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 cost 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 !

Small & Large Capacity Water-Source Heat Pumps

Capacity	Model & Description

8 to 140 kW
2 to 40 tons



Model W01R2 series
Refrigerant: R-410A, R-454B
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-410A, R-454B
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-410A, R-454B
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-410A, R-454B
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.

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
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

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.

Benefits At A Glance

The industrial-grade design of the Withair® Ground/Water Source Heat Pump 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 heat pump 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

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

Learn more at www.withairgroup.com
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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