

The Energy Solutions of Withair Chillers Catalogue 2017



Take Control of Your Energy Future !

Withair offers a wide range of clean energy products and solutions to meet the needs of your projects



Ongoing innovation with cutting-edge products



Over 20 years of experience



Production 100% Made in China



Guaranteed support and spare parts



Support in design



Documentation for incentives



Two-year guarantee



Free training course

About Withair

Withair® is one leading manufacturer in sustainable energy solutions supplying HVACR products & services for cooling, heating, hot water, ventilation, industrial refrigeration and heat recovery that reflect today's demand for sustainable construction, comfortable indoor climate and industrial cooling process application. and specialize in heating & cooling system, air quality system and new energy development and utilization,now it has three factories,manufacturing different kinds of products, and committed to providing the first-class products & system solutions for customers.

At Withair®, our aim is to support the growth, profit, and sustainability goals of our clients by delivering innovative solutions with n x value.we gain a deep understanding of our client's needs and business objectives first and foremost by gaining and leveraging our technical knowledge, innovative thinking, and vast equipment resources. from heating & cooling solutions and air quality management,to energy performance and efficiency determination,Withair® delivers the results.

Withair® operates in a strongly impacting sector in the energy field, and its primary objectives include committing resources to continuous technological research and improvement of production processes, with the aim of streamlining products and raise users' awareness on the actual soundness of ensuing energy savings.

Withair® products & solutions combine utmost efficiency with minimum energy consumption and strict respect of the environment, the idea proved to be a winning one in just a few years, Withair® became the leader in the sector !



Low energy consumption systems

Use of clean energy

Use of environmentally-friendly cooling gases

ZERO direct CO2 emissions in the environment

Water-Cooled Chillers - Cut energy consumption and emissions by Withair® Chilled Water Systems

Withair® chillers were developed based on decades of knowledge and rich experience, includes air-cooled chillers and water-cooled chillers, ranging in capacities from 2 to 1,000+ tons. Withair® chillers are relied upon for both comfort and special process cooling applications in every corner of the world.

Withair® chiller plays a critical role in creating the right environment to ensure the health, comfort and industrial production. Withair® chillers not only serve HVACR systems and industry-type process cooling at factories that deliver the right temperature for the space, but they also help minimize operating costs with superior energy efficiency levels, low sound levels and with minimal environmental impact.

Withair® offers complete, factory-assembled screw and scroll compressor water cooled chiller that offer ease of installation with wiring and microprocessor controllers providing maximum operating efficiency.

Withair® compact chillers install easily and quickly into most building layouts, making them ideal choices for retrofit or new building designs.

Modular Scroll Compressor Water-Cooled Water Chillers



Modular Scroll Compressor Water-Cooled Water Chillers

— Product Description —

Withair® is proud to offer an extensive line of water-cooled scroll chillers ranging from 20 to 40+ tons. The water-cooled chillers feature a variety of models and options engineered to fit a wide range of applications. Withair® water-cooled chillers are ideal for customers who are focused on high energy efficiency, superior reliability and long equipment life. Withair® products within the unique portfolio are designed to help lower environmental impact with next-generation, low global warming potential refrigerants and high-efficiency operation.

Withair® Water Cooled Scroll Water Chiller is special designed to be small and medium size for central air conditioning system,It can also provide industrial cooled water and hypothermal water for the technical manufacture. and is widely appropriate for separate management buildings, small and medium size office, factory workshop, restaurant and villa, etc, it also can be customized to equip with multi compressors and more energy saving and durable than split air conditioners. Every modular unit has it own independent refrigerant system and control and protection system, applies step by step system to meet the loading capacity. The unit applies efficient hermetic type scroll compressor, low noise, small vibration, high EER and Microcomputer control. Besides, we manufacture R134a,R407C,R404A,R410a environmental friendly refrigerants, products with seawater source and non-standard power supply. The unit is suitable for installing in the outdoor, i.e roof; balcony and porch, which could save the boiler room and the special room; decrease the investment of building project and easy to install, manage and maintain.

— The Key Advantages Include —

- ECO friendly refrigerant R410a, R407c.
- Shell and tube heat exchanger for high performance, reliability, and resistance to freezing.
- Multi-function: provide cooling only, cooling with hot water, heating only and heating with hot water, hot water, total and partial heat recovery for domestic hot water heating.
- Unit choose efficient rotary or scroll compressor, the use of high efficient heat exchanger technology processing, condensation temperature greatly reduced, the COP is more 4.6 and higher 70% than air cooled heat pump.
- When multiple units were combined into a system, each unit can be individually ON/OFF, so, wide range of system energy regulation and running costs fell by more 40%.
- Unique compressor anti-vibration technology (patent ZL 2020 2 0246589.1) and sound attenuation material ensure ultra-quiet performance.
- Multi-system design and wear-and-tear management technology reduces electric impulse and extend service life.
- Modular network function: unit control system is equipped with the network communication, the user can control operating units quantity according to the actual use load, make user side water system utilities, to realize the automatic device management automation and energy management.
- Smart microchip control and large LCD user interface, capable of one-key startup.
- Automatic intelligent reset. Unit shall automatically restart 5 minutes after shutdown if the fault has cleared. Should a fault occur 3 times sequentially, then lockout will occur.
- Humanized design, widened application scope: the unit's temperature settings for room, hot water, water intake/outlet, freeze protection, and compressor exhaust can be adjusted on-site according to environmental conditions.
- Communication adapter connection the unit to BMS(Building Management System) is an optional accessory, please get in touch with us or our distributor if required.
- Unit with multi-protection to guarantee the unit running stability and security, such as: high/low voltage, low oil level protection, exhaust temperature, antifreeze, power lack/reverse phase,water system cut off. operating condition with small change range stable operation, safe, reliable and long service life.
- Easy installation, simple water piping system configuration, you can make design partition and divide second installation

— Technical Data —

Model			W02C2-75M	W02C2-110M	W02C2-150M
Cooling Condition	Rated cooling capacity	kW	75	110	149
	Input power	kW	14.1	21.2	28.2
	Chilled water flow	m ³ /h	12.5	18.8	25.1
	Chilled water pressure drop	kPa	42	43	43
	Cooling water flow	m ³ /h	15	22.4	29.9
	Cooling water pressure drop	kPa	45	46	46
Compressor	Type		Scroll		
	Brand		Copeland		
Refrigerant	Type		R410A		
	Charging rate	kg	15.5	23	31
	Controlling type		thermostatic expansion valve		
Power supply	V/Ph/Hz	380/3/50			
Energy control	%	0,50,100	0,33,66,100	0,25,50,75,100	
Safe protection device		High-low pressure protection , safe valve ,overload protection, Inverse/lack phase protection, water-lack, anti-freeze protector, overheat,and so on.			
Condenser	Heat exchanger	type	Shell and tube		
	Inlet/outlet diameter		DN65	DN65	DN65
Evaporator	Heat exchanger	type	Shell and tube		
	Inlet/outlet diameter		DN65	DN65	DN65
Noise	dB(A)	66	66	67	
Dimension	Length	mm	2150	2350	2900
	Width	mm	720	760	760
	Height	mm	1440	1440	1440
Unit weight	kg	355	459	658	

Notes:

1. These parameter were tested according to pure water,not include anti-freezing liquid and water pump power.
2. The nominal cooling capacities are based on the GB/T18430.1: Chilled Water Inlet/Outlet Temperature 12°C/7°C; Condenser Water Inlet/Outlet Temperature 30°C/35°C;
3. Units can realize 1~24 unit's modular connection and control energy-regulation automatically.
4. All models, sizes, dimensions, and specifications are subject to change without prior notice, please refer to nameplates for the most accurate specifications

— Delivery & Packaging —

- 100% test before delivering products.
- Products catalogue, installation & operation manual will be sent together.
- Tracking number will be sent to customer as soon as we ship the products.
- Item shipped in 25 working days against payment depends on the quantity.
- Four steps of packages, plastic film, foam, carton and plywood for stable transportation.
- Ocean shipping, railway shipment and air transportation are acceptable according to customer demand.

— You May Like —



Water Chiller

+



Cooling Tower

+



Fan Coil Unit

+



Hydraulic Module

+



Hydraulic balance distributor

+



Thermostat

Withair, your perfect partner for successful projects.



01/2017 - The technical data in this document are not binding.

Withair reserves the right to introduce at any time whatever modifications deemed necessary for improving the product.



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