

The Energy Solutions of Withair Heat Pumps Catalogue 2017



Take Control of Your Energy Future!

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



Ongoing innovation with cutting-edge products



Over 20 years of experience



Production 100% Made in China



Guaranteed support and spare parts



Support in design



Documentation for incentives



Two-year guarantee



Free training course

About Withair

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

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

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

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



Low energy consumption systems

Use of clean energy

Use of environmentally-friendly cooling gases

ZERO direct CO2 emissions in the environment

HEAT PUMPS - CREATING A MORE COMFORTABLE & SUSTAINABLE BUILDING ENVIRONMENT

By installing a Withair® heat pump, you can reduce your energy consumption costs by up to 86% compared to direct electricity. Here we are using the nature's free and renewable energy sources, such as: outdoor air, geothermal energy, solar energy, that minimises your CO2 emissions and pollution free. You can also enjoy an environmentally friendly, renewable and free energy source. The high level of efficiency means that an investment in a heat pump pays for itself quickly and gives you a secure supply of heat, cool and hot water, suitable for different climate all over the world.

Withair® the W01R series heat pumps involve a range of 282 models, with heating and cooling capacity among 2.6kW and 3,200kW, which allow to create "customized" solution, matching the different installations requests.

EVI Air Cooled Heat Pumps ((EVI compressor-enhanced vapor injection))



EVI Air Cooled Heat Pumps

— Product Description —

Withair® EVI Air Cooled Scroll Heat Pump adopts the most advanced low-temperature enhanced vapors injection compressor technology, EVI heat pump delivers higher heating capacity at low evaporation temperature thereby better responding to heating requirements than normal air source heat pumps.(EVI compressor-enhanced vapor injection,Vapor-injected method can effectively improve heat capacity, prevent higher discharge temperature of compressor and guarantee operating stability of unit at low temperature).

Withair® EVI Air-Cooled Heat Pump Unit can supply hot water and heating for large buildings in cold climate region and be widely applied to civilian projects and industrial projects,such as hotel, villa,restaurant, hostital, factory,etc,. it is a wise choice for areas where water is insufficient or there are strict limits on noise level and surroudings.

— The Key Advantages Include —

- ECO friendly refrigerant R410A,R407C.
- Built-in hydraulic module for option.
- Intelligent defrost totally.
- Super heating capacity: latest enhanced vapor injection Copeland EVI compressor for extremely cold climate, reliable operation and meet the demand of heating of the cold region.
- EVI unit rated heating capacity is 15% higher than normal unit,higher 10% COP; under -10°C temperature,heating capacity is 20% higher than the normal unit,higher 25% COP.
- The independent design and manufacturing of high efficiency shell and tube heat exchanger of water side, strong energy saving and anti-freezing.
- The innovation of the split type design, put water system indoor, which solved the frozen damage problem of water side heat exchanger at the cold region in winter.
- Use SWEP auxiliary plate heat exchanger with condensate super-cooling degree, low temperature heating effect significantly.
- Electronic expansion valve throttle control, refrigerant flow control precision at the cold temperature.
- Air side heat exchanger with anti-ice system design, prevent heat exchanger to frost at the cold temperature.
- Multi self-protection functions, such as: high & low pressure, high temperature, water flow and antifreeze protection.
- Modular networking technology, the operation of individual modules can be coordinated according demand.
- Advanced & world-famous hermetic scroll compressor high-efficiency, low-noise and low-vibration operation.
- Standalone subsystems enable maintenance of individual subsystems without affecting the continued operation of the rest.
- Hydrophilic and corrosion-resistant material ensures adaptability to poor weather.
- Uses advanced hermetic scroll compressor high-efficiency, low-noise, and low-vibration operation.
- Remote monitoring and control features enable the unit's operational schedule to be set via internet or phone.
- Using modular networking technology, the operation of individual modules can be coordinated according demand.
- Standalone subsystems enable maintenance of individual subsystems without affecting the continued operation of the rest.
- Unique heat exchanger protection technology, increases heat exchange efficiency to 30% above that of conventional heat exchangers.

— Technical Data —

Model		W01R1-12E	W01R1-18E	W01R1-23E	W01R1-28E	W01R1-66E	
Nominal heating capacity I	kW	11.8	17.4	23	27.8	66	
Nominal heating capacity II	kW	8.1	11.6	16.2	19	45	
Nominal cooling capacity	kW	10.2	15.4	20.4	24.8	68	
Power supply	V/Ph/Hz	380/3/50					
Compressor	Type	Hermetic scroll compressor					
	Brand	Hitachi, Panasonic, Copeland					
	Input Power	kW	3.1	4.7	6.3	10.7	19.5
	Quantity		1	1	2	2	2
Safe protection device		High/low pressure switch, overload protection, counter clock wise and short phase protection (power phases sequence protection), lack water (water-flow switch), anti-freeze protection, ect					
Air side (Condenser)	Type	High efficiency finned tube heat exchanger					
Water side (Evaporator)	Type	High efficiency shell-and-tube heat exchanger					
	Water flow volume	m ³ /h	1.8	2.6	3.6	4.2	11.1
	Water pressure drop	kPa	30-40			50	
Dimension	L*W*H	mm	956*410*1440	956*410*1440	1208*590*1585	1208*590*1585	2065*1030*1974
Noise	dB(A)	58	58	60	62	65	
Refrigerant	Type	R410A					
	Charging rate	kg		8	8×2	10×2	13×2
Net weight	kg	145	165	250	290	980	
Entering/leaving water pipe		DN25		DN32		DN65	

Notes:

- Standard cooling work condition: entering chilled water temperature 12°C, leaving temperature 7°C; dry bulb temperature 35°C, wet bulb temperature 24°C;
- Standard heating work condition I: entering hot water temperature 40°C, leaving temperature 45°C; dry bulb temperature 7°C, wet bulb temperature 6°C.
- Standard heating work condition II: entering hot water temperature 36°C, leaving temperature 41°C; dry bulb temperature -12°C, wet bulb temperature -14°C.
- Units can realize 1~16 unit's modular connection and control energy-regulation automatically.
- As an optional function, heat recovery for domestic hot water is available, maximum heat recovery rate: 40%.
- Units working ambient range from -25°C to 45°C.
- All models, sizes, dimensions, and specifications are subject to change without prior notice, please refer to nameplates for the most accurate specifications

— Delivery & Packaging —

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

— You May Like —



EVI Air Cooled Heat Pump

+

Fan Coil Unit

+

Hydraulic Module

+

Hydraulic balance distributor

+

Insulation pipe

+

Thermostat

Withair, your perfect partner for successful projects.



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

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



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