Withair® HVACR SYSTEM SOLUTIONS OFFERING -

A full portfolio of solutions for comfort and process applications



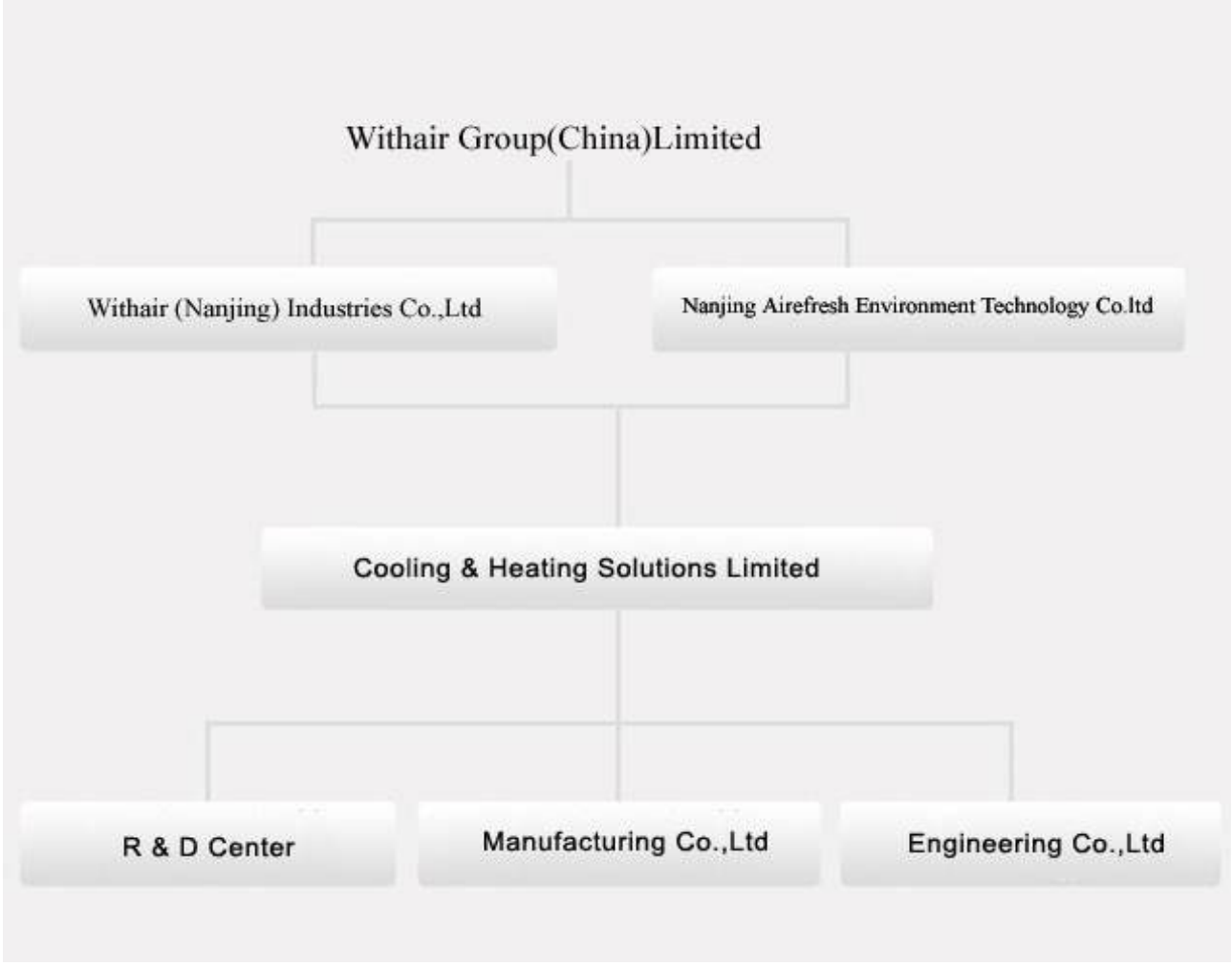
Withair® is a premium manufacturer in sustainable energy solutions supplying HVACR products & services for heating, cooling, hot water, indoor air quality, industrial refrigeration, heat recovery that reflect today's demand for sustainable construction, comfortable indoor climate, and industrial cooling & heating process application. We specialise in large scale and bespoke projects from data centres and hospitals to pharmaceutical facilities and process cooling..., We turn ideas into products. We specifically design heating and cooling solutions fit for any application and provide several flexible and bespoke systems to meet our customers' diverse heating and cooling requirements. We offer high-capacity bespoke products, adapted according to temperature, load and any other technical requirements to provide a completely tailor-made solution.

No matter which one you choose, you can rest easy knowing that every Withair® product is backed by the proven reliability and performance. It's how we help customers make the easy decision to choose Withair® — and how we continue to go beyond.

Innovation means continuous improvement, We believe that there is always room for improvement. And this belief is the driving force behind everything that we do at Withair®. From small improvements in the production process, to major breakthroughs that result in 70% energy savings, we aim to inspire technological change. With our own Product Development Centre, focus on energy-efficient products, we are creating climate solutions for all countries.

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BRIEF INTRODUCTION





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We've a lot of solutions
to care "Construction"


We've a lot of solutions
to care "Industries"


The Withair System
Cooling
Heating
Fresh air
Purification
Humidification
We've a lot of solutions
for "Air Quality"

WHO WE ARE

Our Vision

Driving new standards in the cooling, heating and IAQ sector.

Our Start

Founded in July 2006 by Dr.Ji Yongsheng, a HVAC expert with a rich 22-year background, Withair® represents a beacon of innovation and diversity in the HVAC sector. As a veteran and minority-owned enterprise, Withair® stands out for its unique perspective and expertise. The team, comprising industry veterans and professionals with over 30 years of combined experience, has achieved remarkable milestones, Withair® has advanced Product Development & Engineering Design Center, as well as two Manufacturing Plants.

Our Impact

Withair's rapid growth is a testament to its impactful vision. securing significant partnerships with global leaders like YORK, DAIKIN, HITACHI, CVMORE, and generating substantial revenue. Withair® is not just a company; it's a movement towards a more sustainable and efficient future in renewable energy and air quality, driven by innovation and an unwavering commitment to resolving industry pain points for the benefit of the planet."

Our Core

At the core of our vision is a commitment to significantly enhance the efficiency of energy and help improve the environment that we all live in by supplying energy-efficient and environmentally friendly solutions.

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Manufacturing Facilities Show

Withair® is a global provider of technical products and services for sustainability and resource management, specialize in heating & cooling system, air quality system and clean energy technology development and utilization, now it has two factories, manufacturing different kinds of products, and committed to providing the first-class products & system solutions for clients.

Lean production: perfection is our benchmark

Rational use of systems, an increase in efficiency, less warehouse stock, immediate solutions to any design errors, the elimination of waste and a decrease in costs - these are just some of the results we have achieved thanks to strict application of the principles of lean production.

Reducing time, used space, costs and errors means we are able to respond with maximum flexibility, precision and speed to any customer's requirements, offering the best possible products at competitive prices.

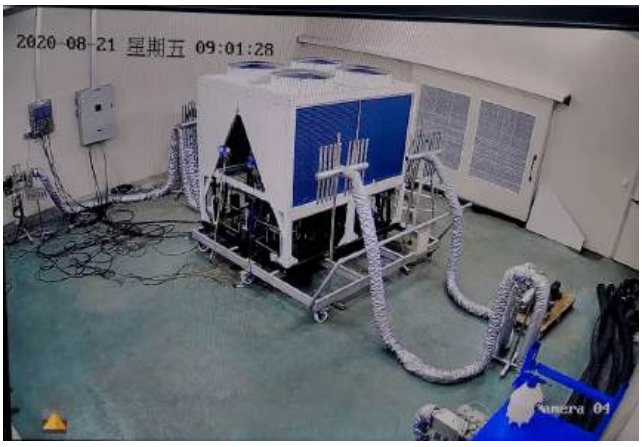




Performance Testing Rooms












Performing simulation testing room (ARI condition)
The test facilities can simulate real circumstance assuring operation in differing climates

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Manufacturing Facilities











Heat exchanger production lines

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Manufacturing Facilities








Air-cooled Heat Pump & Chiller Production Lines

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Water Source Heat Pump Production Lines

Manufacturing Facilities







Water Cooled Screw Chiller Production Lines

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Package Rooftop Unit Production Lines

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Package Rooftop Unit Production Lines

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DX Split Unit Production Lines

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DX Split Unit Production Lines

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Manufacturing Facilities








Air Handler Production Lines

Quality Supply Chain

Strong cooperation and creating good quality

A. Compressors









B. Refrigerant accessories









C.Electric parts









The parts you need, when you need them. Withair® offers a full-line of quality universal HVACR affordable parts and supplies that will work on all models. Our team is committed to delivering solutions to help you meet your customers' needs and grow your business. We have the parts, supplies and replacement equipment you need, when you need it, with the knowledge to support you from start to finish.

Factory Authorized Parts have been designed and built specifically for Withair® equipment. These parts are the perfect fit, restoring equipment to its original performance and are available at your local equipment distributor. You should know that Factory Authorized Parts are always the right choice. When you choose to install a Factory Authorized Part, you'll not only find an exact, drop-in replacement, but you'll also find an option that maintains original OEM efficiency – that means a better solution for you.

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Quality Commitment

Withair® is committed to providing the highest value products and services to our clients. as part of this commitment, we conform to strict quality control procedures globally based on ISO9001,ISO14001 and OHSAS18001.our goal is to exceed the quality requirements set by our clients.

Our quality commitment is met through implementation of the following general objectives:
Thoroughly understand and meet customer's requirements and those of relevant regulatory authorities.
Abide by all local, state and federal laws and regulations.
Use only reliable, properly maintained and accurate equipment.
Apply appropriate testing standards and methods.
Employ fully trained specialized staff.
Keep abreast of changes in standards and available methods.
Participate in regular independent performance audits.
Provide authority and resources for initiation and assessment of corrective actions.

Basic unit shall be rated in accordance with ISO/ASHRAE Standards, all units shall be factory tested under normal operating conditions at nominal water flow rates to assure proper operation of all components and safety devices.

To this end, we have designated a Quality Leadership group that has the authority and resources to implement and maintain this quality plan. they will ensure that we operate under this plan at all times, at all levels of the organization, and at all locations where we perform work.

All Withair® equipment is sold pursuant to its standard terms and conditions of sale, including limited product warranty.

Consult your local Withair®applied representative for warranty details.

All Withair® products manufactured in an ISO Certified Facility.



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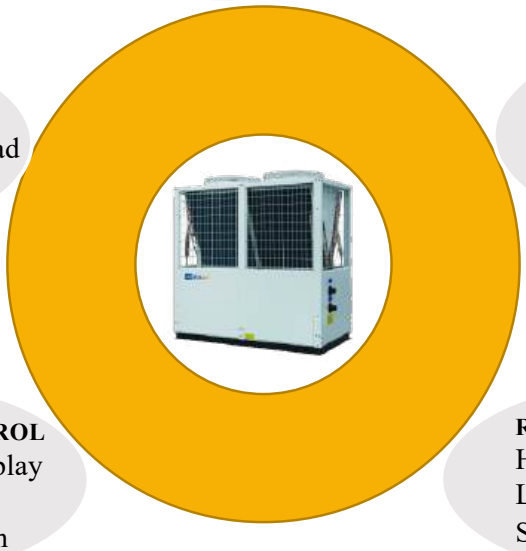
AIR-COOLED CHILLERS

COMPLETE, ULTIMATE FLEXIBILITY

Withair® Chillers make cold water or water/glycol fluid mixture to cool buildings or processes. An air cooled chiller rejects the heat absorbed from the building or process directly to the outdoor air using refrigerant to air coils and fans that blow outdoor air directly over those coils.

SUPERIOR PERFORMANCE
EER up to 3.20, IPLV 6.0
Stable power factor 0.95
±0.5° C Temperature Control

QUIET OPERATION
Inverter Technology
Down to 68dBA at full load
Extra - 5dBA at part load



GREAT FLEXIBILITY
Easy Installation
Easy Layout
Easy Operation
Easy Maintenance

INTELLIGENT CONTROL
5.5" touch screen display
6 steps VFD control
10+ control protection

ROBUST RELIABILITY
High Quality Compressor
Low Inrush Current
Superior redundancy



APPLICATIONS:

- HEALTHCARE
- OFFICE BUILDINGS
- SCHOOLS
- HOSPITALITY
- DATA CENTERS
- INDUSTRIAL & MANUFACTURING

Air-Cooled Chillers -

A full portfolio of solutions for comfort and process applications



As buildings continue to evolve in size and function, their cooling systems must meet increasingly rigorous demands in an efficient and sustainable way. But often, what works for one project may not work for another, even with similar specifications. Location, utility rates and architectural features all introduce challenging variables that must be accounted for.

That's why Withair® has developed a robust portfolio of air-cooled chillers with intentional overlap in capacity, efficiency and sound performance. Our large selection gives customers the ability to make targeted equipment customizations with the opportunity to reduce energy intensity and lessen environmental impact.

The result is numerous system designs and chiller configurations with a variety of possible efficiency levels. So, whether our customers are calculating energy efficiency to meet local code requirements, selecting an HVAC system with the lowest operating costs, there's a Withair® solution for you.

No matter which one you choose, you can rest easy knowing that every Withair® product is backed by the proven reliability and performance. It's how we help customers make the easy decision to choose Withair® — and how we continue to go beyond.

Read on to see which Withair® air-cooled chiller model is right for your project.

No matter your application, there's a Withair® air-cooled chiller that's right for you !

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Air-Cooled (Mini) Chillers

Capacity	Model & Description

8.2 to 52.4 kW
2 to 15 tons



Model W02C1-1 series
Refrigerant: R-454B, R-410A, R32
Compressor: DC Inverter Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Heat recovery sites.
Unique features: DC Inverter scroll compressor(10~120Hz); 60Hz~330Hz inverter controller; Advanced microcomputer automatic control system; Brazed plate heat-exchanger; BAS communications; Self-diagnosis; Easy serviceability; Great flexibility; Robust reliability; Easy layout; Unique compressor anti-vibration technology.
Factory-installed options: VSD hydronic pump kit; ECM fans; Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉); Heat recovery capability; Double-pipe heat-exchanger; Flow switch; Metallic filter; Expansion tank; Anti-corrosion and Sound-reduction packages, etc.

Overview

Withair® **Air Cooled DC Inverter (Mini) Chiller** is a very intelligent chiller system with flexible capacity output. It could adjust cooling capacity output automatically according to requirements. It is much more energy-saving with a long lifespan. and provides energy-efficient room cooling for residential and small commercial application. Using free renewable energy from the air, the units are highly efficient with low running costs, low carbon emission.

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2 to 422 kW
0.57 to 120 tons



Model W02C1-1 series
Refrigerant: R-454B, R-410A, R32
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Unique features: In house engineered microprocessor control; High efficiency heat-exchanger; Easy serviceability; Great flexibility; Robust reliability; Service isolation valves; Intelligent energy management technology; Intelligent air volume management; Multiple protection functions; Saw-shaped condenser fan blades; High precision electronic expansion valve; Compact design, smaller footprint.
Factory-installed options: Hydronic pump kit; ECM fans; Heat Pump; Heat recovery capability; Flow switch; Metallic filter; Expansion tank; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair's next-generation of **Industrial Chiller Unit** is applicable for industrial applications, and requirements on energy saving and environment protection. It can operate for refrigerant at the ambient temperature of -20℃~48℃ all the year round, fully meeting the requirements of various industry applications for chilled water (+20~+5℃, -5/-15/-35℃) throughout the year. Temperature control accuracy as low as ±0.1℃. The temperature difference range from 3 to 20 ℃.

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Modular Air-Cooled Scroll Chillers

Capacity	Model & Description

72 to 565 kW
20 to 160 tons



Model W02C1 series

Free cooling economizer as option

Refrigerant: R-454B, R-410A, R32
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling.
Unique features: Shell & tube heat-exchanger; Smart control; BAS communications; Easy serviceability; Great flexibility; Robust reliability; Service isolation valves; Ease of installation; Easy layout.
Factory-installed options: Hydronic pump kit; Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉); Heat recovery capability; Brazed plate heat-exchanger; Flow switch; Metallic filter; Expansion tank; Anti-corrosion and Sound-reduction packages, etc.

Overview

Withair® **Modular Air-Cooled Scroll Chiller** offers the perfect combination of flexibility, efficiency and low noise. Available in sizes ranging from 20 to 160 tons with a compact footprint. There are multiple levels of efficiency to choose from to comply with your local code requirements.

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72 to 565 kW
20 to 160 tons



Model W02C1-I series

Free cooling economizer as option

Refrigerant: R-454B, R-410A, R32
Compressor: Inverter Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling;
Unique features: Inverter scroll compressor(10~120Hz); Easy layout; 60Hz~330Hz inverter controller; BAS communications; High precision of temperature control; Shell & tube heat-exchanger; Fast cooling; Superior performance.
Factory-installed options: VSD hydronic pump kit; Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉); VSD/EC fans; Heat recovery capability; Brazed plate heat-exchanger; Flow switch; Metallic filter; Expansion tank; Anti-corrosion and Sound-reduction packages, etc.

Overview

In an effort to reduce the energy consumed by cooling & heating, Withair® has developed the W02C1-I series **Modular Inverter Scroll Chiller** by leveraging the latest DC inverter compressor technology, Variable Speed Drive (VSD), offering the right balance of energy efficiency and quiet operation. Its exceptional efficiency at both full load and part load set new benchmarks for the industry, making the new inverter chiller stand out as the premium solution for small-to-medium size commercial and industrial applications, making them ideal for buildings with a large amount of off-peak operation.

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Air-Cooled Screw Compressor Chillers

Capacity	Model & Description

200 to 1,516 kW
60 to 460 tons



Model W02C1-S series

Free cooling economizer as option

Refrigerant: R-513B, R-134a, R-407C
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling;
Unique features: BAS communications; Shell and tube condenser; DX evaporator; Capacity turndown to 10 percent load; Operation from -17℃ (0°F) to 125℃ (51°F) ambient; Microprocessor control center touch-screen; Easy serviceability; Great flexibility; Robust reliability.
Factory-installed options: Hydronic pump kit; Extreme low-ambient kit to -35℃ (-31°F); High ambient kit to 55℃ (131°F); Quick start; Heat recovery capability; Electrostatic coating; Flow switch; Metallic filter; Expansion tank; Anti-corrosion; Sound-reduction packages, etc.

Overview

The W02C1-S series Withair® **Air-Cooled Screw Chiller** is designed to meet current and future requirements in terms of reliability, energy efficiency and intelligent control. we adopt touchable screen display and Siemens PLC controls, twin-rotor screw compressors, low operating noise benefit from low-noise, low-vibration fans and double-wall structure screw compressor.

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200 to 1,516 kW
60 to 460 tons



Model W02C1-SV series

Free cooling economizer as option

Refrigerant: R-513B, R-134a, R-407C
Compressor: VSD Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling;
Unique features: Variable speed drive; Shell and tube condenser; DX evaporator; Siemens PLC control system; BAS communications; Operation from -29℃ (-20°F) to 55℃ (131°F) ambient; High precision of temperature control; Superior performance; Variable flow rates.
Factory-installed options: VSD hydronic pump kit; VSD/EC fans; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Heat recovery capability; Quick start; Electrostatic coating; Flow switch; Expansion tank; Anti-corrosion, Sound-reduction packages, etc.

Overview

The W02C1-SV series **Air-Cooled, Variable-Speed Drive (VSD) screw chiller** from Withair® is designed to improve reliability and performance through proven technology and a customizable, highly optimized design. Installed across the globe, the chiller offers a tailored solution for a broad range of applications. variable volume rates improves part-load efficiency makes the chiller a great choice in a variety of applications. With optional Quick Start technology, the Withair® Air-Cooled Screw Chiller is the more reliable, lower maintenance solution for high-efficiency cooling.

WATER-COOLED CHILLERS

ENERGY SAVINGS BUILDING OWNERS DEMAND

Withair® Chillers make cold water or water/glycol fluid mixture to cool buildings or processes. A water-cooled chiller rejects the absorbed heat to an additional fluid loop that can then reject the heat through a secondary device such as a cooling tower or dry cooler.





APPLICATIONS:

- HEALTHCARE
- OFFICE BUILDINGS
- SCHOOLS
- HOSPITALITY
- DATA CENTERS
- INDUSTRIAL & MANUFACTURING

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Water-Cooled Chillers -

A full portfolio of solutions for comfort and process applications



Withair® offers complete, factory-assembled scroll and screw compressor water cooled chiller that offer ease of installation with wiring and microprocessor controllers providing maximum operating efficiency. Withair® chillers install easily and quickly into most building layouts, making them ideal choices for retrofit or new building designs.

Withair® Water-Cooled Chiller Solutions help meet your efficiency needs with the wider variety of water-cooled industrial and commercial chillers on the market. From reducing your facility's carbon footprint, to cutting operating costs, our energy-efficient chillers are tailored to fit almost any application.

Withair® Water-Cooled Chiller optimized system design and enhanced heat exchange efficiency makes the unit working best under both full load and partial load. Every chiller is fully factory tested and refrigerant charged in the factory before dispatch. It' s good choice for hotel, shopping mall, hospital, factory, cinema and other buildings air conditioning system. Besides, it is widely used in plastic industry, electroplating industry, food processing, chemical industry, pharmaceutical industry and other process cooling applications of modern manufacturing industries which needs a lot of chilled . The units can be operated with the utmost simplicity.

Whatever interior comfort, Low-temperature process cooling, advanced and specialized applications, for so many customers and their buildings, Withair® chillers are more than a refreshingly different choice.

Cut energy consumption and emissions by Withair® Chilled Water Systems !

Small Capacity Water-Cooled Scroll Chillers

Capacity	Model & Description

8 to 140 kW
2 to 40 tons



Model W02C2 series
Refrigerant: R-454B, R-410A, R32
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling; Data centers.
Unique features: Smart control; Multi-protections; One-key startup; Automatic intelligent reset; Brazed plate heat-exchanger; Easy serviceability; Robust reliability; Easy to install; BAS communications.
Factory-installed options: Hydronic pump kit; Heat recovery; Double-pipe heat exchanger; Expansion tank; Safety valve; Vibration Isolators; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair® is proud to offer an extensive line of **Water-Cooled Mini Chillers** ranging from 2 to 40 tons. The water-cooled mini chillers featured a variety of models and options engineered to fit a wide range of applications. Withair® Water-Cooled Mini Chillers are ideal for customers who are focused on high energy efficiency, superior reliability and long equipment life.

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72 to 280 kW
20 to 80 tons



Model W02C2 series
Refrigerant: R-454B, R-410A, R32
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling; Data centers.
Unique features: Smart control; Multi-protections; One-key startup; Automatic intelligent reset; BAS communications; Robust reliability; Easy layout; Shell & tube heat-exchanger; Modular network functions.
Factory-installed options: Hydronic pump kit; Heat recovery; Flow switch; Metallic filter; Expansion tank; Safety valve; Vibration Isolators; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair® **Modular Water-Cooled Chillers** are complete factory- assembled units designed for a wide range of comfort and process cooling applications, and can be easily combined to meet higher capacity demands and are easy to install in most building layouts. This makes them the ideal choice for retrofit or new building designs where reliability, serviceability, high efficiency, flexibility, and expandability are critical.

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Water-Cooled Screw Chillers

Capacity	Model & Description

116 to 3,253 kW
33 to 930 tons



Model W02C2-S series
Refrigerant: R-513A, R134a
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and district cooling; Glycol chilling; Heat pumps; Heat recovery sites; Process/industrial cooling; Data centers.
Unique features: Siemens PLC control system; BAS communications; Shell and tube condenser; DX evaporator; Capacity turndown to 10 percent load; Microprocessor control center touch-screen; Easy serviceability; Great flexibility; Robust reliability; Heat pump to 85℃.
Factory-installed options: Heat recovery; Ice storage; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Electrostatic coating; Hydronic pump kit; Anti-corrosion; Sound-reduction packages.

Overview

Withair® W02C2-S series **Water-Cooled Screw Chillers** are designed for all the conveniences of chilled water, air-conditioning systems, from reducing your facility's carbon footprint, to cutting operating costs, our energy-efficient chillers are tailored to fit almost any application. especially for hotels, stores, hospitals and process cooling applications of modern manufacturing industries.

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116 to 3,253 kW
33 to 930 tons



Model W02C1-SV series
Refrigerant: R-513A, R134a
Compressor: VSD Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and district cooling; Glycol chilling; Heat pumps; Heat recovery sites; Process/industrial cooling; Data centers.
Unique features: Variable speed drive; Shell and tube condenser; Variable flow rate; Siemens PLC control system; Superior performance; BAS communications; High precision of temperature control; Easy serviceability; Great flexibility; Robust reliability; Heat pump to 85℃.
Factory-installed options: VSD hydronic pump kit; Heat recovery; Ice storage; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Electrostatic coating; Anti-corrosion; Sound-reduction packages;

Overview

You need a chiller that delivers reliable cooling performance — and offers the capacity, energy efficiency and lasting value your unique application requires. This is why you need a Withair® W02C2-SV series **Water-Cooled VSD Screw Chiller**. Designed for faster, easier installations, the chillers can immediately add value to new and retrofit projects. That value continues over long lifetimes, with very low maintenance requirements and enhanced energy-efficiency options that can significantly reduce operating costs.

Medium/Low/Ultra-low Temp. Water-Cooled Screw Chillers

Capacity	Model & Description

58 to 2,262 kW
16 to 650 tons



Model W02C2-ML series
Refrigerant: R-404A, R-507A, R-513A
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Process/industrial cooling; Heat recovery sites.
Unique features: BAS communications; Shell and tube condenser; DX evaporator; Solution spray technology; Y-△ startup; Heat recovery technology for waste heat utilization; Siemens PLC control technology; Oil separator; Easy serviceability; Great flexibility; Robust reliability.
Factory-installed options: Heat recovery; Ice storage; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Electrostatic coating; Hydronic pump kit; Anti-corrosion; Sound-reduction packages;

Overview

Withair® **Medium and Low Temperature Water-Cooled Screw Chiller** is a highly effective, energy saving and environment protection of the fifth generation chiller. The chiller can provide -45℃~0℃ medium and low temperatures and a secondary refrigerant that may be applied to any place where there is a demand for varieties of medium and low temperature cold sources. This can assist with the production process of any industry, i.e. pharmaceutical, chemistry, metallurgy, electronic and food, etc., and act as the cold source of large size refrigerators and ice stadiums.

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65 to 657 kW
20 to 190 tons



Model W02C1-UL series
Refrigerant: R-404A, R-507A, R-513A
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Process/industrial cooling; Heat recovery sites.
Unique features: BAS communications; Shell and tube condenser; DX evaporator; Siemens PLC control system; Superior performance.
Factory-installed options: Hydronic pump kit; Heat recovery; Hybrid falling film evaporator; Vibration Isolators; Anti-corrosion; Integrated waterside economizer; Evaporator inlet strainer; Electrostatic coating; Sound-reduction packages,etc.

Overview

Withair® next generation of **Low Temperature / Ultralow Temperature Screw Chiller** integrated the advanced technology with high efficiency, energy-saving, environmental protection and high reliability. Chillers provide -35℃(-31℉) to -145℃(-229℉) low temperature fluid (brine, alcohols). This series of products can meet the needs of the following different processes:

* Pharmaceutical and chemical industries;
* Low temperature quenching in the metal heat treatment industry;
* Low temperature test chamber for parts and components test;
* Low temperature recovery of oil and gas in petrochemical industry;
* Ultra-low temperature processing and storage in the food industry;
* Cryogenic weapon storage in the military industry;
* Other related places with low temperature/ultra-low temperature requirements.

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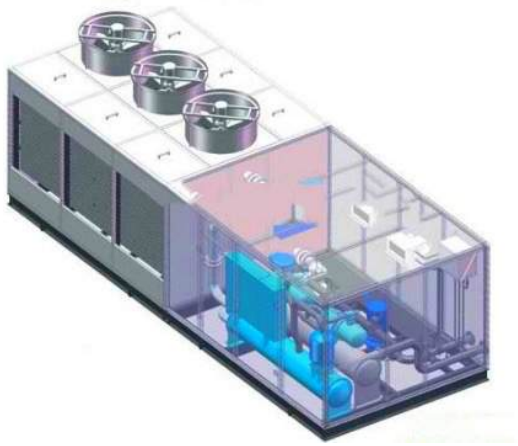
MODULAR CENTRAL PLANT (MCP)

SCALABLE SOLUTIONS TO ACCOMODATE EXPANSION

When building for today with an eye toward tomorrow, pick a scalable solution that can accommodate expansion in the years ahead. A Withair® MCP is a complete central plant including all components: chillers, boilers, domestic hot water, pumps, piping, electrical, controls and cooling towers.

Each modular central plant (MCP) is custom designed and fabricated in our production facility by a certified team for your specific project. Before shipping to the installation site, each MCP is fully assembled and tested in the factory.





Capacity: 100 to 660 tons

BENEFITS:

* 100% turnkey
* Fits specific footprint
* Meets fast-track jobs
* Lowest cost per ton
* Custom engineered

SOLUTIONS:

* Modular construction, easy walk-in access
* Complete management through delivery
* Simplified single-source responsibility
* Scalable for ongoing building expansions

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MODULAR CENTRAL PLANT (MCP)

Capacity	Model & Description

70 to 1,756 kW
20 to 500 tons



Model W02C2-IEC series
Refrigerant: R-404A, R-507A, R-513A
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort/process cooling; Heat recovery sites.
Unique features: Superior performance(up to 48% energy saving, water consumption dropped by 86%); Zero engineering design; Lowering installation costs; No need foundation and machine room; Compact design and smaller footprint; Suitable for any conditions.
Factory-installed options: Heat recovery; Ice storage; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Electrostatic coating; Anti-corrosion; Sound-reduction packages, etc;

Overview

Withair® **MODULAR CENTRAL PLANT (MCP)** integrates water chiller unit, cooling tower, cooling water pump, chilled water pump, expansion tank, and control system. After being debugged properly in factory and then delivered, the product needs no special machine room, which helps simplify the design for air conditioning or the refrigeration system engineering. Quick installation and easy to use. It is suitable for the cooling places such as hotels, shopping malls, cinemas, restaurants, restaurants, entertainment places, offices and so on. Also for chemical plants, pharmaceutical factories, electronic factories and other process cold source systems.

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28 to 200 kW
8 to 58 tons



Model W02C2-DY series
Refrigerant: R-454B, R-410A
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort cooling; Data centers.
Unique features: Shell & tube heat-exchanger; One-key startup; Microcomputer control; Easy serviceability; Two layers of filtration; Great flexibility; Robust reliability; Multiple protection functions; Intelligent energy management technology.
Factory-installed options: Hydraulic module; Heat recovery; Flow switch; Metallic filter; Auxiliary electrical heating; Two types discharge air outlet: top discharge air and side discharge air; Anti-corrosion; Sound-reduction packages, etc;

Overview

Withair® indoor **Water-cooled Packaged Unit** is designed for vertical installation, a variety of airflow configurations, and cooling only operation. These units provide a versatile and economical approach to comfort conditioning requirements in replacement, renovation, and new construction applications. With a small footprint and quiet operation, a cost-effective stand-alone cooling system permits installation anywhere in the building eliminating the need for an equipment room. the systems provide ultimate flexibility, efficiency, affordability, quiet and control. Just select the best cooling source for your system, whether air, water or remote-cooled, and enjoy the energy savings that come with highly efficient advanced scroll technology.

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PACKAGED & SPLIT DX SYSTEMS

ADVANCED TECHNOLOGIES, UNPARALLELED PERFORMANCE

Withair® Packaged & Split DX Systems have provided heating and air conditioning solutions for demanding applications and deliver the simplicity, efficiency and long-term reliability that give you the competitive advantage you need. Withair® offers the broadest selection of split & packaged system components. Design the system you need for a corner retail shop, light commercial application, office building, hotel, school and more. Choose from gas furnace and indoor coil options for smaller buildings to a full line of air handler units and compressors with capacities from 0.6 - 120 tons. With our split systems, a wide range of outdoor air conditioners and heat pumps works seamlessly with innovative indoor air handlers to create reliable solutions that are easy-to-install and service for a wide range of commercial HVAC needs. Our units are designed with the flexibility and compact footprint you need for easy installation.





APPLICATIONS:

- HEALTHCARE
- OFFICE BUILDINGS
- SCHOOLS
- HOSPITALITY
- DATA CENTERS
- INDUSTRIAL & MANUFACTURING

Packaged & Split DX Systems -

A full portfolio of solutions for comfort and process applications



Whether for a large data center, a complex commercial concern or a small business, Withair® offers sustainable options to deliver customized comfort and efficiency. For commercial projects small or large, we've got you covered. Our packaged units and split systems are available in a broad range of capacities. All with Withair® quality, efficiency and reliability.

Our systems have provided heating and air conditioning solutions for demanding applications and deliver the simplicity, efficiency and long-term reliability that give you the competitive advantage you need. and offers the broadest selection of split & packaged system components. Design the system you need for a corner retail shop, light commercial application, office building, hotel, school and more. With our systems, a wide range of outdoor air conditioners and heat pumps works seamlessly with innovative indoor air handlers to create reliable solutions that are easy-to-install and service for a wide range of commercial HVAC needs. Units are designed with the flexibility and compact footprint you need for easy installation.

Withair's small packaged rooftop systems, Ideal for small buildings, provide cost-effective options to increase comfort and energy efficiency, while simplifying operation and maintenance. These packaged systems make advanced functionality affordable and easy for non-technical users to operate.

Withair's light commercial packaged rooftop units deliver reliable and efficient comfort in small to medium size commercial buildings with either single or multiple zones. Our broad portfolio of solutions can meet any building's footprint requirements and are easy to install and maintain.

Withair's large commercial packaged rooftop units offer superior performance and connectivity for more complex building applications, such as data centers or health care facilities, with more rigorous requirements and single or multiple zones.

Healthy, performance, comfort and efficiency for any building, any size.

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Packaged & Split DX Systems

Capacity	Model & Description

10 to 840 kW
3 to 239 tons



Model W06R1-I series
Refrigerant: R-454B, R-410A, R32
Compressor: DC Inverter Hermetic Scroll
Power supply : 50 and 60 Hz
Ideal applications: Superior comfort and efficiency for small buildings
Unique features : DC Inverter scroll compressor(10~120Hz); 60Hz~330Hz inverter controller; BAS communications; Self-diagnosis function; High precision of temperature control; Easy layout.
Factory-installed options: Roof Mounting Curb, Indirect Gas-Fired Heating, Electric Heating, BMS system, Economizer, Heat Recovery, Hot Gas Reheat, Outdoor EC Axial Fan, Extraction Fan, Humidifier, Outdoor Air, Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉), Antimicrobial UV lights; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair's **Packaged Rooftop Unit (RTU)** offer superior indoor air quality, industry leading energy efficiency, and provides a full line of rooftop unit to meet demanding HVAC systems requirements, easy to install and maintain for new construction or replacement projects and deliver reliable and efficient comfort in small to big size buildings with either single or multiple zones. Delivers simplicity and performance that give you an advantage on almost every rooftop project.

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10 to 840 kW
3 to 239 tons



Model W06R1-I series
Refrigerant: R-454B, R-410A, R32
Compressor: DC Inverter Hermetic Scroll
Power supply : 50 and 60 Hz
Ideal applications: Adaptable rooftop solutions for any buildings
Unique features : DC Inverter scroll compressor(10~120Hz); 60Hz~330Hz inverter controller; BAS communications; Self-diagnosis function; High precision of temperature control; Easy layout.
Factory-installed options: Roof Mounting Curb, Indirect Gas-Fired Heating, Electric Heating, BMS system, Economizer, Heat Recovery, Hot Gas Reheat, Outdoor EC Axial Fan, Extraction Fan, Humidifier, Outdoor Air, Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉), Antimicrobial UV lights; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair's **Dedicated Outdoor Air Systems (DOAS)** are designed to condition up to 100% of outdoor air year-round, reduce latent loads, enhance comfort and energy efficiency, and maintain your building's health. and help improve IAQ to keep your building optimized and the people in your building comfortable. It delivers up to 100% fresh air into your building and meets the ventilation requirements, indicating its ability to help minimize adverse health effects for occupants and helping you dilute the buildup of contaminants in your building — a critical step for improving indoor air quality.

Packaged & Split Systems

Capacity	Model & Description
10 to 530 kW **3 to 150 tons** 	**Model W01R1-TW series** **Refrigerant:** R-454B, R-410A, R32 **Compressor:** DC Inverter Hermetic Scroll **Power supply :** 50 and 60 Hz **Ideal applications:** Superior comfort and efficiency for small buildings **Unique features :** DC Inverter scroll compressor(10~120Hz); 60Hz~330Hz inverter controller; BAS communications; Self-diagnosis function; High precision of temperature control; Easy layout. **Factory-installed options:** Microchannel Coils; Blue or Golden Epoxy Pre-Coated Coils; Ultraviolet Air Sterilization Lamp; Compressor Soundproof System; Modbus, BACnet Communications Interface Wireless Components; Humidity Control; Electric Heaters, etc.

Overview

Almost invisible, powerful, noiseless and space-saving: this is the Withair® **DC Inverter Through Wall Packaged Heat Pumps Air Conditioner** without an external unit. No more of the usual bulky, unsightly condensing units that spoil homes. Withair® has developed a high-efficiency solution with a hyper-compact design that minimises aesthetic impact. Just 16 centimetres deep, super simple installation and DC Inverter technology to optimise performance.

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10 to 175 kW **2 to 50 tons** 	**Model W01R1-S series** **Refrigerant:** R-454B, R-410A, R32 **Compressor:** DC Inverter Hermetic Scroll **Power supply :** 50 and 60 Hz **Ideal applications:** Adaptable rooftop solutions for any buildings **Unique features :** DC Inverter scroll compressor(10~120Hz); 60Hz~330Hz inverter controller; BAS communications; Self-diagnosis function; High precision of temperature control; Easy layout. **Factory-installed options:** Pleated media filters (MERV-8, MERV-13, MERV-14, or a combination filters), Anti-corrosion Cabinet and Structure, Electric Heating, BMS system, Humidifier, Outdoor Air, Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉), Antimicrobial UV lights; Sound-reduction packages, etc.

Overview

Withair® **Commercial Split DX Systems** have provided heating and air conditioning solutions for demanding applications and deliver the simplicity, efficiency and long-term reliability that give you the competitive advantage you need. Withair® offers the broadest selection of split system components. Design the system you need for a corner retail shop, light commercial application, office building, hotel, school and more. With our split systems, a wide range of outdoor air conditioners and heat pumps works seamlessly with innovative indoor air handlers to create reliable solutions that are easy-to-install and service for a wide range of commercial HVAC needs.

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AIR-COOLED HEAT PUMPS

PROVEN PERFORMANCE BACKED BY CAREFUL ENGINEERING

As buildings continue to evolve in size and function, their heating & cooling systems must meet increasingly rigorous demands in an efficient and sustainable way. The result is numerous system designs and heat pump configurations with a variety of possible efficiency levels. So, whether our customers are calculating energy efficiency to meet local code requirements, selecting an HVAC system with the lowest operating costs, there's a Withair® solution for you. No matter which one you choose, you can rest easy knowing that every Withair® product is backed by the proven reliability and performance. It's how we help customers make the easy decision to choose Withair® — and how we continue to go beyond.





APPLICATIONS:

- HEALTHCARE
- OFFICE BUILDINGS
- SCHOOLS
- HOSPITALITY
- DATA CENTERS
- INDUSTRIAL & MANUFACTURING

Air-Cooled Heat Pumps -

A full portfolio of solutions for comfort and process applications



As buildings continue to evolve in size and function, their cooling & heating systems must meet increasingly rigorous demands in an efficient and sustainable way. But often, what works for one project may not work for another, even with similar specifications. Location, utility rates and architectural features all introduce challenging variables that must be accounted for.

That's why Withair® has developed a robust portfolio of air-cooled heat pumps with intentional overlap in capacity, efficiency and sound performance. Our large selection gives customers the ability to make targeted equipment customizations with the opportunity to reduce energy intensity and lessen environmental impact.

The result is numerous system designs and heat pump configurations with a variety of possible efficiency levels. So, whether our customers are calculating energy efficiency to meet local code requirements, selecting an HVAC system with the lowest operating costs, there's a Withair® solution for you.

No matter which one you choose, you can rest easy knowing that every Withair® product is backed by the proven reliability and performance. It's how we help customers make the easy decision to choose Withair® — and how we continue to go beyond.

Read on to see which Withair® air-cooled heat pump model is right for your project.

No matter your application, there's a Withair® air-cooled heat pump that's right for you !

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Air-Cooled (Mini) Heat Pumps & Chillers

Capacity	Model & Description

8.2 to 52.4 kW
2 to 15 tons



Model W01R1-I series
Refrigerant: R-454B, R-410A
Compressor: DC Inverter Hermetic Scroll
Power supply : 50 and 60 Hz
Ideal applications: Comfort and process cooling; Heat recovery sites.
Unique features : DC Inverter scroll compressor(10~120Hz); 60Hz~330Hz inverter controller; BAS communications; Self-diagnosis function; High precision of temperature control; Brazed plate heat-exchanger; Superior performance; Easy layout.
Factory-installed options: VSD hydronic pump kit; ECM fans; Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉); Heat recovery capability; Double-pipe heat-exchanger; Flow switch; Metallic filter; Expansion tank; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair® **Air Cooled DC Inverter (Mini) Heat Pump & Chiller** is a very intelligent system with flexible capacity output. It could adjust cooling/heating capacity output automatically according to requirements. It is much more energy-saving with a long lifespan. and provides energy-efficient room cooling/heating for residential and small commercial application. Using free renewable energy from the air, the units are highly efficient with low running costs, low carbon emission.

8.2 to 52.4 kW
2 to 15 tons



Model W01R1-IR4 series
Refrigerant: R32
Compressor: DC Inverter Hermetic Scroll
Power supply : 50 and 60 Hz
Ideal applications: Comfort and process cooling; Heat recovery sites.
Unique features : DC Inverter scroll compressor(10~120Hz); 60Hz~330Hz inverter controller; BAS communications; Self-diagnosis function; High precision of temperature control; Brazed plate heat-exchanger; Superior performance; Easy layout.
Factory-installed options: VSD hydronic pump kit; ECM fans; Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉); Heat recovery capability; Double-pipe heat-exchanger; Flow switch; Metallic filter; Expansion tank; Anti-corrosion; Sound-reduction packages, etc.

Overview

The new generation Withair® **Small Full Inverter Chiller & Heat Pump** uses R-32 refrigerant to reduce drastically the carbon footprint of the unit. The selection of R-32 (chemical name difluoromethane) minimises the global warming impact of scroll compressor units thanks to the lower Global Warming Potential in combination with high-energy efficiency. The Global Warming Potential of R-32 is 675, which is only one third of the commonly used refrigerant R-410A.Thanks to the low flammability classification (R-32 refrigerant is classified A2L in ISO817), it can be safely used in many applications including chilled water systems. Being a single component refrigerant, R-32 is also easier to recycle and reuse, that is another environmental plus in its favour.

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Modular Air-Cooled Scroll Heat Pumps & Chillers

Capacity	Model & Description

72 to 565 kW
20 to 160 tons



Model W01R1 series

Free cooling economizer as option

Refrigerant: R-454B, R-410A, R32
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling.
Unique features: Shell & tube heat-exchanger; Smart control; BAS communications; Easy serviceability; Great flexibility; Robust reliability; Service isolation valves; Ease of installation; Easy layout; Multiple protection functions; Compact design and smaller footprint.
Factory-installed options: Hydronic pump kit; Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉); Heat recovery capability; Brazed plate heat-exchanger; Flow switch; Metallic filter; Expansion tank; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair® **Modular Air-Cooled Scroll Heat Pump & Chiller** offers the perfect combination of flexibility, efficiency and low noise. Available in sizes ranging from 20 to 160 tons with a compact footprint. There are multiple levels of efficiency to choose from to comply with your local code requirements.

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72 to 565 kW
20 to 160 tons



Model W01R1-I series

Free cooling economizer as option

Refrigerant: R-454B, R-410A, R32
Compressor: Inverter Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling;
Unique features: Inverter scroll compressor(10~120Hz); 60Hz~330Hz inverter controller; BAS communications; Easy layout; High precision of temperature control; Shell & tube heat-exchanger; Fast cooling; Superior performance; Small footprint.
Factory-installed options: VSD hydronic pump kit; Extreme low-ambient kit to -35℃ (-31℉); High ambient kit to 55℃ (131℉); VSD/EC fans; Heat recovery capability; Brazed plate heat-exchanger; Flow switch; Metallic filter; Expansion tank; Anti-corrosion; Sound-reduction packages, etc.

Overview

In an effort to reduce the energy consumed by cooling & heating, Withair® has developed the W02C1-I series **Modular Inverter Air-Cooled Scroll Heat Pump & Chiller** by leveraging the latest DC inverter compressor technology, Variable Speed Drive (VSD), offering the right balance of energy efficiency and quiet operation. Its exceptional efficiency at both full load and part load set new benchmarks for the industry, making the new inverter chiller stand out as the premium solution for small-to-medium size commercial and industrial applications, making them ideal for buildings with a large amount of off-peak operation.

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Air-Cooled Screw Heat Pumps & Chillers

Capacity	Model & Description

200 to 1,516 kW
60 to 460 tons



Model W01R1-S series

Free cooling economizer as option

Refrigerant: R134a, R-513A
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling;
Unique features: BAS communications; Shell and tube condenser; DX evaporator; Capacity turndown to 10 percent load; Operation from -17℃ (0°F) to 125℃ (51°F) ambient; Microprocessor control center touch-screen; Easy serviceability; Great flexibility; Robust reliability.
Factory-installed options: Hydronic pump kit; Extreme low-ambient kit to -35℃ (-31°F); High ambient kit to 55℃ (131°F); Quick start; Heat recovery capability; Electrostatic coating; Flow switch; Metallic filter; Expansion tank; Anti-corrosion; Sound-reduction packages, etc.

Overview

The Withair® **Air-Cooled Screw Heat Pump & Chiller** is designed to meet current and future requirements in terms of reliability, energy efficiency and intelligent control. we adopt touchable screen display and Siemens PLC controls, twin-rotor screw compressors, low operating noise benefit from low-noise, low-vibration fans and double-wall structure screw compressor.

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200 to 1,516 kW
60 to 460 tons



Model W01R1-SV series

Free cooling economizer as option

Refrigerant: R134a, R-513A
Compressor: VSD Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling; Glycol chilling; Heat pumps; Heat recovery sites; Industrial cooling;
Unique features: Variable speed drive; Shell and tube condenser; DX evaporator; Siemens PLC control system; BAS communications; Operation from -29℃ (-20°F) to 55℃ (131°F) ambient; High precision of temperature control; Superior performance; Variable flow rates.
Factory-installed options: VSD hydronic pump kit; VSD/EC fans; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Heat recovery capability; Quick start; Electrostatic coating; Flow switch; Expansion tank; Anti-corrosion; Sound-reduction packages, etc.

Overview

The W02C1-SV series **Air-Cooled, Variable-Speed Drive (VSD) Screw Heat Pump & Chiller** from Withair® is designed to improve reliability and performance through proven technology and a customizable, highly optimized design. Installed across the globe, the unit offers a tailored solution for a broad range of applications. variable volume rates improves part-load efficiency makes the chiller a great choice in a variety of applications. With optional Quick Start technology, the Withair® Air-Cooled VSD Screw Heat Pump & Chiller is the more reliable, lower maintenance solution for high-efficiency cooling/heating.

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Heat Pump Water Heaters

Capacity	Model & Description

21 to 81 kW
6 to 23 tons



Model W01R1-IHT series
Refrigerant: R-410A, R-134a, R515B
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Food/drinks processing industry; Hospital; Electroplating dyeing industry, Textile printing and dyeing industry, Drying industry; Sterilization line; Oil drilling; military industry etc.
Unique features: Smart control; BAS communications; Easy layout; Easy serviceability; Great flexibility; Robust reliability; Service isolation valves; Ease of installation; Multiple protection functions; Shell & tube/ Brazed plate heat-exchanger; Compact design and smaller footprint.
Factory-installed options: Hydronic pump kit; Extreme low-ambient kit to -35℃ (-31°F); High ambient kit to 55℃ (131°F); Flow switch; Brazed plate heat-exchanger; Metallic filter; Expansion tank; Anti-corrosion; Sound-reduction packages; etc.

Overview

Withair® **High Temperature (Up to 95℃) Heat Pump Water Heater** with special high temperature compressor to producing hot water. Outlet hot water temperature can set from 55℃~95℃ as user requirement, so it is widely using home radiator heating by 65℃, 75℃, 85℃ to 95℃ hot water for industry heating use.

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4 to 85 kW
1.2 to 25 tons



Model W01R1-WH series
Refrigerant: R-410A, R-134a
Compressor: Hermetic Rotary/Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and Industrial process heating
Unique features: Smart control; BAS communications; Easy layout; Easy serviceability; Great flexibility; Robust reliability; Service isolation valves; Ease of installation; Multiple protection functions; Shell & tube/ Brazed plate heat-exchanger; Compact design and smaller footprint.
Factory-installed options: Hydronic pump kit; Extreme low-ambient kit to -35℃ (-31°F); High ambient kit to 55℃ (131°F); Flow switch; VSD fans; Metallic filter; Expansion tank; DC Inverter compressor; Anti-corrosion; Sound-reduction packages, etc.

Overview

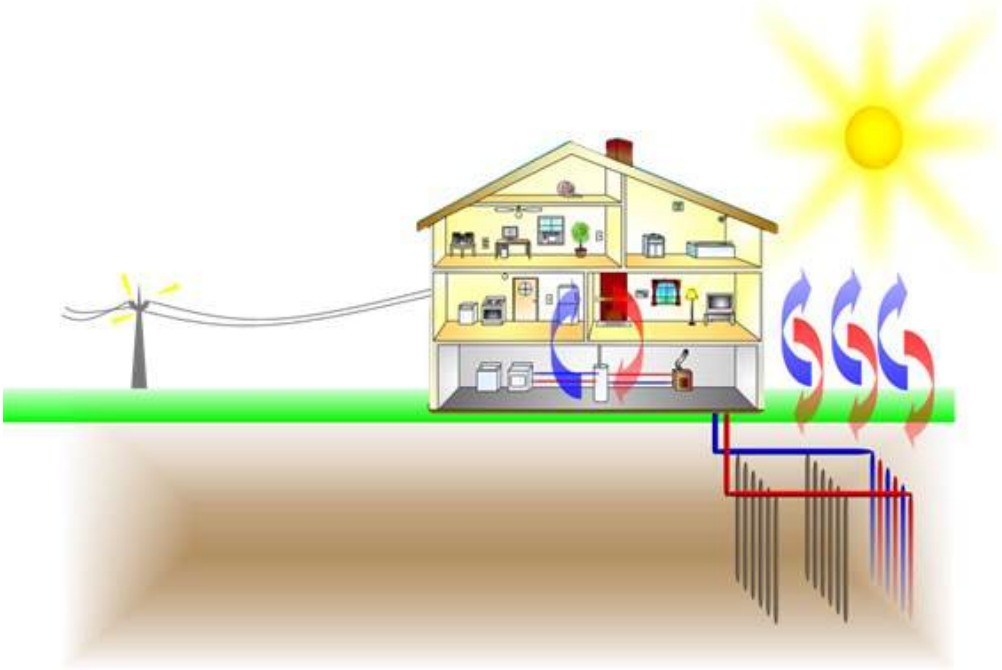
With high efficiency and energy saving advantages, Withair® **Air Source Heat Pump Water Heater** is free modular combination, the maximum output water temperature is up to 65 ℃.It is widely used in large hot water project of apartment, villa, school, hotel, restaurant and hospital, etc. and equipped with bigger and more powerful compressors, larger heating capacity output to meet big heat consumption.

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WATER SOURCE HEAT PUMPS

UNPARALLELED PERFORMANCE AND OCCUPANT COMFORT

Withair® water source heat pump systems (WSHPs) are some of the most efficient, environmentally-friendly systems available for heating and cooling buildings. These high-efficiency, self contained units are available in a variety of sizes/configurations and can be placed in virtually any location within a building.





APPLICATIONS:

- CONDOINIUMS
- OFFICE BUILDINGS
- SCHOOLS
- HOSPITALITY
- DATA CENTERS
- GOVERNMENT

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Ground/Water Source Heat Pumps -

A full portfolio of solutions for comfort and process applications



Withair® Ground/Water Source Heat Pump Solutions help meet your efficiency needs with the wider variety of Water Source comfortable, commercial and industrial heat pumps. From reducing your facility's carbon footprint, to cutting operating costs, our energy-efficient heat pumps are tailored to fit almost any application, whatever interior comfort, high-temperature process heating, advanced and specialized application.

Withair® Water Source Heat Pump System is one of the most efficient, environmentally-friendly systems available for heating and cooling buildings. High-efficiency, self-contained units are available in a variety of sizes and configurations and can be placed in virtually any location within a building. Each water source heat pump system responds only to the heating or cooling load of the individual zone it serves. This permits an excellent comfort level for occupants, better control of energy use for building owners, and lower seasonal operating costs.

Withair® Commercial Water Source Heat Pumps can be applied to geothermal closed-circuit or open-well loops, or on a traditional boiler/tower loop system. These systems offer benefits ranging from low costs installation to the highest energy efficiency available in the market today.

Withair® Industrial Water Source High Temperature Heat Pump with up to 122℃ outlet water, it is widely used in plastic industry, electroplating industry, slaughter industry, food processing, agricultural drying, waste heat recovery, chemical industry, pharmaceutical industry and other process heating applications of modern manufacturing industries which needs a lot of hot water and heat recovery.

Every Withair® unit installed, one more step towards a greener tomorrow !

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Small & Large Capacity Water-Source Heat Pumps

Capacity	Model & Description

8 to 140 kW
2 to 40 tons



Model W01R2 series
Refrigerant: R-454B, R-410A
Compressor: Hermetic Rotary and Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling/heating.
Unique features: Smart control; Multi-protections; Coaxial heat exchangers; Copper tube/aluminum fin condenser coils; Easy to install; Easy serviceability; Robust reliability; BAS communications; Vertical, Horizontal, and Downflow configurations.
Factory-installed options: Hot water coils; ECM fan; Variable-Speed compressor; Expansion tank; Vibration Isolators; Isolation valve; Variable water flow control; Hot gas reheat; Stainless steel drain pan; MERV 8 or 13 Filters; Anti-corrosion; Sound-reduction packages; Electric heater, etc.

Overview

Withair® Water-Source Heat Pump (WSHP) delivers high-performance heating and cooling with exceptional efficiency on select systems. Advanced technology makes a Withair® water-source heat pump easy to operate and maintain, resulting in optimal comfort and long-lasting durability. The broad range of products suit a variety of applications, we designed products to give you maximum flexibility to design, install, operate and maintain the ideal water source heat pump system for your building project.

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8 to 140 kW
2 to 40 tons



Model W01R2-F series
Refrigerant: R-454B, R-410A
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and process cooling/heating.
Unique features: Smart control; Multi-protections; High efficiency multi-stages scroll compressor; Brazed plate heat exchangers; Copper tube/aluminum fin coils; Easy to install; Easy serviceability; Robust reliability; BAS communications; Shaftless blower with EC fan motor.
Factory-installed options: Hot water coils; ECM fan; Variable-Speed compressor; Expansion tank; Vibration Isolators; Isolation valve; Variable water flow control; Hot gas reheat; Stainless steel drain pan; MERV 8 or 13 Filters; Anti-corrosion; Sound-reduction packages; Electric heater, etc.

Overview

Withair® Dedicated Outside Air Systems (DOAS) bring the outside in by drawing 100% outside air through the unit and into the building's HVAC system to improve indoor air quality and ensure that proper ventilation is efficiently delivered to the desired space.
The Withair® DOAS Water Source Heat Pump is designed to accommodate a diverse range of entering air conditions ranging from the hottest summer days to the coldest winter nights. It provides advanced unit control features for maximum application flexibility, incorporates an impressive array of leading technologies to provide premium performance.

Small/Middle Capacity Water to Water Heat Pumps

Capacity	Model & Description

8 to 140 kW
2 to 40 tons



Model W01R2 series
Refrigerant: R-454B, R-410A
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and industrial/process cooling/heating.
Unique features: Smart control; Multi-protections; One-key startup; Automatic intelligent reset; Brazed plate heat-exchanger; Easy serviceability; Robust reliability; Easy to install; BAS communications.
Factory-installed options: Hydronic pump kit; Hot water generator; Coaxial & double-pipe heat exchanger; Expansion tank; Safety valve; Vibration Isolators; Solenoid water control valves; Two-way motorized control valve; Y strainers; Ball valves; Flow switch; Metallic filter; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair® Water to Water Source Heat Pumps are available as heating only, cooling only, heating and cooling or heating and cooling with domestic hot water units, making them ideal for a variety of applications including geothermal and boiler. These units provide high efficiencies with precise metering of refrigerant flow under all expected operating conditions, and offer efficient, standard design features as well as additional value options to suit a building owner's needs.

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72 to 170 kW
20 to 50 tons



Model W01R2 series
Refrigerant: R-454B, R-410A
Compressor: Hermetic Scroll
Power supply: 50 and 60 Hz
Ideal applications: Comfort and industrial/process cooling/heating.
Unique features: Smart control; Multi-protections; One-key startup; Automatic intelligent reset; BAS communications; Robust reliability; Easy layout; Ease of installation; Easy serviceability; Great flexibility; Shell & tube heat-exchanger; Modular network functions.
Factory-installed options: Hydronic pump kit; Hot water generator; Flow switch; Metallic filter; Expansion tank; Safety valve; Vibration Isolators; Anti-corrosion; Sound-reduction packages, etc.

Overview

Withair® Modular Water to Water Source Heat Pumps adopts the modularizing and combining of the newest advanced technology, the unit is suitable for various places, such as office, hotels, hospitals, factories, houses, etc. It is a more fashion, adhering to the "efficient, reliable, energy saving, environmental protection," the design concept, become available to users of the newer and more economical outstanding products.

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Commercial Large Capacity Water Source Heat Pump

Capacity	Model & Description

116 to 3,253 kW
33 to 930 tons



Model W01R2-S series
Refrigerant: R-134a, R-513A
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and district cooling/heating; Glycol chilling; Heat recovery sites; Process/industrial cooling and heating;
Unique features: Siemens PLC control system; BAS communications; Shell and tube condenser; DX evaporator; Capacity turndown to 10 percent load; Microprocessor control center touch-screen; Easy serviceability; Great flexibility; Robust reliability.
Factory-installed options: Heat recovery; Ice storage; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Electrostatic coating; Hydronic pump kit; Anti-corrosion; Sound-reduction packages.

Overview

The Withair® Large Capacity Water Source Heat Pumps are designed for all the conveniences of chilled/hot water, air-conditioning systems, from reducing your facility's carbon footprint, to cutting operating costs, energy-efficient units are tailored to fit almost any application. especially for hotels, offices, malls, hospitals and process cooling/heating applications of modern manufacturing industries.

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116 to 3,253 kW
33 to 930 tons



Model W01R2-SV series
Refrigerant: R-134a, R-513A
Compressor: VSD Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and district cooling/heating; Glycol chilling; Heat recovery sites; Process/industrial cooling and heating.
Unique features: Variable speed drive; Shell and tube condenser; Variable flow rate; Siemens PLC control system; Superior performance; BAS communications; High precision of temperature control; Easy serviceability; Great flexibility; Robust reliability.
Factory-installed options: VSD hydronic pump kit; Heat recovery; Ice storage; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Electrostatic coating; Anti-corrosion; Sound-reduction packages;

Overview

You need a unit that delivers reliable cooling/heating performance — and offers the capacity, energy efficiency and lasting value your unique application requires. This is why you need a Withair® W01R2-SV series Water Source VSD Screw Heat Pump. Designed for faster, easier installations, the units can immediately add value to new and retrofit projects. That value continues over long lifetimes, with very low maintenance requirements and enhanced energy-efficiency options that can significantly reduce operating costs.

Medium/High Temperature Industrial Water Source Heat Pump

Capacity	Model & Description

58 to 2,262 kW
16 to 650 tons



Model W01R2-H1 series
Refrigerant: R-404A, R-507A, R-134a
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Comfort and district cooling; central heating; Glycol chilling; Heat recovery sites; Process/industrial cooling/heating.
Unique features: BAS communications; Shell and tube condenser; DX evaporator; Solution spray technology; Y-△ startup; Heat recovery technology for waste heat utilization; Siemens PLC control technology; Oil separator; Easy serviceability; Great flexibility; Robust reliability.
Factory-installed options: Heat recovery; Ice storage; Hybrid falling film evaporator; Vibration Isolators; Economizer; Strainer; Electrostatic coating; Hydronic pump kit; Anti-corrosion; Sound-reduction packages;

Overview

The Withair® Medium Temperature Water Source Heat Pump with 45~65℃ Hot Water Generator is widely used in plastic industry, electroplating industry, food processing, chemical industry and other process applications of manufacturing industries which needs a lot of high temperature hot water. It is the mature products which are equipped with newly-developed semi-hermetic screw compressors and use dry type or flooded type evaporator, which result in lower noise and lower vibration, reliable long period operation, and installation feasibility on any floor of the building.

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65 to 657 kW
20 to 190 tons



Model W01R2-H2 series
Refrigerant: R-134a, R-513A
Compressor: Semi-hermetic Screw
Power supply: 50 and 60 Hz
Ideal applications: Central heating, industrial/process heating, agricultural drying and waste heat utilization and other fields.
Unique features: BAS communications; Shell and tube condenser; DX evaporator; Siemens PLC control system; Superior performance.
Factory-installed options: Hydronic pump kit; Heat recovery; Hybrid falling film evaporator; Vibration Isolators; Anti-corrosion; Integrated waterside economizer; Evaporator inlet strainer; Electrostatic coating; Sound-reduction packages, etc.

Overview

The Withair® next generation of High Temperature Screw Heat Pump integrated the advanced technology with high efficiency, energy-saving, environmental protection and high reliability. This heat pump provide hot water from 50℃ (122℉) to 122℃(252℉), the water temperature at the heat source side ranges from -40℃ (-40℉) to 72℃(162℉) .
This series of products can meet the needs of the following different processes:
* Textile hot water;
* Metal surface heating;
* Electroplating solution heating;
* Crude Oil transportation heating;
* Other related places with high temperature requirements.

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AIR HANDLERS

PERFORMANCE YOU DEMAND. QUALITY YOU EXPECT. ULTIMATE FLEXIBILITY

Withair® indoor and outdoor air handlers to meet and surpass their most desired requirements, with options and sizing to meet building application and conditions. They are used to condition and circulate large volumes of air throughout a space via ductwork and are part of a system using either a chiller with cooled water or a condensing unit in a direct expansion (DX) system.





APPLICATIONS:

- HEALTHCARE
- OFFICE BUILDINGS
- SCHOOLS
- HOSPITALITY
- MUSEUMS
- GOVERNMENT

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Air Handers - From basic comfort cooling to a custom-designed part of a sophisticated HVAC system



Withair® Air Handlers are distributed heating and cooling equipment designed to locally condition the air for the space they serve. A fan coil unit can either be exposed with a painted metal cabinet occupying the conditioned space or recessed with a wall plate or ductwork connecting it to the conditioned space.

The Withair® portfolio of Fan Coil Unit, Variable Air Volume Unit and Air Handling Unit is designed to make installations faster and easier, offers temperature and humidity control, heat recovery, deodorization, energy saving and air purification, and to maximize HVACR system performance. Using advanced technology, such as: ECM motor, single-zone, these systems quietly, temperature stability, reliably and efficiently deliver the comfort your building occupants need.

Whether it's air handlers for centralized cooling, fan coil units for individual spaces or almost anything in between, Withair® offers a comprehensive range of airside equipment suited for a long list of commercial and industrial applications. And while comfort is something you can feel, many airside products also deliver benefits you can't see or hear – enhanced indoor air quality and quiet operation, for starters.

Withair® offers a full range of air side products and systems to meet your performance requirements. From 200CFM to the highly flexible 60,000CFM with numerous custom options, to a compeletely custom, energy efficient, environmentally responsible system, we have the optimal solutions for commercial, industrial and process applications.

AIR SIDE PRODUCTS - MAXIMIZING HVACR SYSTEM PERFORMANCE !

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Variety of Chilled Water Fan Coil Units (FCU)

Overview

Withair® Fan Coil Units (FCUs), provide maximum performance, unparalleled design flexibility and superior serviceability. The extensive selection of available standard and optional features provides the versatility you need to fit any heating, ventilation and air conditioning system design.

Withair® Fan Coil Unit is designed and manufactured on the base of advanced technology, and utilizes qualified galvanized iron as structure material. The most obvious advantage is that it can decrease the outlet air temperature difference as low as possible to make the room more comfortable, as well as doesn't reduce the cooling capacity output. for the large air flow volume design, it can increase room ventilation frequency, supply more fresh air, and balance room temperature distribution.

Model W05F Series

Airflow range (CFM): 200 - 1,500
Power supply: 50 and 60 Hz
Ideal applications: Apartment; Office building; Hospital; Hotel; Airport; Factory; etc.
Unique features: Optimized performance; Superior serviceability; Flexible design; Compact size; Heavy-gauge, galvanized-steel casing construction; Thick fiberglass insulation; Side-access electrical enclosure; Sloped drain pan, Removable fan assembly; 1" throwaway filters; Externally insulated; 3-tap PSC motors; Horizontal, vertical, and reduced footprint designs; Easy to install.
Factory-installed options: Ultraviolet band C (UV-C) germicidal lamps; Auto air vents; Insulated plenum; Mixing box with linkage; Damper actuator ; Foil-faced insulation; Closed-cell foam insulation; Stainless-steel drain pan; Stainless-steel coil casings; Condensate-overflow switch; Double-deflection discharge grille; pleated filter; Piping package; Thermostats; Anti-corrosion; etc.



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Variable Air Volume units (VAV)

Overview

Withair® Variable Air Volume units (VAV) are among the industry leaders in quality and reliability and are designed to meet the specific needs of today's applications, and designed for efficient, long-lasting performance with a unique range of configurations including single-duct, series-flow and parallel-flow HVAC boxes. This next-generation of Withair® units builds upon Withair's of high quality and reliability and expands the products into one of the most complete variable-air-volume units offering in the industry. Our units feature rugged variable-air-volume units construction, are available in several different profiles to suit the space available, and all utilize digital controls for energy-efficiency and to facilitate interface with building management systems.

Model W05F Series

Airflow range (CFM): 1,500 - 35,000
Power supply: 50 and 60 Hz
Ideal applications: Healthcare facilities & pharmaceuticals; Industrial & specialty applications; Office building; Commercial spaces; Hospital; Hotel; Airport; Schools; Factory; Shopping mall etc.
Unique features: Optimized performance; Superior serviceability; Flexible design; Compact size; Heavy-gauge, galvanized-steel casing construction; Thick fiberglass insulation; long-lasting performance through quiet, precise airflow to the occupied space; maximize building air quality.
Factory-installed options: Ultraviolet band C (UV-C) germicidal lamps; Piping packages; Controller; Piping package; Anti-corrosion; etc.



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Air Handling Units (AHU)

Overview

Withair® Air Handlers are compact and fully assembled. They combine versatility with economical, dependable performance for heating, cooling, ventilation, and variable air volume applications. Galvanized steel panels ensure structural integrity under all operating conditions. Double-walled hinged access doors also enhance structural stability and provide fast, easy access. A sloped, double-wall stainless steel drain pan controls condensate and complies local codes.

Designed to optimize your HVAC system: Withair® air handlers can help HVAC systems achieve higher energy efficiency and indoor air quality while reducing maintenance requirements – adding life to buildings and improving the lives of people within them.

Withair® offers a full range of air handling equipment and systems to meet your performance requirements. From 1,500cfm to the highly flexible 60,000cfm with numerous custom options, multi-static pressure choice, compact structure, humidifier, perfect cooling and heating performance, optional with air valve, water baffle, etc. to a completely custom, energy-efficient, environmentally responsible system, Withair® has the optimal solution for commercial, industrial, institutional or process applications. All Withair® AHUs are designed to be energy-efficient, with several energy recovery options available to minimize energy consumption. we also offers several dehumidification options.

Model W05F Series

Airflow range (CFM): 1,500 – 60,000+
Power supply: 50 and 60 Hz
Ideal applications: Healthcare facilities & pharmaceuticals; Industrial & specialty applications; Office building; Commercial spaces; Hospital; Hotel; Airport; Schools; Factory; Shopping mall etc.
Unique features: Optimized performance; Flexible design; Compact footprint; Design flexibility; Reliable serviceability; Robust construction; Easy to install; Double-wall construction; etc.
Factory-installed options: Ultraviolet band C (UV-C) germicidal lamps; Sound attenuators; Filter options from MERV 8 flat filters to face loaded HEPA filters; Energy recovery ventilator (ERV); Water coils; Refrigerant coils; Steam coils; Electrical heat; Humidifiers; Anti-corrosion; etc.





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AIRADAY® Life Air System

All-In-One Full Fresh Air Temp. & Humidity Control System



* 100% Fresh Air
* Anhydrous Humidification
* Deep dehumidification
* Temperature Control System









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Benefits At A Glance

The industrial-grade design of the Withair® HVACR equipment is ideal for both industrial and commercial markets, in applications such as office buildings, hospitals, schools, retail buildings, and industrial facilities. The latest advanced compressor, wide operating temperature range, advanced controls, electronic expansion valve, and high efficiencies mean that HVACR equipment is the perfect choice for tight temperature control in almost any application temperatures, and under widely varying loads.

For Building Owners and Managers

- Quiet operation
- Easy to maintain
- Reliable operation
- Reduces operating expenses
- Environmentally sound refrigerant
- Building automation system compatible

For Consulting Engineers

- HFC refrigerants
- High-efficiency optimization
- Ideal for replacement projects
- Compliant local code requirements
- Quick response technical support services

For Contractors

- Compact footprint
- Diagnostic controls
- Easy to break down
- Ideal for replacement
- Reliable performance
- Reduces installation expenses

Project Cases

Withair® is a experienced partner in designing, installing small to large scale projects in the HVACR field of engineering systems for built environment of the further !

Withair® Provides Global Installation Services:

We have developed close, long-term relationships with consultants, contractors, builders, and installers around the world. Teams of technical personnel are often sent to assist these partners in the design and implentation of large projects, and in the preparation of tenders for a variety of joint ventures. Among our worldwide installations are major shopping centers, industrial parks, schools, office buildings, hospitals, restaurants, convention centers, showrooms, green houses, commercial and residential buildings, swimming pools, mobile communication centers, and special projects.

At Withair®, we offer the largest selection of cooling and heating solutions to suit all environments and personal preferences. Learn more about the options available to you by choosing an application. Powering impactful sustainability, respectful safety and security, while delivering an enhanced customer experience Withair® has a complete suite of connected solutions that serves industries from workplaces to schools, hospitals to campuses and more. This includes tailored, AI-infused service solutions such as remote diagnostics, predictive maintenance, compliance monitoring, advanced risk assessments and more.



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Project Cases (Air-Cooled Chillers)













Project Cases (Water-Cooled Chillers)













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Project Cases (Packaged & Split DX Systems)

















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Project Cases (Air-Cooled Heat Pumps)











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Project Cases (Water Source Heat Pumps)











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Project Cases (Air Handlers)









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Premium manufacturer in HVACR products
for Heating,Cooling and Indoor Air Quality.

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or follow us info@withairgroup.com

About Withair ®

Withair® is the premium manufacturer in sustainable energy solutions supplying HVACR products & services for heating, cooling, hot water, indoor air quality, industrial refrigeration, and heat recovery that reflect today's demand for sustainable construction, comfortable indoor climate and industrial cooling & heating process application.

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