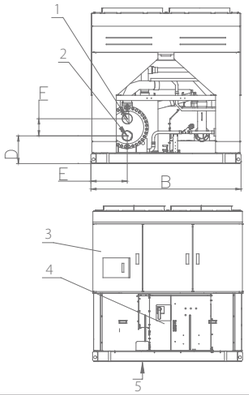
Note:
1. Performance and efficiency are based on AHRI 551/591.
   Cooling: chilled water inlet/outlet=12℃(53.6°F)/7℃(44.6°F); fouling factor=0.018 m²·℃/kW(0.000102h-ft²-°F/Btu), outdoor ambient temperature 35℃(95°F) DB.
2. As a result of the continuous improvement of the product, the above parameters may be changed, please refer to the product nameplate and in-kind.
3. T1, T3 and FC series are AHRI certified.

Dimensions and base diagrams

Dimensions (T1, T3, LA)

The drawings below contain all the models can be selected from the selection software.
As a result of the continuous improvement of the product, the following drawings may be changed, please refer to the product in-kind.

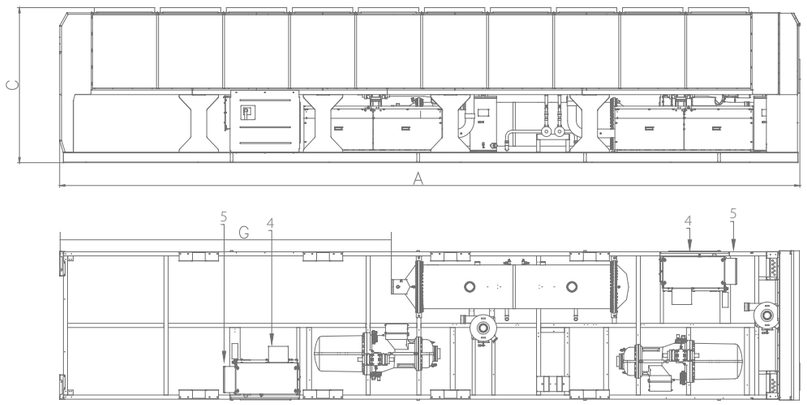


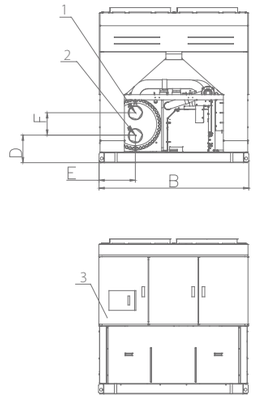


① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (unit: mm)

Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F	G
80,85,95,100,105,110,115,120	4440	2300	2460	420	550	260	60
125,130,135,140,145	5240	2300	2460	420	550	260	65
150,160,165,170,175	6245	2300	2460	420	550	260	405
185,190,195,200,205	7250	2300	2460	420	550	260	1300
215,220,225,230,235,240,245,250,255	8255	2300	2460	420	550	260	2305
265,270,275	9260	2300	2460	420	550	300	3310





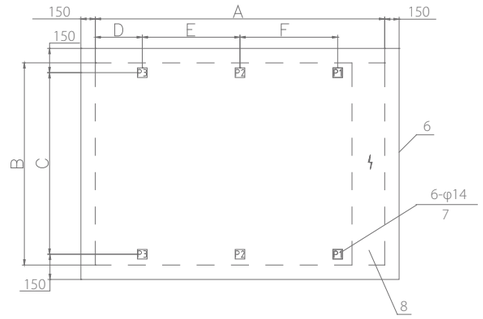
① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (unit: mm)

Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F	G
285,295	9260	2300	2460	410	550	350	2960
310,320,330,340	10265	2300	2460	410	550	350	3965
350,360,370,375,385,395,405,410	11270	2300	2460	410	550	350	4970
420,430,440,450, 470,490	11865	2300	2460	410	550	350	5640

Base diagrams (T1, T3, LA)

⑥ Installation foundation
⑦ Spring isolator installation hole
⑧ Electric control box



Dimensions (unit: mm)

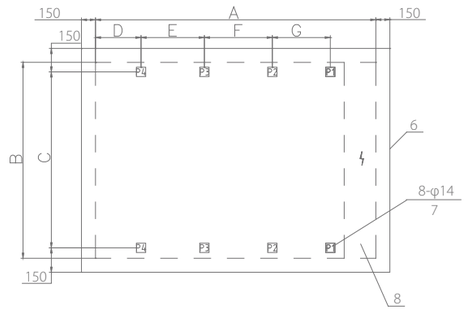
Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F
80,85,95,100,105,110,115,120	4440	2300	2180	600	1670	1200
125, 130, 135, 140, 145	5240	2300	2180	800	2000	1700

Spring isolator at all points

Model, SCAF***HV, HV(T3), HV(LA)	P1	P2	P3
80,85,95,100,105,110,115,120	MHD-850	MHD-850	MHD-850
125, 130, 135, 140, 145	MHD-1050	MHD-1050	MHD-1050

Note：
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Installation foundation
⑦ Spring isolator installation hole
⑧ Electric control box



Dimensions (unit: mm)

Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F	G
150,160,165,170,175	6245	2300	2180	1080	2000	1200	1200

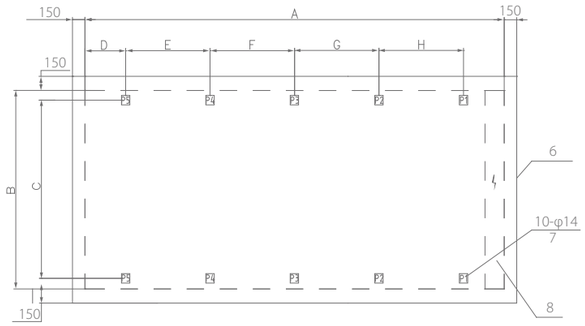
Spring isolator at all points

Model, SCAF***HV, HV(T3), HV(LA)	P1	P2	P3	P4
150,160,165,170,175	MHD-850	MHD-850	MHD-850	MHD-850

Note：
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

Dimensions and base diagrams

⑥ Installation foundation
⑦ Spring isolator installation hole
⑧ Electric control box



Dimensions (unit: mm)

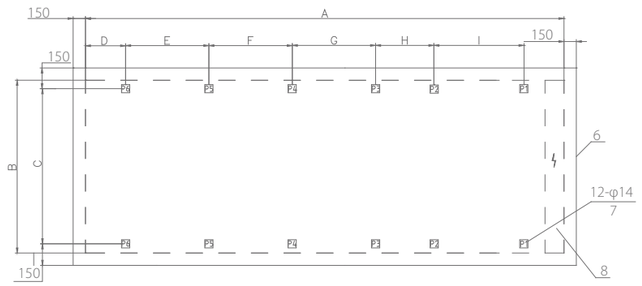
Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F	G	H
185,190,195,200,205	7250	2300	2180	635	1800	1800	1050	1200

Spring isolator at all points

Model, SCAF***HV, HV(T3), HV(LA)	P1	P2	P3	P4	P5
185,190,195,200,205	MHD-850	MHD-850	MHD-850	MHD-850	MHD-850

Note：
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Installation foundation
⑦ Spring isolator installation hole
⑧ Electric control box



Dimensions (unit: mm)

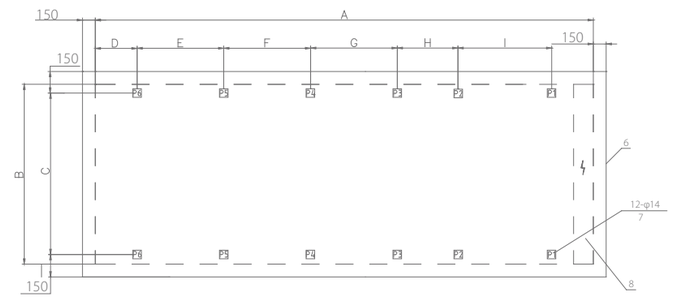
Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F	G	H	I
215,220,225,230,235,240,245,250,255	8255	2300	2180	440	1200	1800	1800	1050	1200

Spring isolator at all points

Model, SCAF***HV, HV(T3), HV(LA)	P1	P2	P3	P4	P5	P6
215,220,225,230,235,240,245,250,255	MHD-850	MHD-850	MHD-850	MHD-850	MHD-850	MHD-850

Note：
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Installation foundation
⑦ Spring isolator installation hole
⑧ Electric control box



Dimensions (unit: mm)

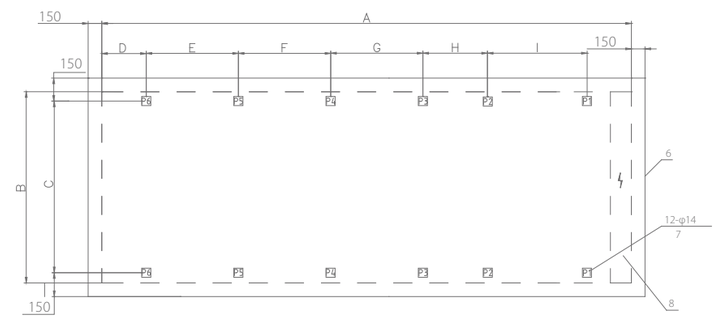
Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F	G	H	I
265,270,275,285,295	9260	2300	2180	845	1800	1800	1800	1050	1200

Spring isolator at all points

Model, SCAF***HV, HV(T3), HV(LA)	P1	P2	P3	P4	P5	P6
265,270,275,285,295	MHD-850	MHD-850	MHD-850	MHD-850	MHD-850	MHD-850

Note：
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Installation foundation
⑦ Spring isolator installation hole
⑧ Electric control box



Dimensions (unit: mm)

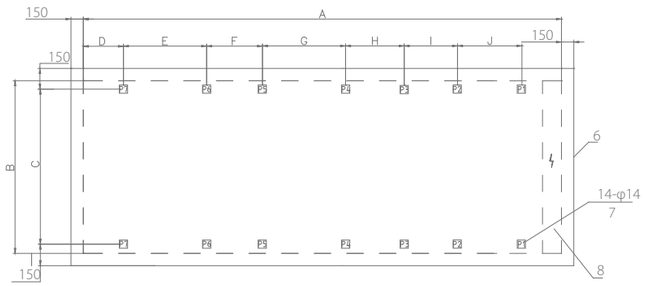
Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F	G	H	I
310,320,330,340	10265	2300	2180	1100	2000	2000	2000	1200	1200

Spring isolator at all pionts

Model, SCAF***HV, HV(T3), HV(LA)	P1	P2	P3	P4	P5	P6
310,320,330,340	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note：
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

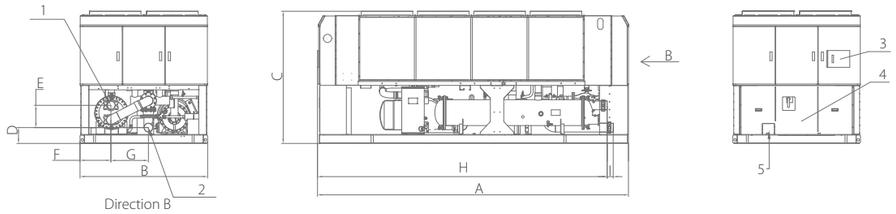
⑥ Installation foundation
⑦ Spring isolator installation hole
⑧ Electric control box



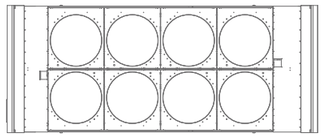
Dimensions (unit: mm)										
Model, SCAF***HV, HV(T3), HV(LA)	A	B	C	D	E	F	G	H	I	J
350,360,370,375,385,395,405,410	11270	2300	2180	405	1700	2000	2000	2000	1200	1200
420,430,440,450,470,490	11865	2300	2180	990	1700	2000	2000	2000	1200	1200

Spring isolator at all points							
Model, SCAF***HV, HV(T3), HV(LA)	P1	P2	P3	P4	P5	P6	P7
350,360,370,375,385,395,405,410	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050
420,430,440,450,470,490	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

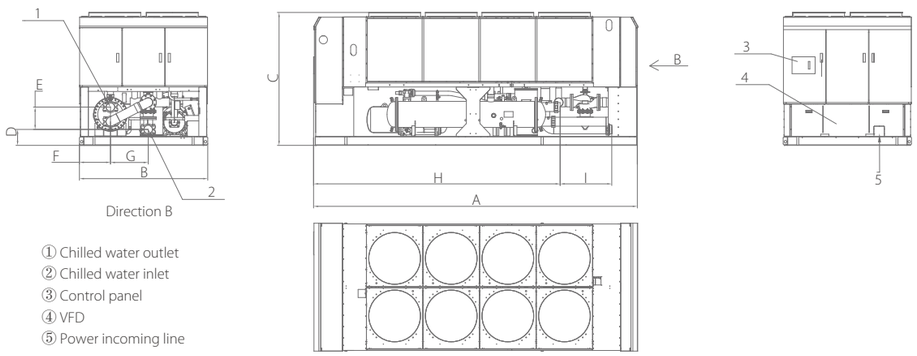


① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line



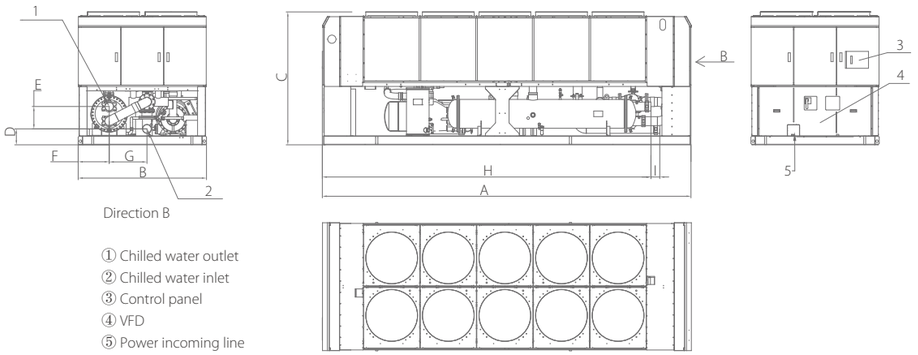
Dimensions (Unit: mm)									
Model	A	B	C	D	E	F	G	H	I
SCAF130HV(FCD)	5540	2300	2460	283	397	550	670	5170	108

Dimensions (FCD)



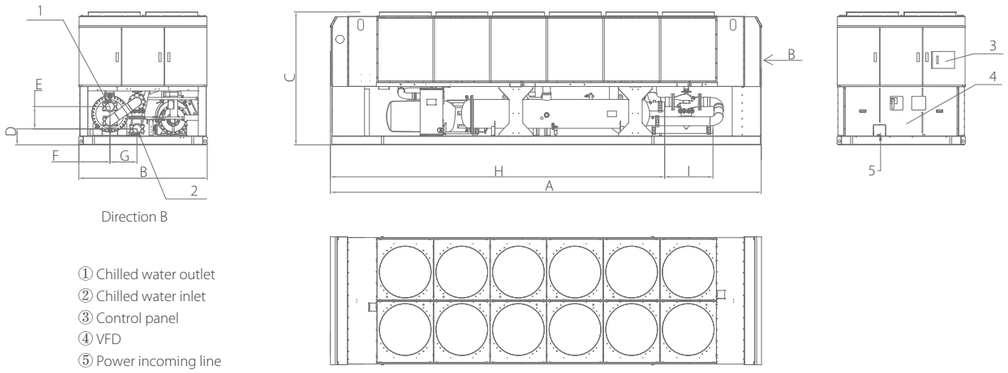
① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)									
Model	A	B	C	D	E	F	G	H	I
SCAF110HV(FCD)	5740	2300	2460	293	397	550	670	4378	917



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

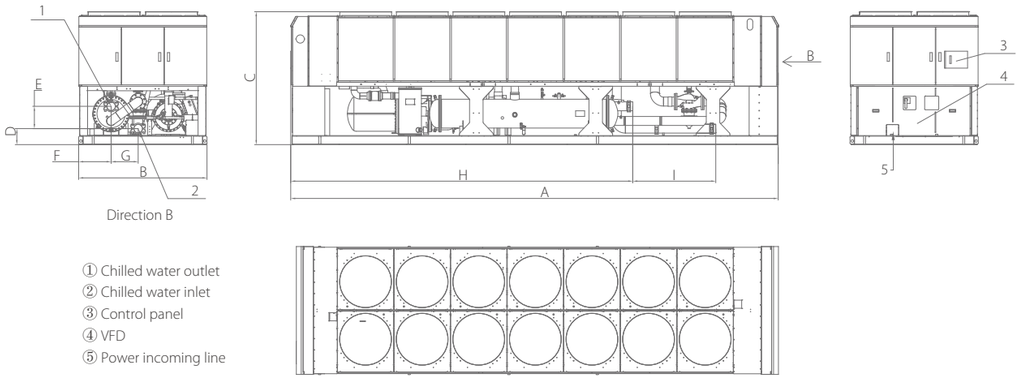
Dimensions (Unit: mm)									
Model	A	B	C	D	E	F	G	H	I
SCAF165HV(FCD)	6545	2300	2460	283	397	550	670	5835	157



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

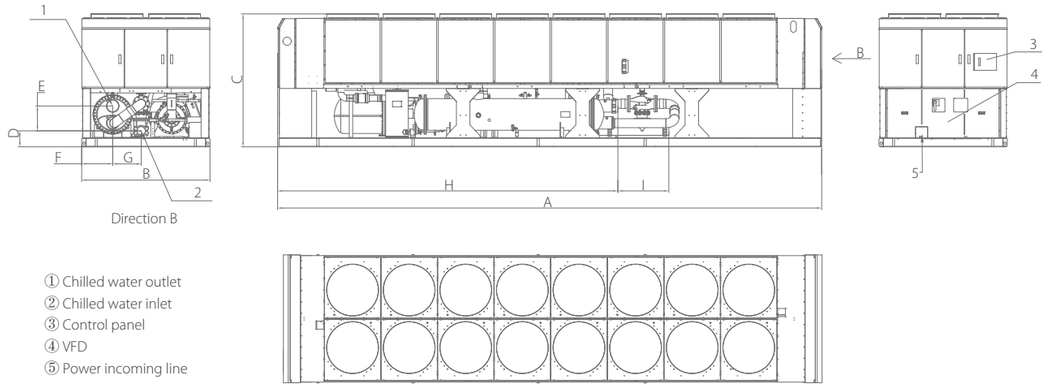
Model	A	B	C	D	E	F	G	H	I
SCAF195HV(FCD)	7650	2300	2460	283	397	550	480	5935	857



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

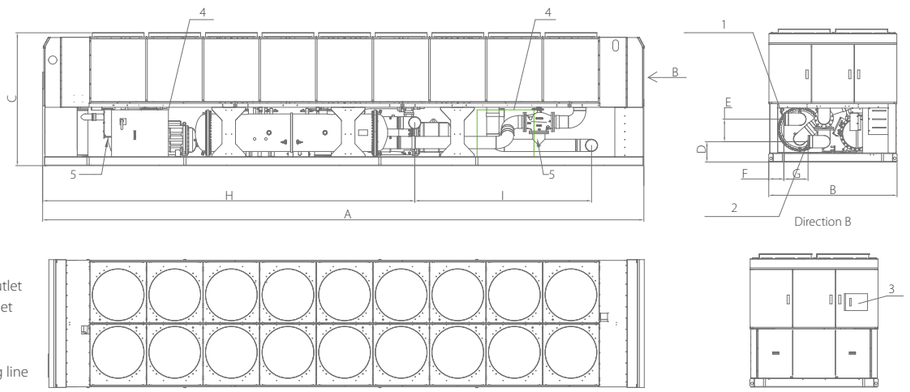
Model	A	B	C	D	E	F	G	H	I
SCAF225HV(FCD)	8655	2300	2460	283	397	576	480	5973	1474



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

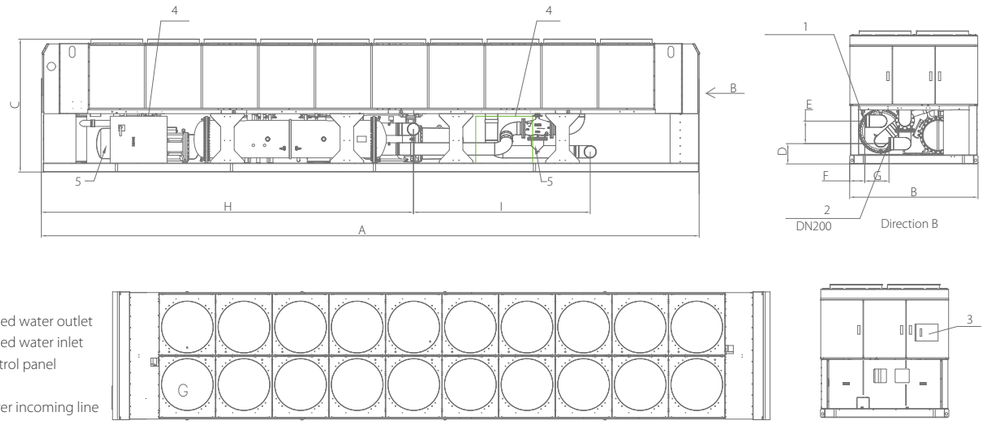
Model	A	B	C	D	E	F	G	H	I
SCAF260HV(FCD)	9660	2300	2460	283	442	550	505	5942	905



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

Model	A	B	C	D	E	F	G	H	I
SCAF310HV(FCD)	10665	2300	2460	360	400	268	429	6508	3138

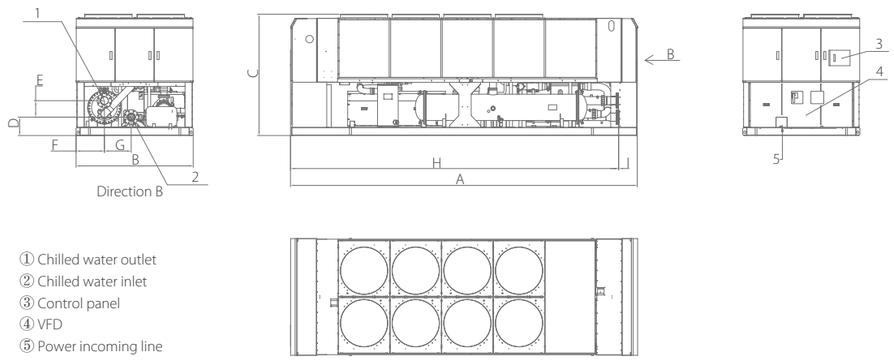


① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

Model	A	B	C	D	E	F	G	H	I
SCAF370HV(FCD)	11670	2300	2460	360	400	268	429	6608	3138

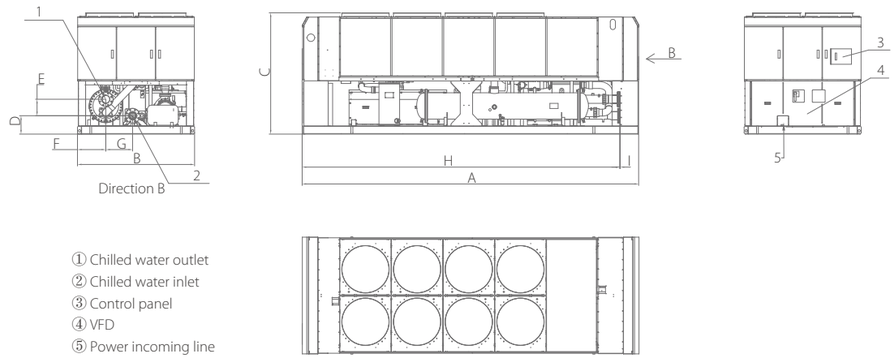
Dimensions (FCI)



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

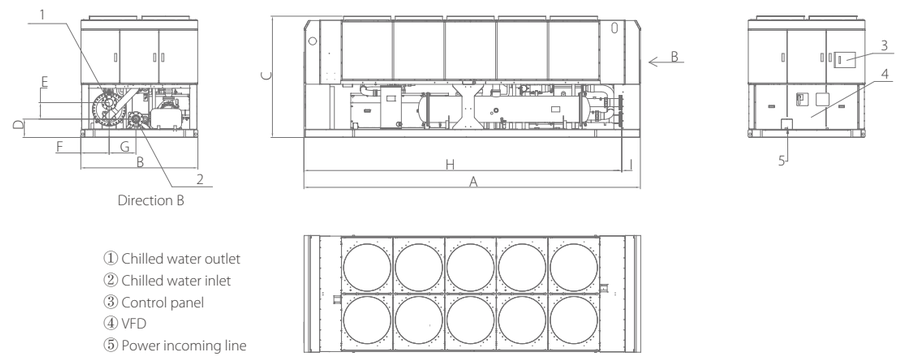
Model	A	B	C	D	E	F	G	H	I
SCAF110HV(FCI)	6745	2300	2460	357	320	550	522	6380	5



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

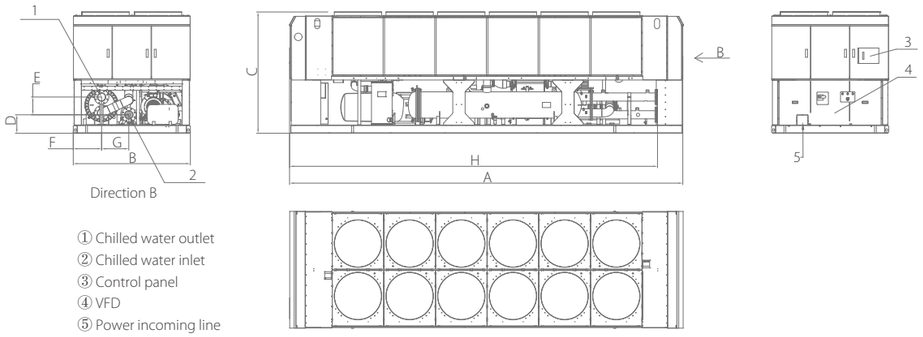
Model	A	B	C	D	E	F	G	H	I
SCAF130HV(FCI)	6545	2300	2460	357	320	550	522	6180	5



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

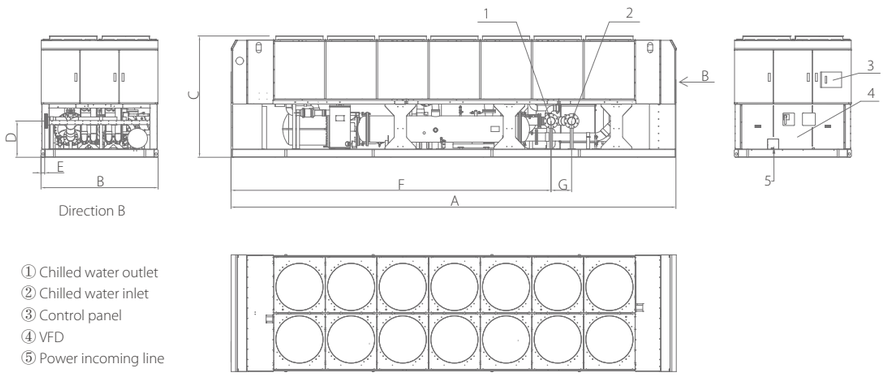
Model	A	B	C	D	E	F	G	H	I
SCAF165HV(FCI)	6545	2300	2460	357	320	550	522	6180	5



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

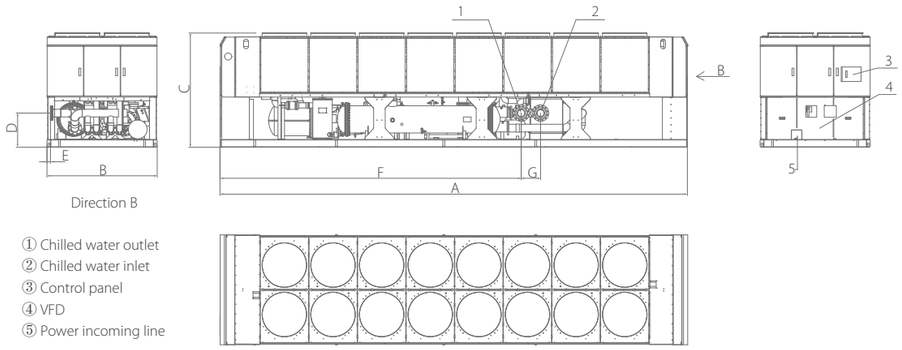
Model	A	B	C	D	E	F	G	H
SCAF195HV(FCI)	7650	2300	2460	360	345	550	530	7158



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

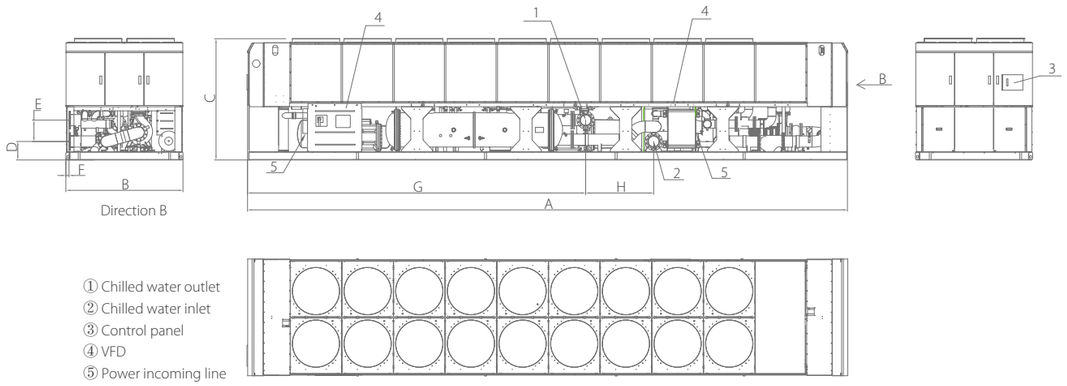
Model	A	B	C	D	E	F	G
SCAF225HV(FCI)	8655	2300	2460	705	72	6225	400



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

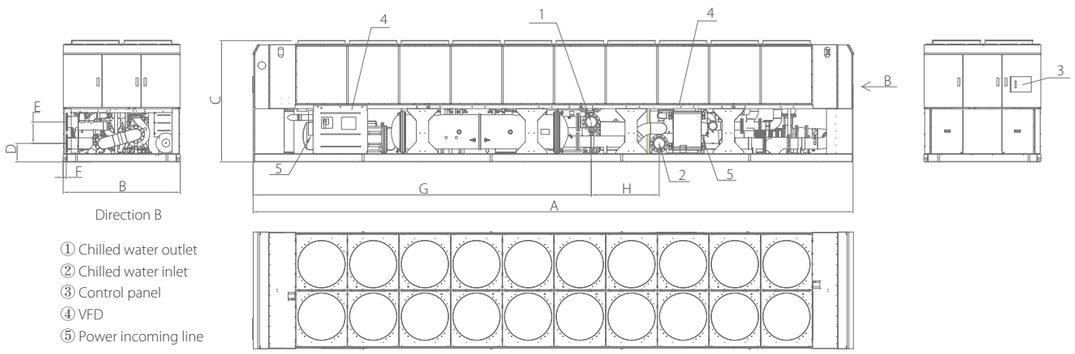
Model	A	B	C	D	E	F	G
SCAF260HV(FCI)	9660	2300	2460	705	72	6225	400



① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

Model	A	B	C	D	E	F	G	H
SCAF310HV(FCI)	11670	2300	2460	360	415	60	6578	1323



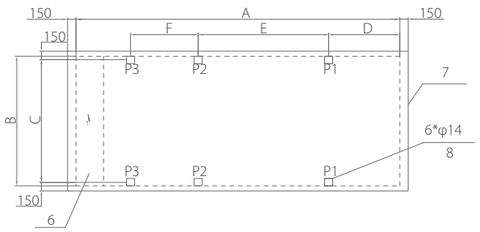
① Chilled water outlet
② Chilled water inlet
③ Control panel
④ VFD
⑤ Power incoming line

Dimensions (Unit: mm)

Model	A	B	C	D	E	F	G	H
SCAF370HV(FCI)	11670	2300	2460	360	415	60	6578	1323

Base diagrams (FCD)

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole

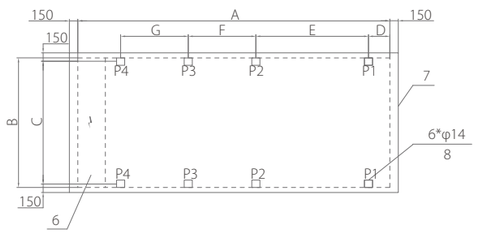


Dimensions (Unit: mm)						
Model	A	B	C	D	E	F
SCAF110HV(FCD)	5740	2300	2180	1263	2317	1200

Spring isolator at all points			
Model	P1	P2	P3
SCAF110HV(FCD)	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole

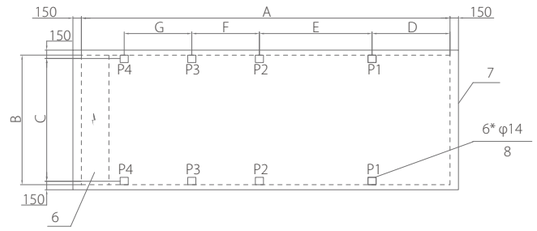


Dimensions (Unit: mm)							
Model	A	B	C	D	E	F	G
SCAF130HV(FCD)	5540	2300	2180	380	2000	1200	1200

Spring isolator at all points				
Model	P1	P2	P3	P4
SCAF130HV(FCD)	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole

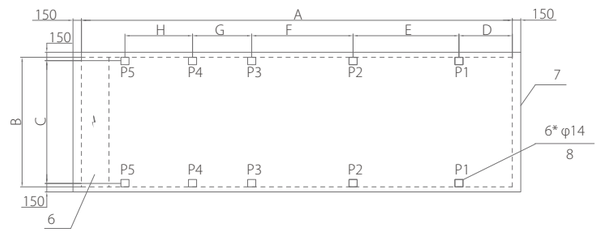


Dimensions (Unit: mm)							
Model	A	B	C	D	E	F	G
SCAF165HV(FCD)	6545	2300	2180	1385	2000	1200	1200

Spring isolator at all points				
Model	P1	P2	P3	P4
SCAF175HV(FCD)	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole

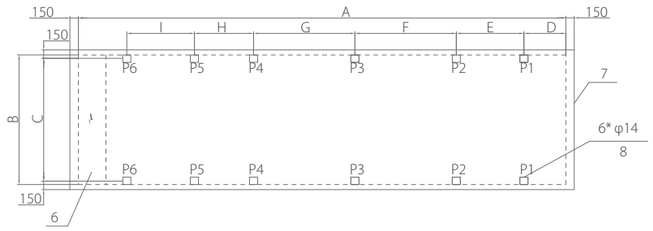


Dimensions (Unit: mm)								
Model	A	B	C	D	E	F	G	H
SCAF195HV(FCD)	7650	2300	2180	948	1880	1800	1050	1200

Spring isolator at all points					
Model	P1	P2	P3	P4	P5
SCAF195HV(FCD)	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole

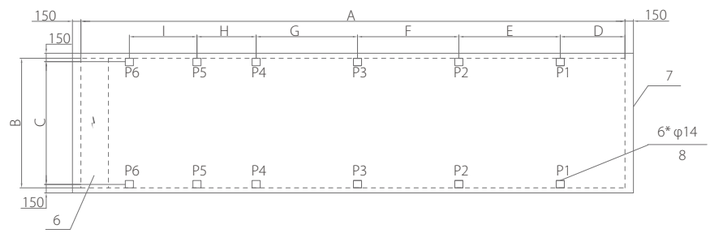


Dimensions (Unit: mm)									
Model	A	B	C	D	E	F	G	H	I
SCAF225HV(FCD)	8655	2300	2180	745	1200	1800	1800	1050	1200

Spring isolator at all points						
Model	P1	P2	P3	P4	P5	P6
SCAF225HV(FCD)	MHD-850	MHD-850	MHD-850	MHD-850	MHD-850	MHD-850

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole

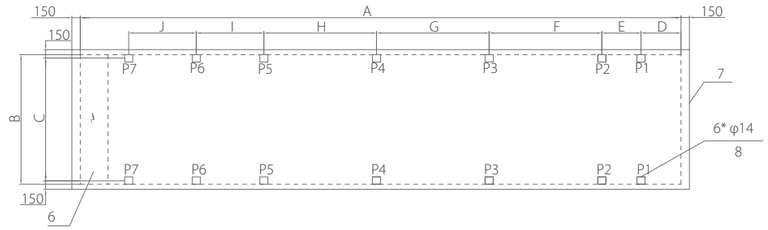


Dimensions (Unit: mm)									
Model	A	B	C	D	E	F	G	H	I
SCAF260HV(FCD)	9660	2300	2180	1150	1800	1800	1800	1050	1200

Spring isolator at all points						
Model	P1	P2	P3	P4	P5	P6
SCAF260HV(FCD)	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole

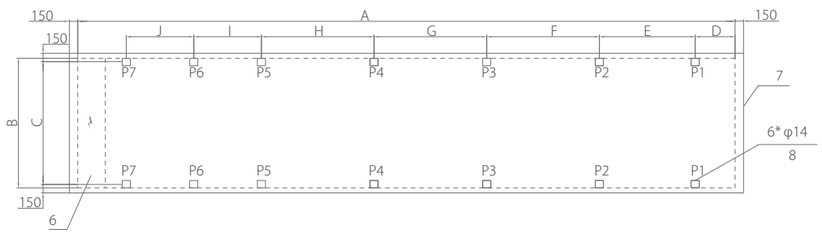


Dimensions (Unit: mm)										
Model	A	B	C	D	E	F	G	H	I	J
SCAF310HV(FCD)	10665	2300	2180	710	695	2000	2000	2000	1200	1200

Spring isolator at all points							
Model	P1	P2	P3	P4	P5	P6	P7
SCAF165HV(FCD)	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



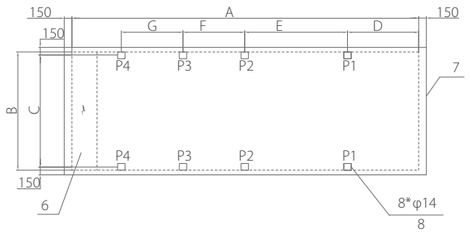
Dimensions (Unit: mm)										
Model	A	B	C	D	E	F	G	H	I	J
SCAF370HV(FCD)	11670	2300	2180	710	1700	2000	2000	2000	1200	1200

Spring isolator at all points							
Model	P1	P2	P3	P4	P5	P6	P7
SCAF370HV(FCD)	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

Base diagrams (FCI)

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



Dimensions (Unit: mm)

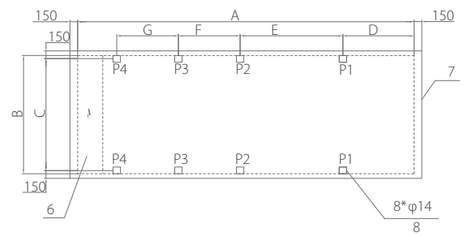
Model	A	B	C	D	E	F	G
SCAF110HV(FCI)	6745	2300	2180	1385	2000	1200	1200

Spring isolator at all points

Model	P1	P2	P3	P4
SCAF110HV(FCI)	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



Dimensions (Unit: mm)

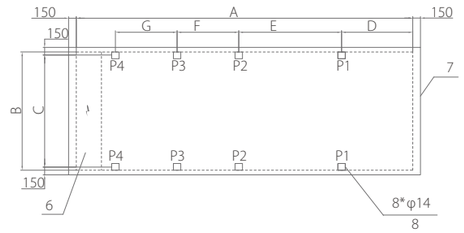
Model	A	B	C	D	E	F	G
SCAF130HV(FCI)	6545	2300	2180	1385	2000	1200	1200

Spring isolator at all points

Model	P1	P2	P3	P4
SCAF130HV(FCI)	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



Dimensions (Unit: mm)

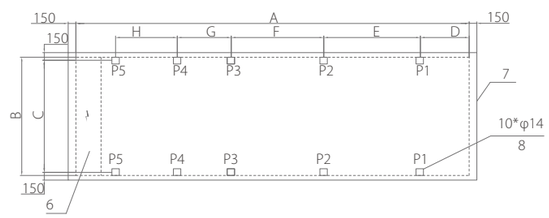
Model	A	B	C	D	E	F	G
SCAF165HV(FCI)	6545	2300	2180	1385	2000	1200	1200

Spring isolator at all points

Model	P1	P2	P3	P4
SCAF165HV(FCI)	MHD-1350	MHD-1350	MHD-1350	MHD-1350

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



Dimensions (Unit: mm)

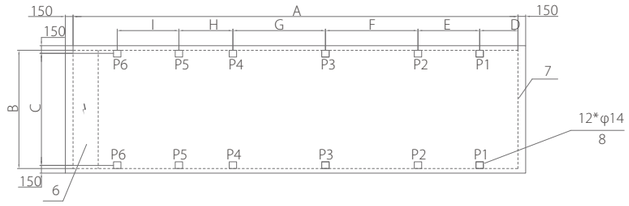
Model	A	B	C	D	E	F	G	H
SCAF195HV(FCI)	7650	2300	2180	948	1880	1800	1050	1200

Spring isolator at all points

Model	P1	P2	P3	P4	P5
SCAF195HV(FCI)	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



Dimensions (Unit: mm)

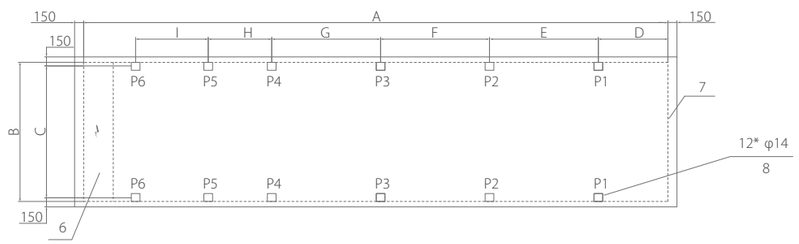
Model	A	B	C	D	E	F	G	H	I
SCAF225HV(FCI)	8655	2300	2180	745	1200	1800	1800	1050	1200

Spring isolator at all points

Model	P1	P2	P3	P4	P5	P6
SCAF225HV(FCI)	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



Dimensions (Unit: mm)

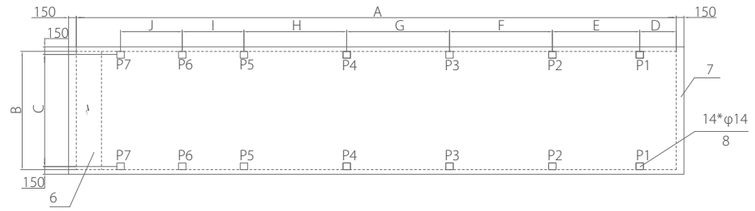
Model	A	B	C	D	E	F	G	H	I
SCAF260HV(FCI)	9660	2300	2180	1150	1800	1800	1800	1050	1200

Spring isolator at all points

Model	P1	P2	P3	P4	P5	P6
SCAF260HV(FCI)	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050	MHD-1050

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



Dimensions (Unit: mm)

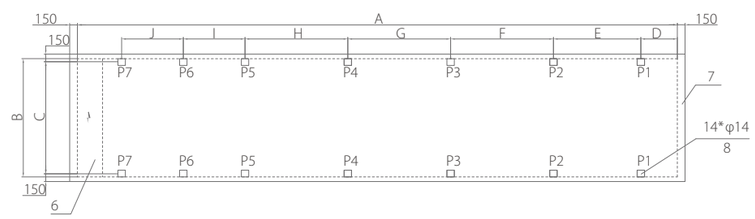
Model	A	B	C	D	E	F	G	H	I	J
SCAF310HV(FCI)	11670	2300	2180	710	1700	2000	2000	2000	1200	1200

Spring isolator at all points

Model	P1	P2	P3	P4	P5	P6	P7
SCAF310HV(FCI)	MHD-1350	MHD-1350	MHD-1350	MHD-1350	MHD-1350	MHD-1350	MHD-1350

Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

⑥ Electric control box
⑦ Installation foundation
⑧ Spring isolator installation hole



Dimensions (Unit: mm)

Model	A	B	C	D	E	F	G	H	I	J
SCAF370HV(FCI)	11670	2300	2180	710	1700	2000	2000	2000	1200	1200

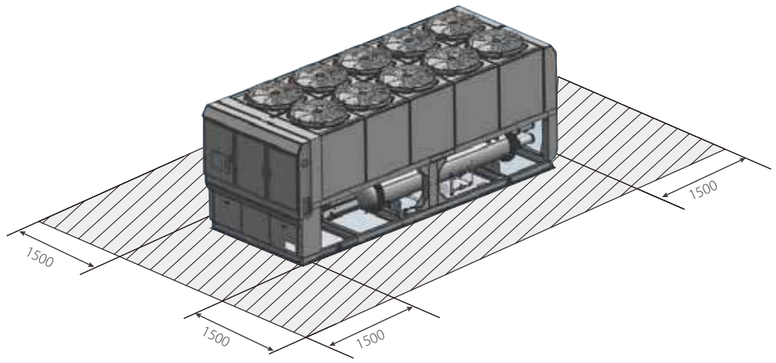
Spring isolator at all points

Model	P1	P2	P3	P4	P5	P6	P7
SCAF370HV(FCI)	MHD-1350	MHD-1350	MHD-1350	MHD-1350	MHD-1350	MHD-1350	MHD-1350

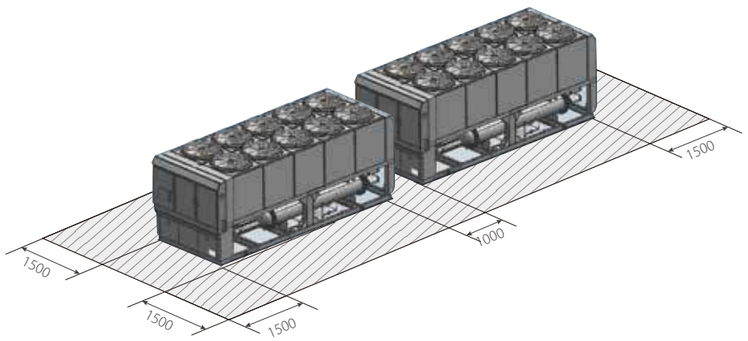
Note:
1. The spring isolator is optional.
2. The value in the spring isolator model indicates the bearable weight (unit: kg). For example, "1050" in "MHD-1050" indicates 1050kg.

Installation and maintenance

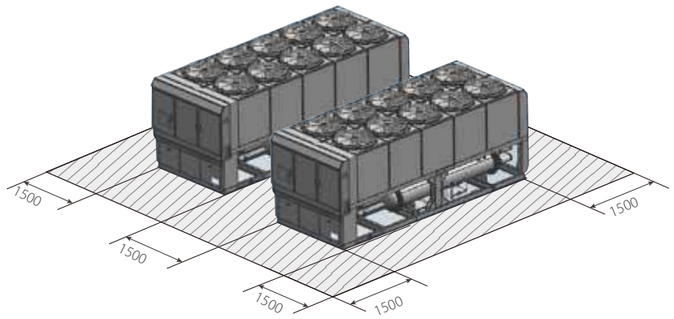
Single installation



Horizontal placement



Vertical placement



Options

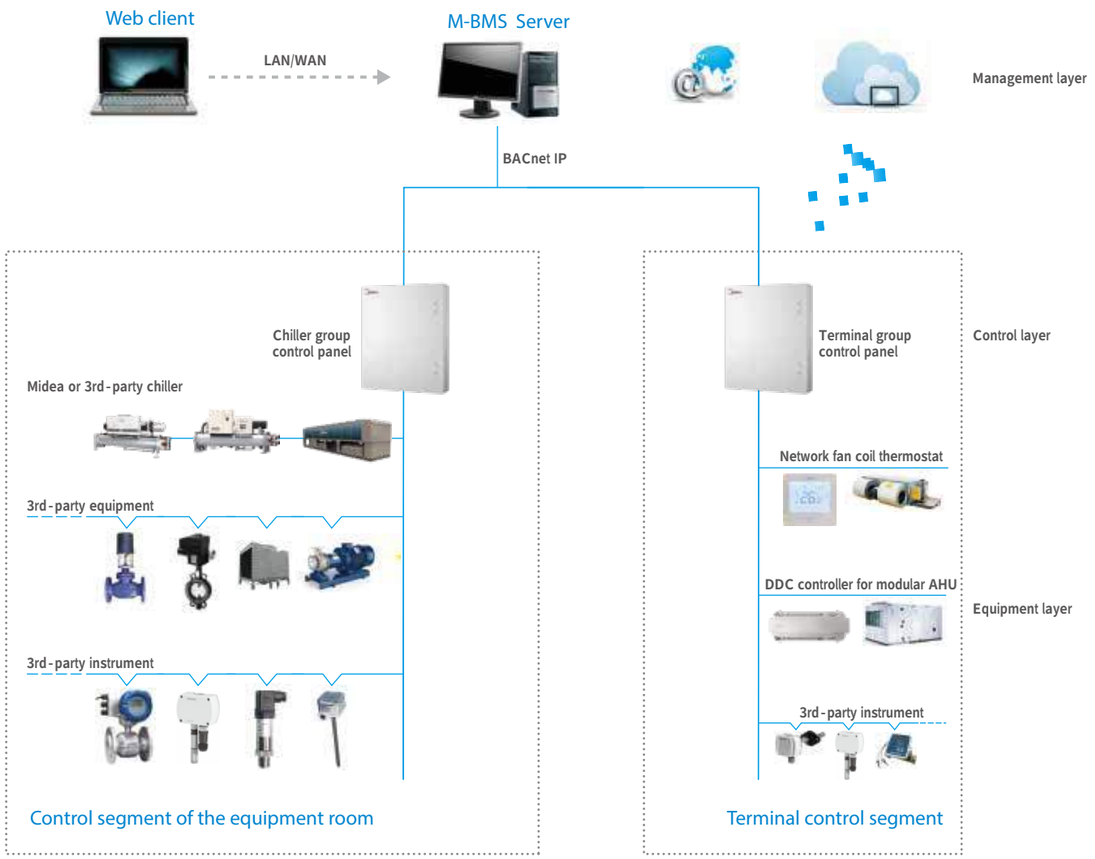
Items	Standard	Optional
Power supply	380V-3Ph-50Hz	50Hz: 400V, 415V; 60Hz: 380V, 400V, 440V, 460V
Water side pressure	1.0MPa	1.6MPa, 2.0MPa
Heavy anti-corrosion treatment	×	√
Communication	Modbus-RTU (RS485 port)	BACnet IP, BACnet MS/TP(RJ-45 port)
Water pipe connection	Victaulic	Flange
Spring isolator	×	√
Water flow switch	×	√
Insulation	20mm	40mm
Hydraulic module	×	√ (external)
High water outlet temperature (cooling)	5~15℃	15~20℃
Large temperature difference	×	8~10℃
Inverter fan	×	√
Free cooling	×	√
T3 series	×	√
All year round cooling	×	√(-20℃)
Vessel code	GB	ASME
Remote control panel	×	√
Midea Chiller Plant Control	×	√
Midea smart cloud platform	×	√
QuickView	×	√

Note: for other options, please contact with our engineers.

Intelligent management

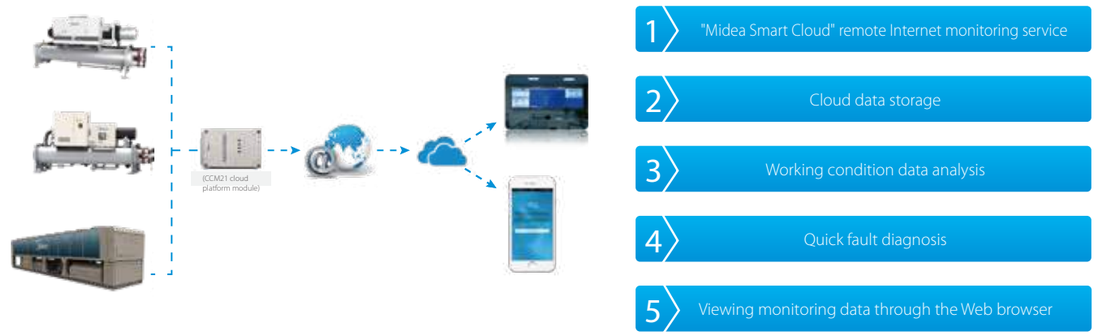
Midea Chiller Plant Control

Midea Chiller Plant Control is a group control system for commercial air conditioning that includes air conditioners, water pumps, cooling towers, terminals and related ancillary equipment (including valves, sensors etc.) as the underlying control objects. Based on a powerful control logic program and communication network, it establishes a 3-layer control framework that integrates the equipment, control and management layers. Midea Chiller Plant Control contains a unique operation module from Midea that is designed to save energy, so in addition to automated stable operations for the various devices, this product also improves and optimizes user management capabilities, reduces labour costs, boosts operational efficiency and lowers the overall energy consumption for commercial air conditioning.



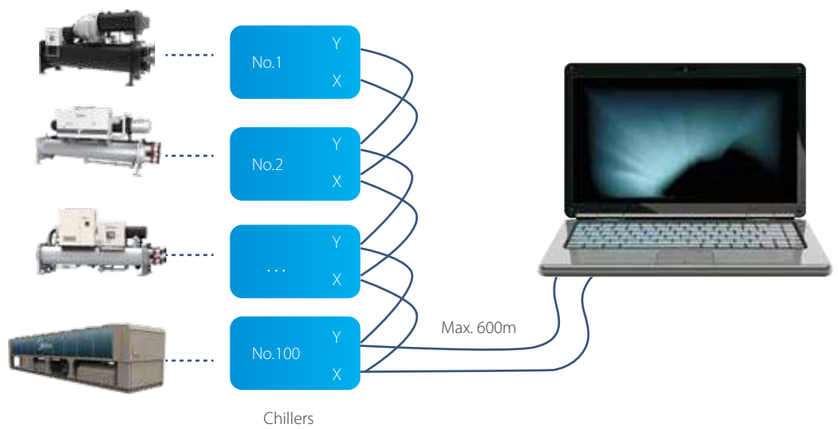
Midea Smart Cloud platform

Midea has built a flawless internet-based remote monitoring system, which provides customers with outstanding cloud service via advanced cloud service technologies and the internet. Customers can connect Midea air conditioner to the global remote monitoring system through Midea's IMU smart data acquisition terminal, so that professionals can help the customer to implement remote fault diagnosis, analysis and receive early warning alarms for failures, ensuring the equipment's optimal operation. Customers authorized by Midea can use a Web browser to view the real-time monitoring data of the air conditioning system.



QuickView

Midea's QuickView smart software control system is a type of smart software specially developed by Midea. It features high real-time efficiency, stability, reliability, a high degree of visualization and strong scalability. It can implement a wide variety of scenarios such as real-time data monitoring of units, unit equipment management, remote control, curve display, data storage, alarm query, fault diagnosis, uploading data to the cloud and external data analysis, greatly improving the unit's operation management efficiency and reducing the human input and operation and maintenance costs.



Reference projects

Reference projects

Mozambique Capital Airport

Country:	Mozambique
City:	Maputo
Total Capacity:	4,000 RT
Outdoor Unit:	Air cooled screw chiller & DC Inverter VRF
Indoor Unit:	FCU & AHU
Completion Year:	2012

Reference projects

Shenzhen North Railway Station

Country:	China
City:	Shenzhen
Total Capacity:	2,842 RT
Outdoor Unit:	Air cooled screw chiller & DC Inverter VRF
Indoor Unit:	MAHU & AHU & FCU
Completion Year:	2012

Sheraton Bandara Resort Hotel (Five Star)	
Country:	Indonesia
City:	Jakarta
Total Capacity:	1,050 RT
Outdoor Unit:	Air cooled screw chiller
Indoor Unit:	FCU
Completion Year:	2011

Hub Power Station	
Country:	Pakistan
City:	Balochistan
Outdoor Units:	Tropical air cooled screw chiller
Total Capacity:	1,024 RT

Renaissance Hotel (Five Star)	
Country:	Thailand
City:	Pattaya
Total Capacity:	512 RT
Outdoor Units:	Air cooled screw chiller
Indoor Units:	AHU
Completion Year:	2017

Sarab Community Market

Country:	UAE
City:	Abu Dhabi
Outdoor Units:	Air cooled screw chiller
Indoor Units:	AHU
Total Capacity:	1,137 RT

Indoor Stadium Huamark

Country:	Thailand
City:	Bangkok
Outdoor Units:	Air cooled screw chiller
Indoor Units:	AHU
Total Capacity:	8,800 kW

AL WAQF SHOPPING DISTRICT

Country:	UAE
Outdoor Units:	AirBoost air cooled screw chiller
Total Capacity:	1,240 RT