

TCL

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 TCL CAC  TCL CAC  TCL CAC  HVAC-TCL  TCL- CAC



TCL AIR COOLED MODULAR CHILLER



High Efficiency



Wide Operation
Range



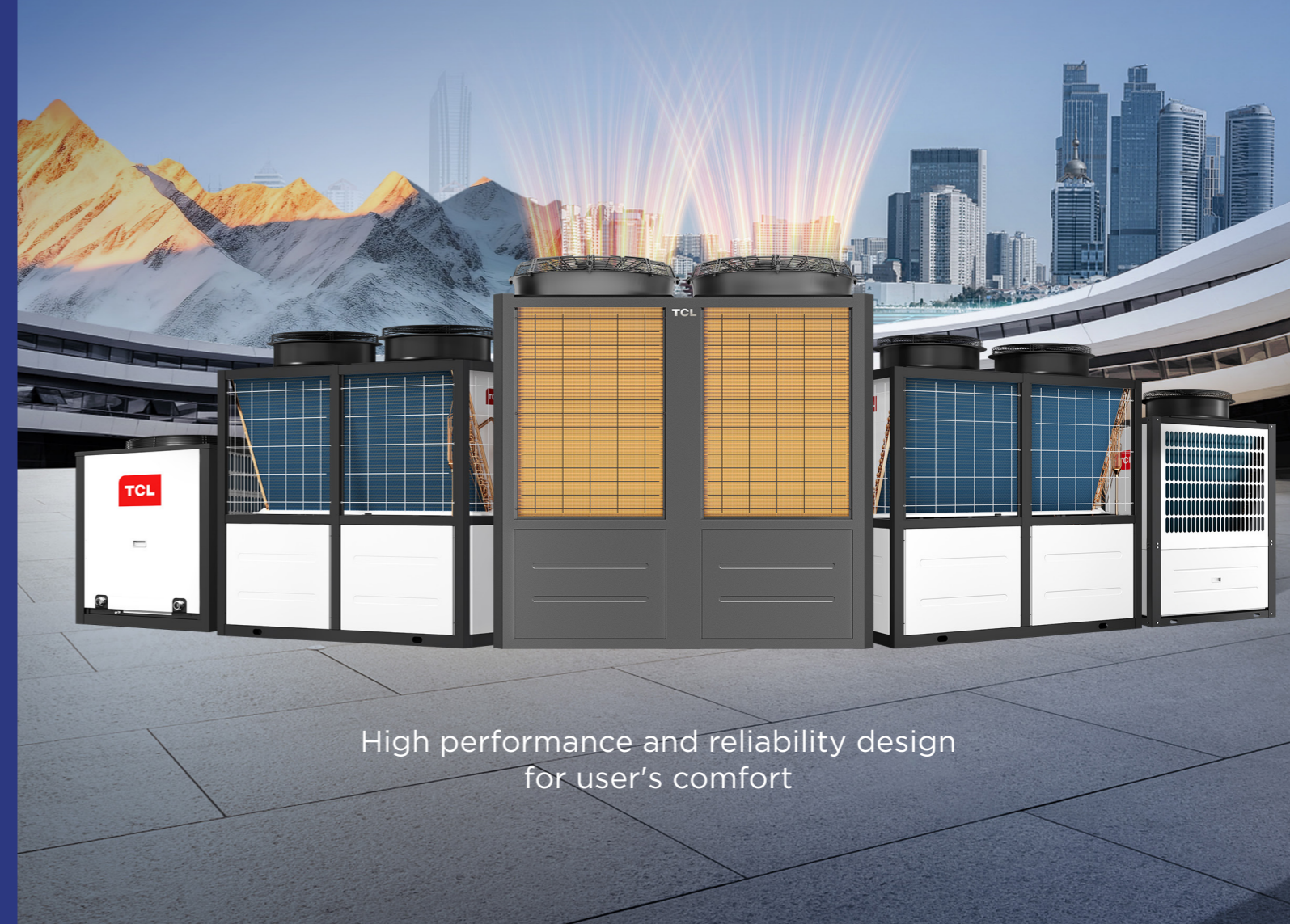
Multiple Noise
Reduction Technology



Intelligent
Defrost



IOT Platforms



High performance and reliability design
for user's comfort

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The Creative Life

TCL is the initials of The Creative Life, which means that creativity touches Life.

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Introduction Of TCL

TCL Corporation LTD, founded in 1981, is one of the largest consumer electronics conglomerates and operates on a global scale in China. At present, TCL has formed four industrial groups including multimedia, communication, China Star Optoelectronics Technology and TCL Home Appliances, and six business segments including System Science and Technology Business Headquarters, Tikeli Group, emerging Business Group, Investment Business Group, Hanlinhui Company and real estate. Its revenue exceeded 100 billion yuan for 5 consecutive years. The group's main industries establish R&D headquarters and 26 R & D institutions where in China, the United States, France, Singapore and other countries. It has nearly 22 manufacturing and processing bases in China, Poland, Mexico, Thailand, Vietnam and other countries.

TCL Corporation is committed to becoming a high-tech industrial group. In January 2004, TCL was listed in Shenzhen Stock Exchange (SZ000100). On April 16, 2019, the restructuring was officially completed. After the restructuring, TCL owns two listed companies: Hua Xian Optoelectronics (00334.HK) and Hanlinhui (835281). TCL Owns two listed companies: TCL Electronics (01070. HK) and Tonly Electronics Holdings Limited (01249.HK).

After nearly 40 years of development, TCL has become a leader in the internationalization process of Chinese enterprises by virtue of China's reform and opening-up and adhering to the enterprise spirit of dedication and innovation.

When COVID-19 broke out In January 2020, TCL immediately rushed to Hubei, donating cash, materials and Internet services that accumulative worth over 20 million yuan, and went to Leishenshan and other designated hospitals to install electrical equipment. In July, TCL Technology announced that it would become the final transferee of 100% equity of Tianjin Zhonghuan Group. TCL also carried out strategic layout in the three industrial sectors of semiconductor display, intelligent terminal, semiconductor and new energy. In August, TCL Technology announced the acquisition of 60 percent of Suzhou Samsung LCD Technology Co., LTD and 100 percent of Suzhou Samsung Display Co., LTD.

In 2021, TCL Corporation annual revenue was exceed 39.4 billion dollar, significant increase in net profit. In the same year TCL start up 'Xuri Plan' which invest more than 3.15 billion dollar to promote ecological leadership and help industrial upgrading.

In the future, TCL will establish a perfect insight system that is close to consumers and run through the overall process of corporate activities, forming the driving force of TCL brand with product force, marketing force and experience force as the core, improving the overall brand image to the direction of "young, fashionable and international", and further strengthening innovation and consumption experience.



30 million sets/year at 11 global production sites

11
Manufacturing
Centers

30M
2023 Annual
Production Capacity

Brazil factory

Jiujiang Jiangxi

Huizhou
Guangdong

Wuhan
factory

TCL

Zhongshan
factory 1/2

Zhongshan
SKD factory

Zhongshan
electrical factory

Zhongshan
DeLonghi

**The greater bay
area hinterland**



Indonesia
factory

Introduction Of TCL CAC

TCL Industry is a smart terminal business group that focus on building a full-scenario smart AI x IoT strategy, creating all smart product categories such as TV & air conditioners, platform support and eco-system service businesses.

TCL Air-conditioner is belong to TCL Industry, which is one of the core industries of TCL Groups.

TCL CAC is a developmental company integrating R & D, manufacturing, sales, and service of HVAC equipment. It has achieved the full coverage of unit-type light commercial, small multi-connected household central air conditioning, multi-connected central air conditioning, air-cooled modular machine series, household dual supply series, air source heat pump hot air machine series, ultra-low temperature modular machine series, household air energy water heater series, commercial air energy hot water series, and other products. It has 4 R&D departments and 20 laboratory groups. The new and old bases will have 27 world-class production lines with an annual capacity of more than 2 million sets.

The test center of TCL-HVAC has been recognized by China National Accreditation Service for Conformity Assessment (CNAS), which lays a solid foundation for the improvement of independent R & D ability and laboratory management ability, as well as the establishment of a customer-centered, quality-oriented, product performance and product innovation improvement system.

With professional technology and serviceability, and nearly 20 years of historical precipitation and market accumulation, TCL-HVAC has been fully verified in the market and gained a good reputation in the market.

Smart Production Technology



Facility Size
50 acres



Annual Output Value:
¥5.8 billion

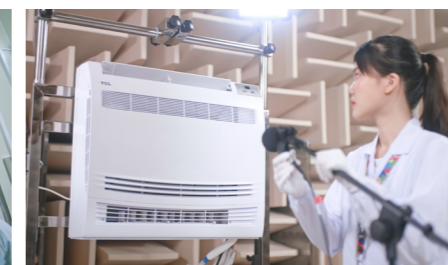


Digital Production
Lines: **9**



Capacity
3,000,000 Sets per year

Strong R&D Capabilities



R&D Personnel:
300+



Proprietary Intellectual
Property: **233 patents**



Advanced
Labs: **16**



Annual R&D Investment:
Over 300 million yuan for 3 years

8 MAJOR PRODUCT STRENGTHS

TCL Eagle series Air-cooled modular chiller

The air-cooled modular chiller is a central air conditioning unit with air as the cooling/heating source and water as the heat transfer medium. It can be combined with fan coil, air handling unit and other terminals to form a central air conditioning system.

TCL Eagle series are equipped with quality components of famous brands and can be intelligently controlled. They have multiple advantages such as high efficiency, energy saving, stability, reliability, comfort, aesthetics, and flexible application. They are widely applied to large business premises, such as office buildings, guesthouses, hotels, malls, and theaters.



Low-noise operation of
high-efficiency stable motor



V-structure high-efficiency
heat exchanger



Precision temperature
control, constant comfort



Stable operation
-15°C ~48°C wide-field
operation



Intelligent defrosting technology
Defrosting when there is frost.
Normal heating when there is none



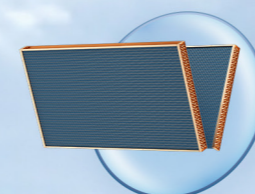
Intelligent rotating technology
Longer service life of the whole
machine



Available to realize the free
combination of 16 modules



Multi-protection function
Assurance of the system's
operating safety



1 High efficiency air heat exchanger
Adopt hydrophilic fins + internal threaded high-efficiency copper tube heat exchange area is larger, defrost faster



2 Imitation wing-shaped axial fan
Integrated design, Large air volume, low noises and high efficiency



3 Intelligent electric control
Flexible control, low noise and high efficiency



4 High efficiency shell-tube heat exchanger
Improvement of heat transfer coefficient and intensification of heat transfer



5 Fully enclosed flexible scroll compressor
Quality compressor, with large capacity, high efficiency, and great durability



6 Large-differential-pressure high-precision electronic expansion valve
Pressure balance structure, reducing pressure impact and achieving high precision and wide range of application

EXCELLENT COMPONENTS

EXCELLENT COMPONENTS AND QUALITY ASSURANCE

Fully Enclosed Flexible Scroll Compressor

Fully enclosed flexible scroll compressor is adopted. The contact- wear- free vortex design reduces the compressor's internal friction, realizes a higher compression ratio and strong power, and improves the unit's reliability and operating efficiency.

High efficiency and low consumption

Suction cooling motor is adopted, realizing higher efficiency and longer service life of the compressor and greater motor efficiency.

Bidirectional flexible vortex design, increasing anti-surge capability, reducing the compressor's internal friction, and improving efficiency.



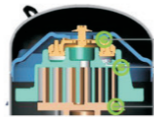
Low noise and low vibration

High-strength cross slip ring design, with small return liquid vibration, increasing reliability and reducing noises.



Safe and reliable

The exhaust check valve prevents gas from backflowing into the LP side.



Floating seal
Static vortex plate
Moving vortex plate

Advanced operation fault diagnosis module.

Environment-friendly lead-free polymer bearing is adopted, meeting reliable operation under severe conditions.

The fully enclosed shell design is free of the risks of liquid leakage like oil leakage and is maintenance-free.

Ultra-Wide Operating Range



Energy saving motor

- An energy-saving motor is adopted. Through the optimized design of the motor coil, the loss is effectively reduced, and the operating efficiency is improved, making the motor generate less heat, consume less power, and have a long operating life.

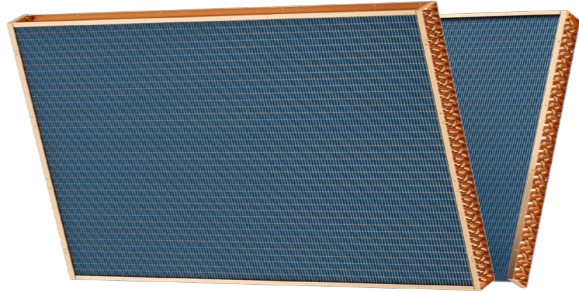


Large diameter fan

- Through CFD optimization design, more air in the unit can exchange heat with the heat exchanger to ensure the condensing temperature. The optimized wind wheel matches the optimal operating speed of the motor, resulting in lower noise.

High efficiency Heat Exchanger

The air - side heat exchanger of the unit adopts a unique V shaped structure, which conforms to the characteristics of air flow distribution and has a large maintenance space. Among them, the heat exchanger is composed of hydrophilic aluminum foil high - efficiency fins and large - diameter inner - threaded copper tubes, and is fixed by a reinforced metal frame around, which greatly improves the heat transfer efficiency, enhances the corrosion resistance and oxidation resistance of the heat exchanger, and makes the defrosting and drainage more smooth.



V-shaped heat exchanger

Internal thread tube

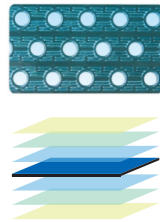
- Its inner surface is designed with grooves, which increases the inner wall heat transfer area and the contact area with the refrigerant, resulting in better heat transfer performance and thermal conductivity.



Hydrophilic Aluminum Fin

Hydrophilic Aluminum Fin

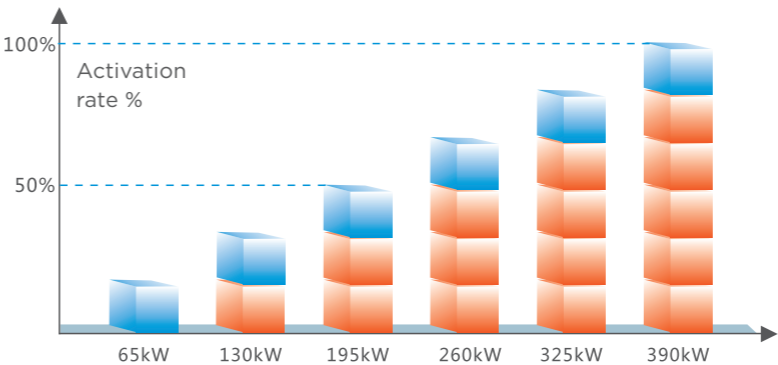
- The fins have stronger hydrophilicity. Condensate water will quickly spread on the hydrophilic aluminum foil and will not condense into water droplets, improving the heat transfer efficiency. The heat exchanger has better corrosion resistance and wear resistance, and its service life is extended.



Ultra-Wide Operating Range

The step - by - step energy regulation technology is adopted to control the number of compressors turned on in the modules within the control system and in the unit modules, so as to output energy according to actual needs.

When starting up, the number of compressors required to operate is automatically calculated according to the actual load demand, and they are started one by one and quickly reach the proper state, avoiding the drawback of all - at - once startup of ordinary heat pump units, which saves energy and electricity.



The number of modules and compressors put into operation for the first time
Adjustment of the number of modules and compressors put into operation

Note: Example of a 65kW module combination

High Energy Efficiency Ratio, Preferable For Energy Saving

High-efficiency environment-friendly R410A refrigerant is adopted, realizing green and environment-friendly performance. The composition and structure do not change easily, realizing high safety and 0 damage factor to the ozone layer (ODP).



STABLE OPERATION

STABLE OPERATION AND CAREFREE



Ultra-Wide Operating Range

The unit has an ultra- wide operating range and can operate stably when the outdoor temperature is -15°C . The maximum heating outlet water temperature is 50°C . The minimum cooling outlet water temperature is 5°C .

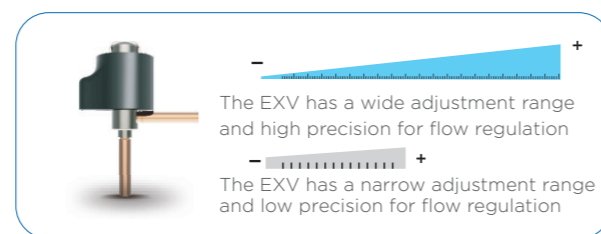


Multiple protection technologies ensure the safe and stable operation of the unit

- | | | | |
|--|--------------------------------|--------------------------------------|--|
| Compressor high and low pressure protection | Fan overload protection | Frequent start-stop protection | Power supply reverse (phase - loss) protection |
| Compressor overload protection | Water pump overload protection | Water flow switch protection | Winter water system anti - freezing protection |
| Compressor discharge high temperature protection | Temperature sensor protection | Unit over-heat prevention protection | Unit refrigeration anti -freezing protection |

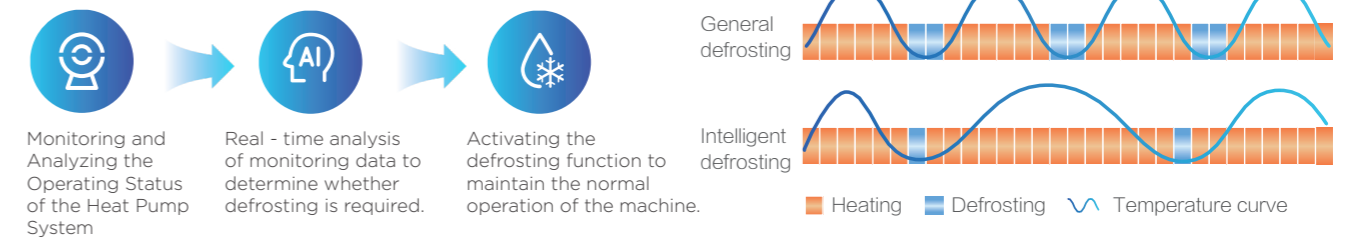
High precision electronic expansion valve

It adopts the 500 - step electronic expansion valve throttling technology, which can flexibly adjust the opening of the electronic expansion valve according to various operation modes and temperature conditions. This allows for more precise control and makes the system operation safer and more reliable. Compared with systems using ordinary thermal expansion valves for throttling, it has a wider adjustment range, a faster response speed to changes, and higher adjustment accuracy. Especially in the low - temperature mode, the system performance is more outstanding.



Intelligent Defrosting Technology, Reducing Thermal Decay

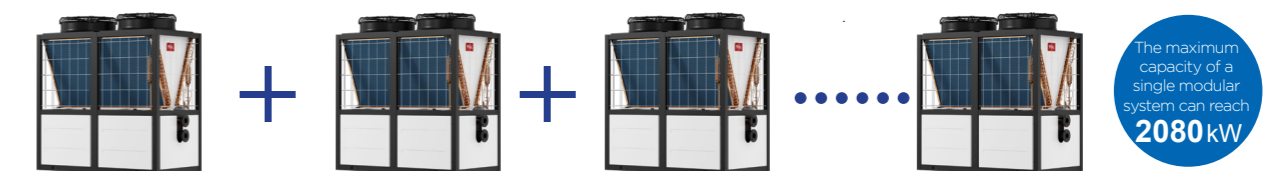
Air - cooled heat pump modular units are prone to frosting under low - temperature and high - humidity environmental conditions. TCL Eagle series Air-cooled modular chillers can accurately determine the defrosting time based on the main parameters of heating operation and load changes. They defrost when there is frost and perform normal heating when there is no frost. Moreover, they can carry out forced manual defrosting according to the actual situation, effectively ensuring users' heating demands. Monitoring and Analyzing the Operating Status of the Heat Pump System



Modular Design with Free Capacity Expansion

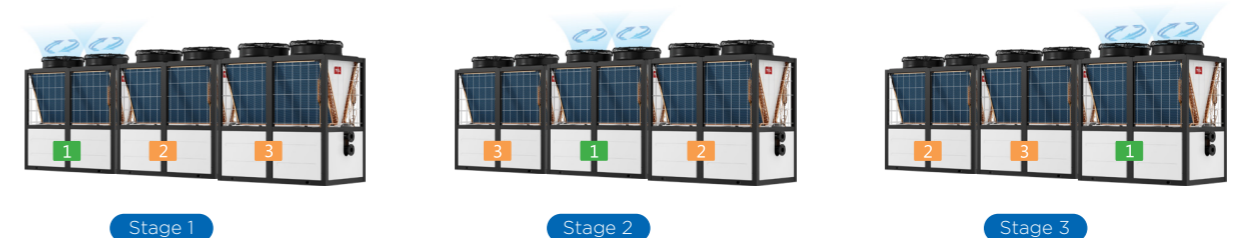
Using a modular design, each modular unit can operate independently and serve as a backup for others. If any modular unit malfunctions, it will not affect the normal operation of other units.

It includes two basic modules of 65KW and 130KW. The capacity can be freely expanded, allowing up to 16 modular units to be connected in parallel to form combined products with capacities ranging from 65KW to 2080KW, easily meeting various needs and providing more freedom in design and installation.



Modular Rotation Operation Technology

The unit can alternate and set the priority startup module unit based on the system load to balance the running time of each module unit, greatly improving the reliability and service life of the unit.



Modular Backup Operation Technology

The unit's unique backup operation technology adopts a single - module multi - system design, making different modules in the same system backup each other. In an emergency, even if one or more compressors or modular units malfunction, the system can still operate normally.



INTELLIGENT CONTROL

INTELLIGENT OPERATION AND NETWORK OPTIMIZED CONTROL



Smart Mainboard

It has multiple functions such as product operation control and safety protection. With a high degree of integration, all control programs of the system can be realized by the built - in control system of the main unit, further reducing the failure rate of system operation, lowering maintenance costs as well as the overall project cost. The core high - speed processing system can quickly obtain the operating parameters of the main unit, perform rapid calculation and processing to achieve intelligent control of the unit.

Through the intelligent system to automatically control the machine, users only need to set the temperature according to environmental needs, and the unit will automatically operate and control all day long according to the set temperature, saving time, effort and worry.

Microcomputer Control

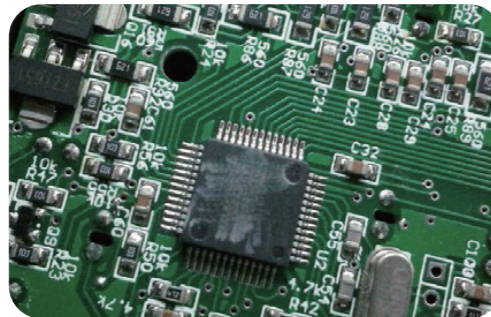
Self - developed programs ensure a more stable system.

Intelligent Zoned Defrosting

Equipped with variable - frequency technology, it defrosts when there is frost and performs normal heating when there is no frost, enhancing the operating capacity. Command Deployment

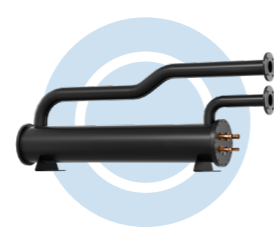
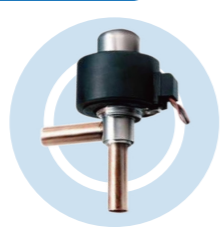
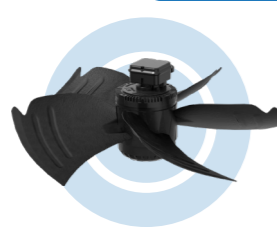
Multi - functional Protection

It has various protection functions such as under - voltage, over - voltage, over - current, and over - temperature protection to ensure the efficient and reliable operation of the system.



Command Deployment

After components receive instructions, they start to operate.



Ensuring Smooth Compressor Start - up

It can reduce the starting current of the unit the impact on the power grid.

Intelligent Automatic Control

One key start, allowing users to freely set the temperature, timer for on/off, and requiring no dedicated personnel for management.

Intelligent Control: Convenient and Safe



Intelligent Protection System

- It has various protection functions such as under - voltage, over - voltage, over - current, and over - temperature protection to ensure the efficient and reliable operation of the system.



Intelligent Self - judgment

- Self - diagnosis technology automatically determines the operating status of the unit and displays operating faults automatically, making user operation and maintenance simpler.



Intelligent Detection

- Password unlocking function, user - level power - on unlocking, effectively supervising the unit installation.



Centralized Control

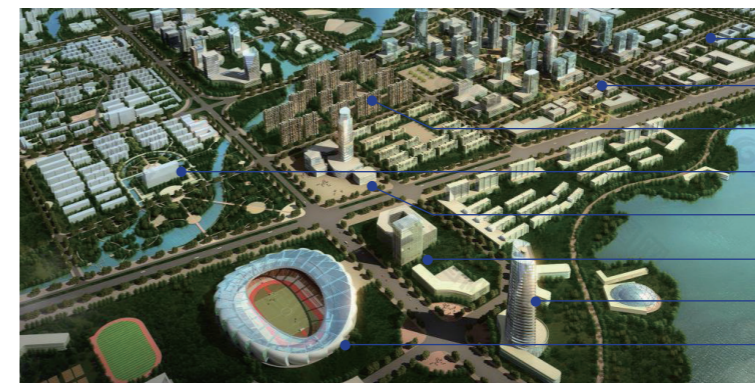
- Multiple units can be centrally controlled, and remote monitoring can also be carried out via a PC. New - type Wired Controller The new - type wired controller has a simple, stylish and beautiful interface, integrating well with indoor decoration.

SPAN TECHNOLOGY

CHOOSE AND MATCH FREELY



Modular Alternate Operation Technology

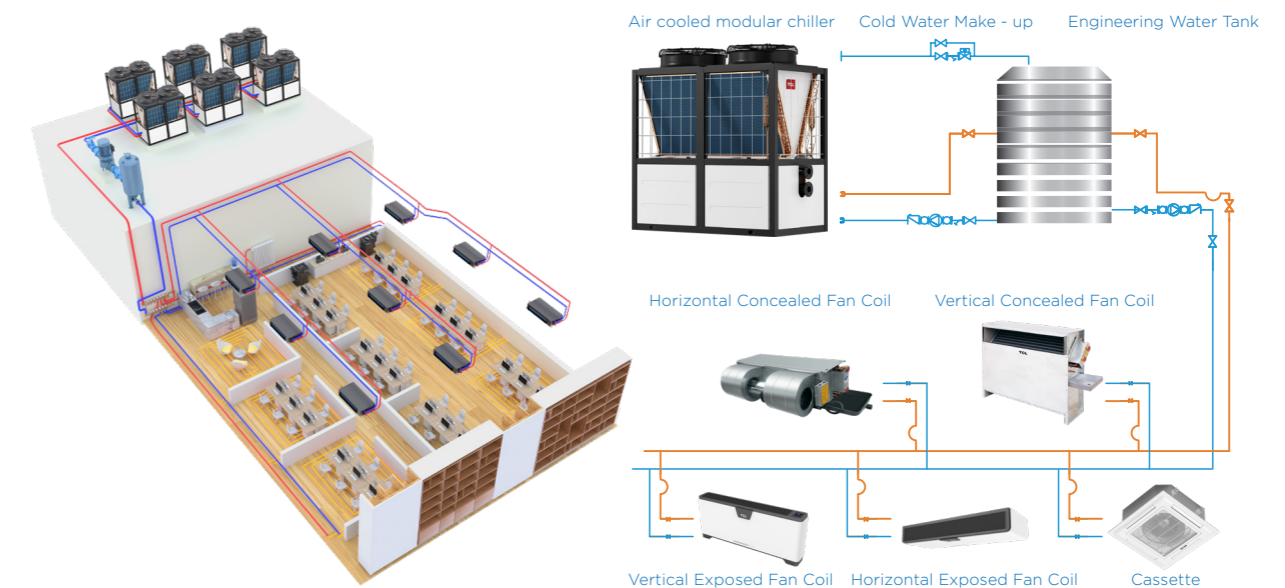


- Factories
- Self - built Buildings
- Residential Buildings
- Hotels
- Commercial Centers
- Schools
- Government Agencies
- Sports Squares

Centralized Cooling and Heating Solutions

It is a central air - conditioning unit that uses air as the cold and heat source and water as the heat transfer medium. The unit can be combined with various terminals such as fan coils, floor heating systems, and radiators to achieve cooling in summer and heating in winter.

The TCL Eagle series air - cooled modular units include 65KW and 130KW models, and up to 16 units can be connected in parallel to provide comfortable cooling and heating for commercial buildings, leisure clubs, hotels, etc.



Unit Parameters



High Efficiency



Wide Operation Range



Multiple Noise Reduction Technology



Intelligent Defrost



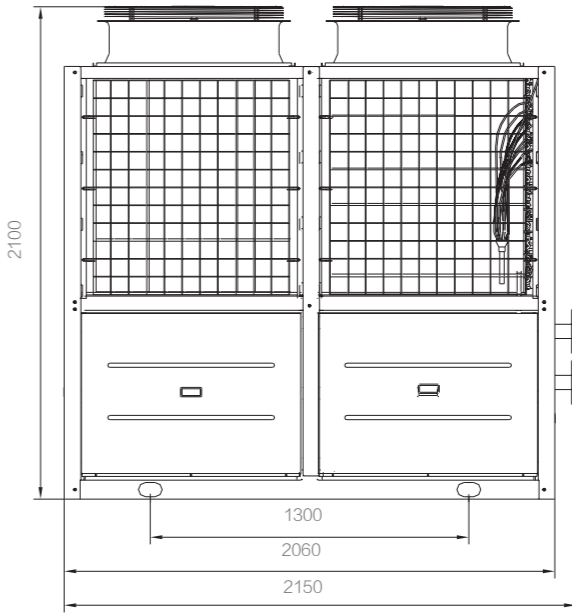
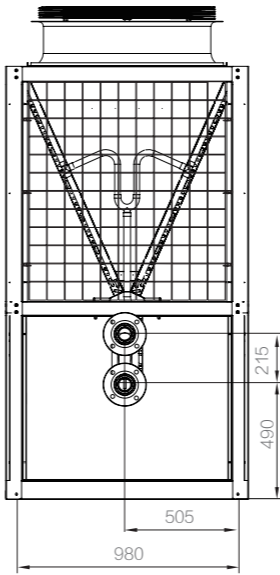
LSRFM65/BN1



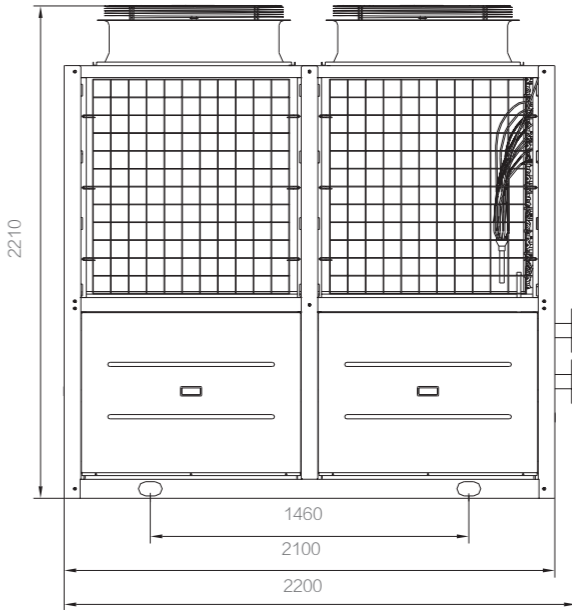
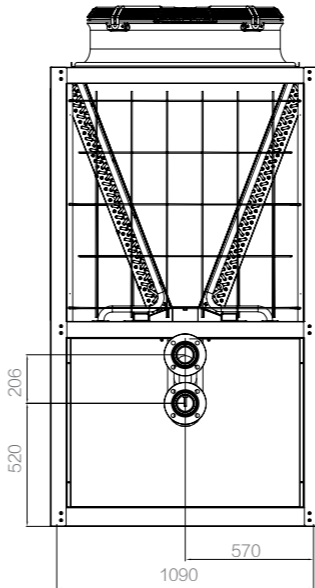
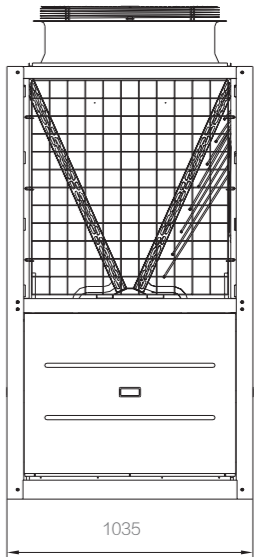
LSRFM130/BN1

Model			LSRFM65/BN1	LSRFM130/BN1
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50
Refrigerant	Type	/	R410A	R410A
	Charge	kg	12.0	11.5×2
Heating (A7W45)	Capacity	kW	70.00	140.00
	Rated input	kW	19.50	40.00
	COP	W/W	3.59	3.50
	Capacity	kW	38.10	76.10
Heating (A-10W45)	Rated input	kW	18.10	36.10
	COP	W/W	2.10	2.11
	Capacity	kW	65.00	130.00
	Rated input	kW	19.90	39.70
Cooling (A35W7)	EER	W/W	3.27	3.27
	Capacity	kW	65.00	130.00
Operation Range	Cooling	°C	15~48	15~48
	Heating	°C	-15~25	-15~25
Water Temperature Range	Cooling	°C	5~25	5~25
	Heating	°C	35~50	35~50
Maximum input power		W	29.9	60.0
Maximum input current		A	60.0	120.0
Compressor	Type	/	Scroll	Scroll
	Control	/	On-off	On-off
	Quantity	/	1	2
Fan	Type	/	Axial	Axial
	Quantity	/	2	2
Condenser	Type	/	Finned tube	Finned tube
	Fin color	/	Blue	Blue
Water side heat exchanger	Types		Shell and tube	Shell and tube
	Water flow rate (Cooling)	m³/h	11.18	22.36
	Water flow rate (Heating)	m³/h	12.04	24.08
	Water drop	Kpa	30	40
	Piping connections	/	DN65	DN65
Throttle type		/	EEV	EEV
Dimensions	Net (W×D×H)	mm	2150×1035×2100	2200×1145×2210
	Packing (W×D×H)	mm	2170×1050×2220	2220×1160×2330
Weight	Net	kg	570	870
	Gross	kg	600	900
Noise		dB(A)	65	69

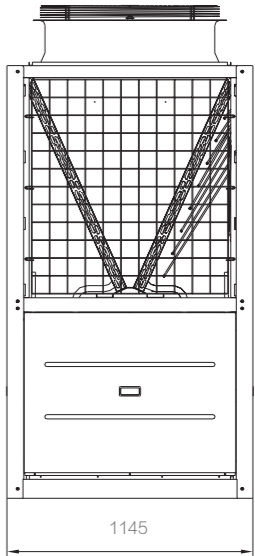
Unit Parameters



LSRFM65/BN1



LSRFM130/BN1



TCL Energy-Efficient Ultra low modular chiller

TCL Ultra low modular chiller can be operated at low ambient temperatures even -38°C .

With precise control and EVI system, unit have good performance than other common unit.



High efficiency EVI Scroll compressor



Full inverter



Low-noise operation of high-efficiency stable motor



Double-U-shaped high-efficiency heat exchanger
High-efficiency inner grooved copper tube



TCL smart cloud platform
Smart IoT. Hassle-free operation



Stable operation
 -38°C -55°C wide-field operation



Intelligent defrosting technology
Defrosting when there is frost.
Normal heating when there is none



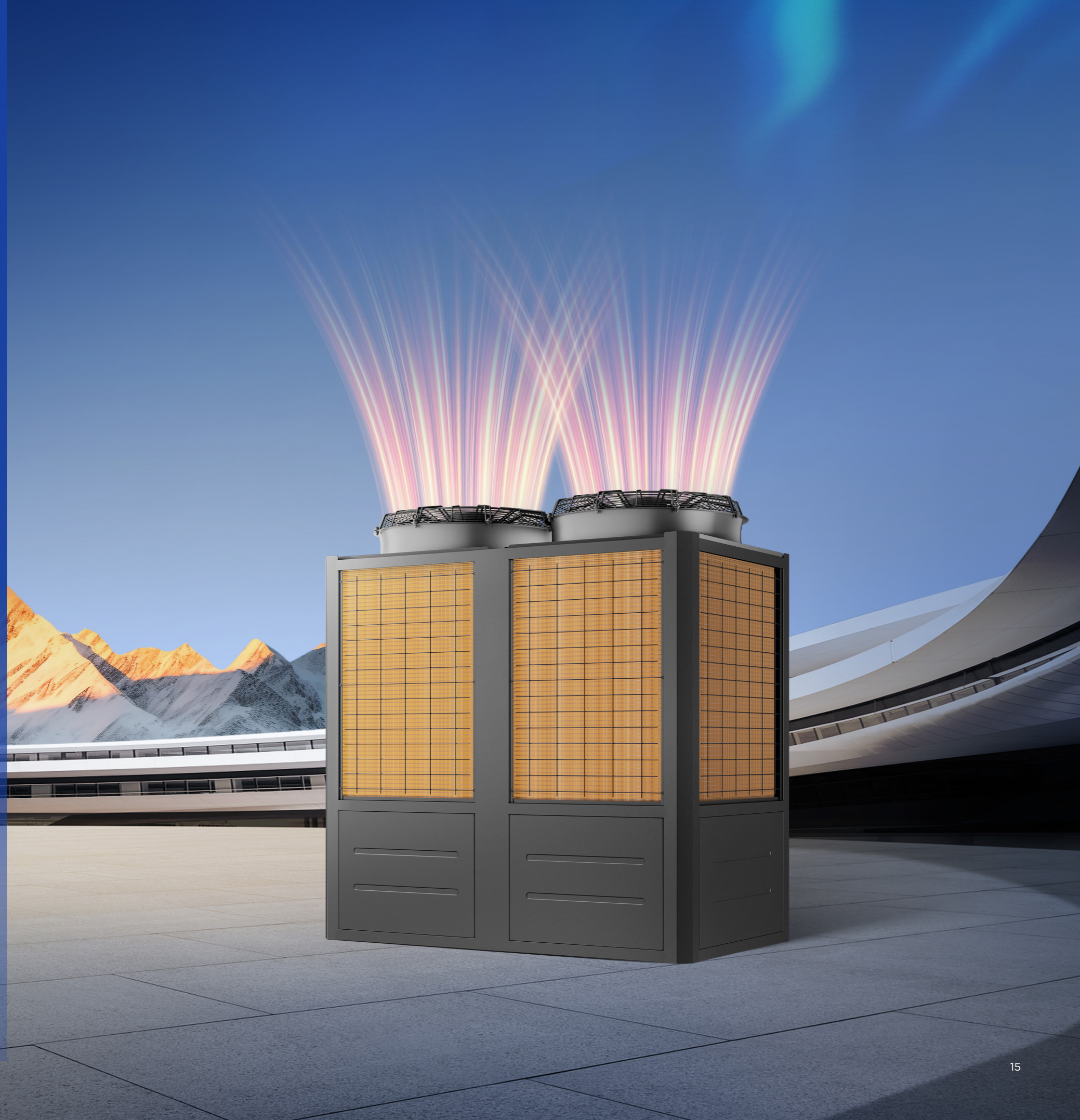
Intelligent rotating technology
Longer service life of the whole machine



Available to realize the free combination of 16 modules



Multi-protection function
Assurance of the system's operating safety



POWERFUL PERFORMANCE

-38°C Ultra-Low Temperature Heating



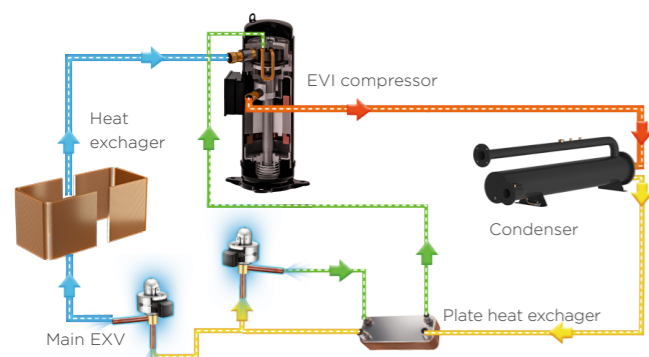
COOLING AND HEATING SAVE 25% ENERGY

A New Choice for Engineering Energy Saving



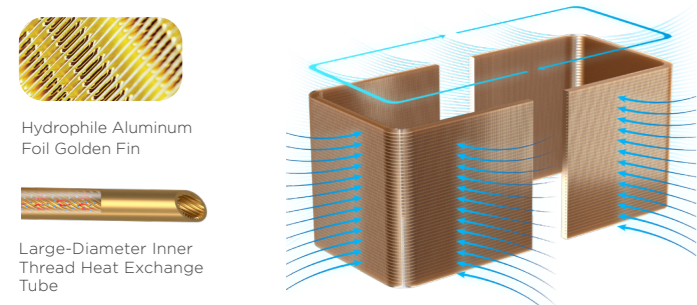
Industry's Largest-Displacement Enhanced Vapor Injection Compressor

Enhanced vapor injection dual-valve control technology, combined with economizer subcooling and return air superheat during ultra-low temperature operation, effectively reduces exhaust temperature. Combined with DC inverter control technology, it further ramps up low-temperature heating capacity and efficiency.



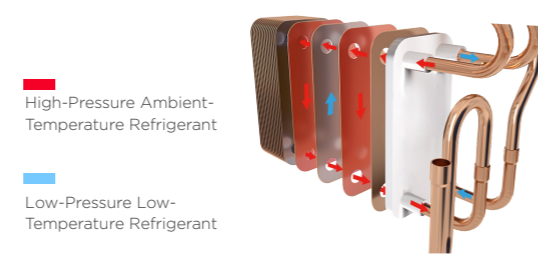
Dual U-Shaped 4-Sided Return Air Evaporator

The large heat exchange area ensures high heat exchange efficiency. Unique process design effectively increases fin area.



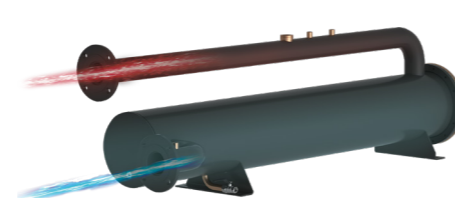
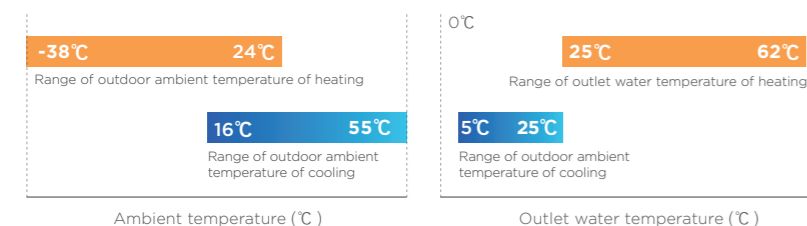
Secondary subcooling technology

To ensure effective refrigerant subcooling, a stainless steel brazed plate heat exchanger is used in circuit design, effectively improving system efficiency while enhancing cooling and heating performance as well as system reliability.



Efficient shell and tube condenser with wide operating range

Utilizing phase change distribution technology, heating water up to 62°C, powerful heating at ultra-low ambient temperature of -38°C, cooling water as low as 5°C, balancing cooling capacity, wider range of unit operation; 0.35mm ultra-thick copper tubes, significantly enhancing pressure resistance and wear resistance, excellent frost resistance.

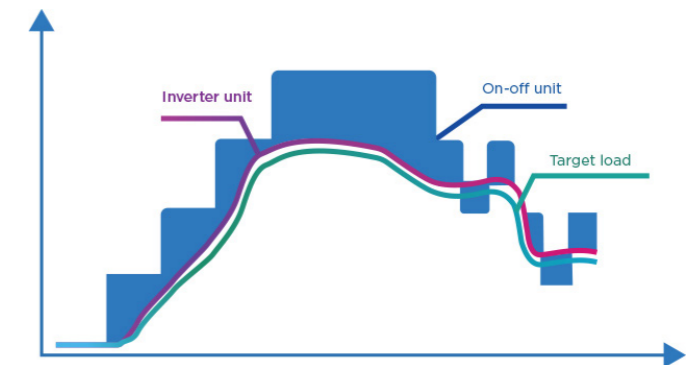


All DC inverter technology

Compared to on-off modular units, the inverter units significantly improve energy efficiency when operating at partial loads. They can precisely adjust refrigerant output according to indoor loads and maintain constant water temperature and speed without frequent starts and stops, thereby saving more energy and providing more comfort.

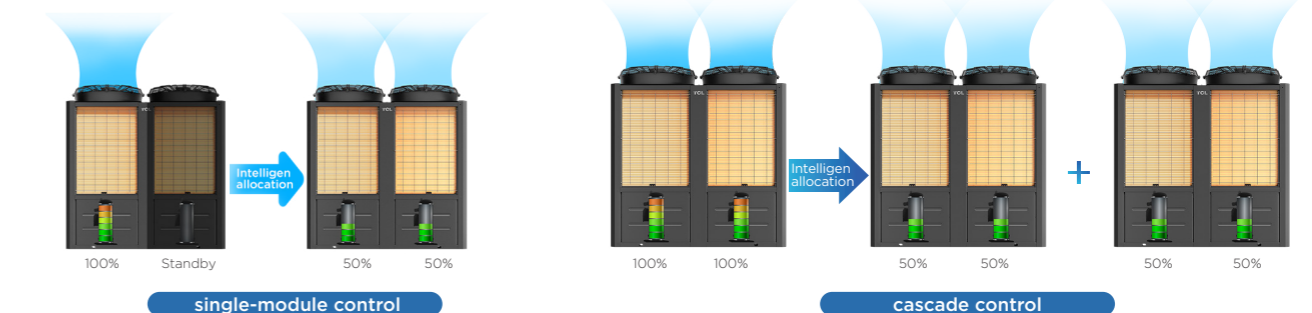
On-off type:
prone to over-adjustment frequent unit startups

Inverter type:
better matching with target load



Intelligent Capacity Allocation

Through single-module control and cascade control, balanced operation time for each compressor or unit is achieved via automatic control by the microprocessor on the main unit, ensuring operation within a higher efficiency range and saving more energy.

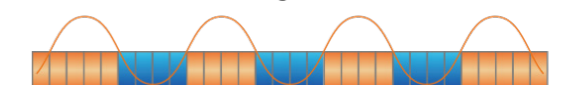


Intelligent Defrosting Technology

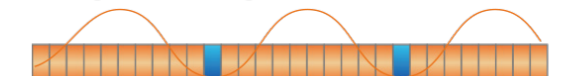
Based on precise assessment of heating capacity attenuation, it accurately determines the optima defrosting time for frosty conditions and avoids defrosting when not needed, ensuring efficient unit operation and enhancing heating efficiency.

Heating operation Defrosting Temperature curve

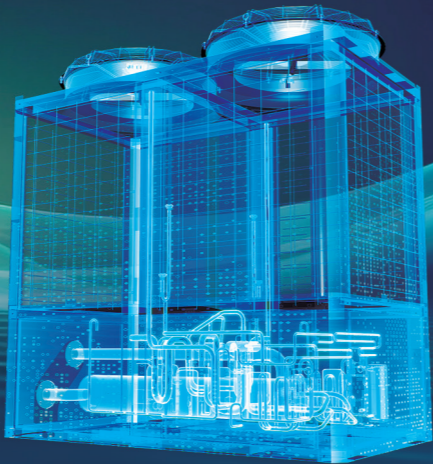
Conventional defrosting



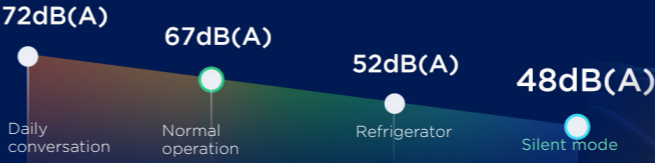
Intelligent defrosting



STABLE AND RELIABLE

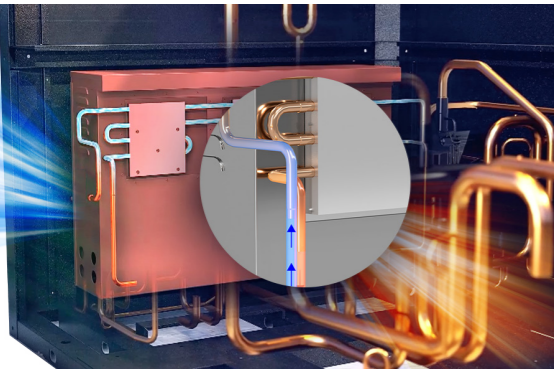


COMFORT AND INTELLIGENCE



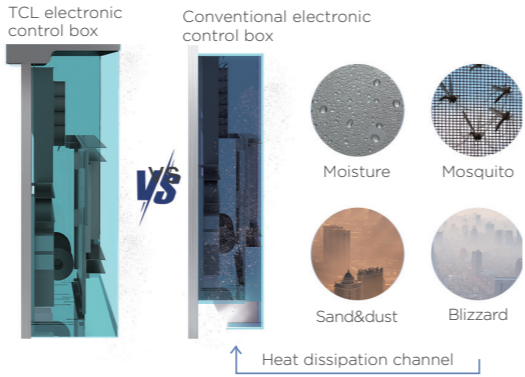
Inverter module cooling protection

TCL module cooling technology can eliminate the heat of PCB, reduce the working temperature of inverter module and improve the PCB system reliability.

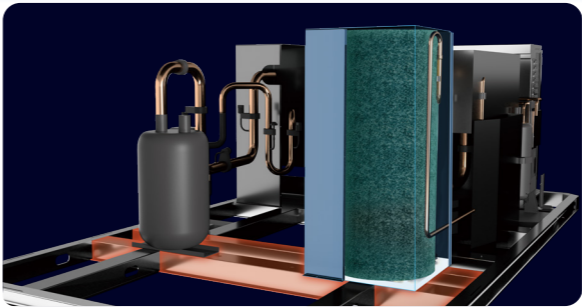


Fully enclosed electronic control box

Through special sealing design, it prevents damage to the electronic control components from moisture, wind, sand, rain, snow, mosquitoes, and other factors, ensuring that the electronic control system remains unaffected by external environmental conditions.



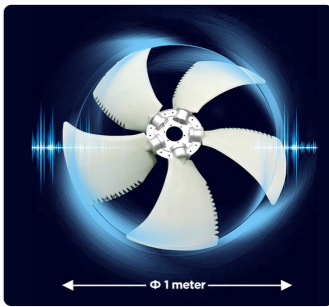
Multi-Layer Noise Reduction Design for Quiet Comfort



Multi-Layer Noise Reduction for Compressors
The sturdy body and comprehensive upgrade of various noise reduction technologies, including vibration reduction, sound absorption, and isolation, sharpen noise reduction capability, resulting in a machine operation akin to the sound of flowing water.



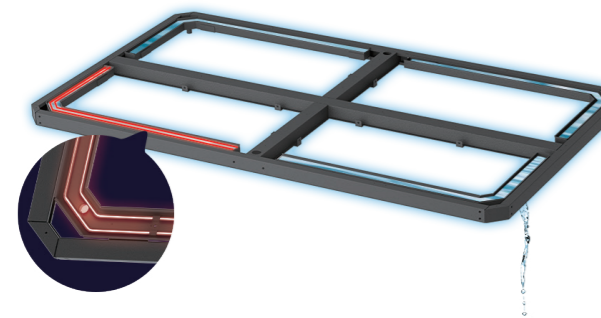
Silent DC Brushless Motor
Stable performance and low-noise operation.



1-Meter Imitation Wing-Shaped Fan Blades
CFD simulation technology is utilized to optimize fan blades, achieving high air volume with low noise.

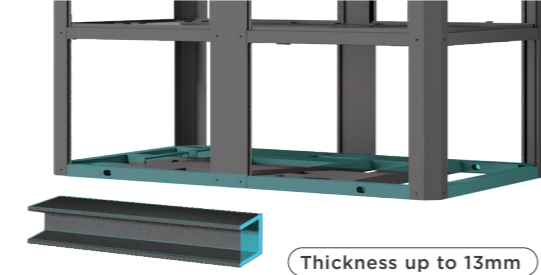
Chassis Disassembly +Auxiliary Electric Heating Design

Utilizing a porous, detachable frame-type water collection tray and electric heating strip, condensate can be quickly drained to prevent the unit from freezing.



Enhanced Frame Design with Integrated Base

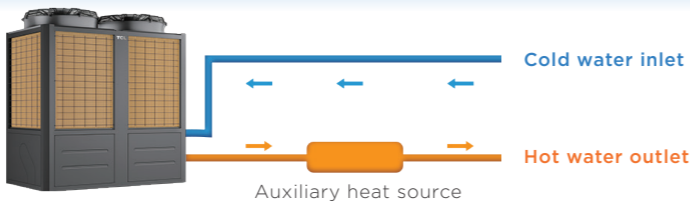
The design features a reinforced frame structure, offering reliable support. It is more robust and corrosion-resistant than ordinary sheet metal.



Thickness up to 13mm

3-level anti-freezing technology to ensure the stable heating of the unit

Utilizing a porous, detachable frame-type water collection tray and electric heating strip, condensate can be quickly drained to prevent the unit from freezing.



Multi-Layer Noise Reduction Design for Quiet Comfort

It is another breakthrough in intelligent control for TCL heat pumps with innovative interaction methods and real-time monitoring of various data and information.

- Comprehensive management efficiency improvement
- Asset efficiency improvement
- Asset efficiency improvement
- O&M efficiency improvement



Smart Cloud O&M

- Remote OTA upgrades
- Equipment warning diagnosis



Smart Cloud Control

- Touch line controller
- Mobile app
- Schedule batch management



Smart Cloud Services

- Viewing of daily operational data
- Real-time fault monitoring
- Remote post-sales analysis
- Abnormal operation monitoring



Smart Cloud IoT

- BMS building protocol connection

Unit Parameters



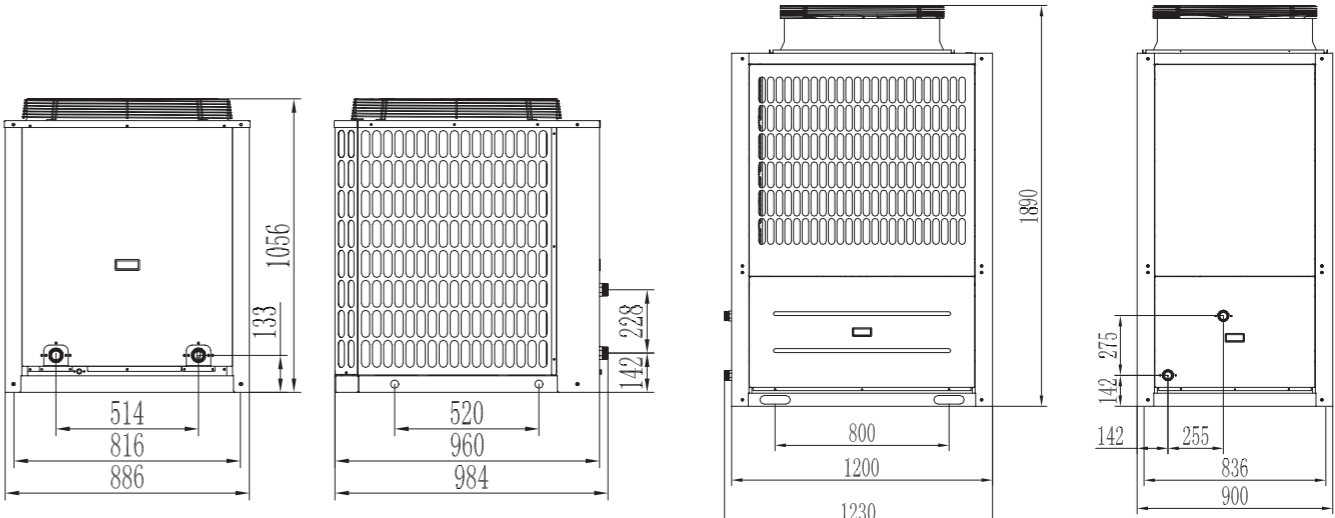
LSRFM38/CN1-DW

LSRFM55/BN1-DW

LSRFM160/AN3S-DWBp

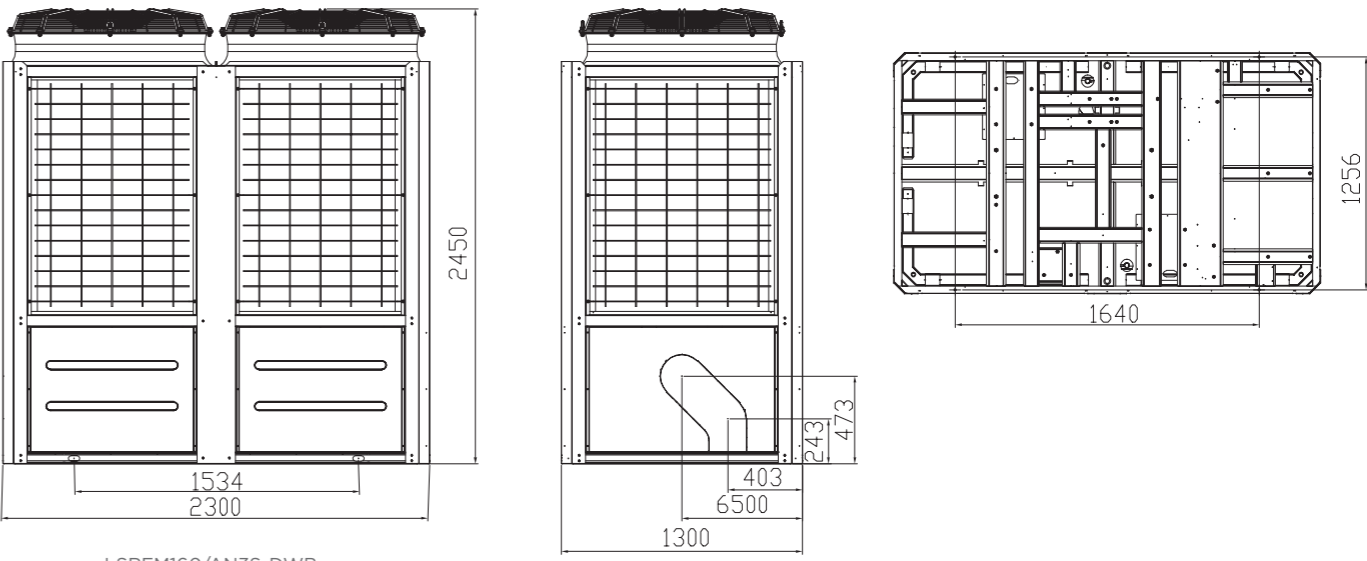
Model			LSRFM38/CN1-DW	LSRFM55/BN1-DW	LSRFM160/AN3S-DWBp
Power supply		V/Ph/Hz	380- 415/3/50	380- 415/3/50	380- 415/3/50
Refrigerant	Type	/	R410A	R410A	R32
	Charge	kg	2.8x2	8.0	12.0x2
Heating (A7W45)	Capacity	kW	32.00	43.00	160.00
	Rated input	kW	8.89	11.62	50.79
	COP	W/W	3.60	3.70	3.15
Heating (A-12W41)	Capacity	kW	20.00	25.00	135.00
	Rated input	kW	8.00	10.64	55.10
	COP	W/W	2.50	2.35	2.45
Cooling (A35W7)	Capacity	kW	22.00	25.00	140.00
	Rated input	kW	8.15	9.96	50.00
	EER	W/W	2.70	2.51	2.80
Operation Range	Cooling	°C	15-48	15-48	16-55
	Heating	°C	- 25-30	- 25-30	- 38-24
Water Temperature Range	Cooling	°C	5-25	5-25	5-24
	Heating	°C	35-60	35-60	35-62
Maximum input power		kW	14.00	18.00	72.00
Maximum input current		A	26.0	35.0	120.0
Compressor	Type	/	EVI Scroll	EVI Scroll	EVI Scroll
	Control	/	On-off	On-off	Inverter
	Quantity	/	2	1	2
Fan	Type	/	Axial	Axial	Axial
	Quantity	/	1	1	2
Condenser	Type	/	Finned tube	Finned tube	Finned tube
	Color of Heat exchanger	/	Blue	Blue	Golden
Water side heat exchanger	Types		Double-pipe	Double-pipe	Shell and tube
	Water flow rate (Cooling)	m³/h	3.8	4.3	24.1
	Water flow rate (Heating)	m³/h	5.5	7.4	24.1
	Waterdrop	Kpa	30	40	52
	Piping connections	/	DN32	DN32	DN80
Throttle type		/	EEV	EEV	EEV
Dimensions	Net (WxDxH)	mm	960x886x1056	1200x900x1890	2300x1300x2450
	Packing(WxDxH)	mm	1070x1000x1150	1300x1000x1930	2320x1320x2570
Weight	Net	kg	240	316	1150
	Gross	kg	250	326	1160
Noise		dB(A)	62	65	69

Unit Parameters



LSRFM38/CN1-DW

LSRFM55/BN1-DW



LSRFM160/AN3S-DWBp