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The Energy Solutions of
Withair Heat Pumps Catalogue 2017

Withair®

Take Control of Your Energy Future!

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

- **Ongoing innovation with cutting-edge products**
- **Over 20 years of experience**
- **Production 100% Made in China**
- **Guaranteed support and spare parts**
- **Support in design**
- **Documentation for incentives**
- **Two-year guarantee**
- **Free training course**

About Withair

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

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

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

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

Low energy consumption systems

Use of clean energy

Use of environmentally-friendly cooling gases

ZERO direct CO2 emissions in the environment

Water Source Heat Pumps - Each Withair® system installed, one more step towards a greener tommorrow

As we know, only two metres below the surface, the ground temperature remains a steady 10-12℃ throughout the year. By installing a ground source heat pump, you could utilise this natural geothermal energy to provide a reliable and renewable cooling, heating and hot water system for your building.When the sun shines, the heat pump's borehole/ ground source heating coil gets a chance to recover and replenish. This also increases the heat pump's service life because it can rest during much of the year.

By installing Withair® a Geothermal Heat Pump, you could utilise this natural heat energy to provide a reliable and renewable heating and hot water system for your home, you can reduce costs by up to 80 % compared to direct electricity, depending on where you live, the living area, the choice of heat pump and whether you use a cooling function or not. All this while keeping noise levels exceptionally low.

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.

Water Source Heat Pumps (Water to Air Heat Pumps)

Water Source Heat Pumps (Water to Air Heat Pumps)

—— Product Description ——

Withair® water-source heat pump (WSHP) delivers high-performance heating and cooling with exceptional efficiency: up to 5.0 EER 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: schools, office buildings, health care and rehabilitation facilities, condominiums and retirement facilities and other commercial buildings are just a few of the building types utilizing the energy conscious water-source design of the 0.75 through 38+ tons horizontal and vertical water-source heat pump.

Withair® Water source heat pump systems are among the most efficient,economical and environmentally friendly methods to heat and cool buildings. Withair® has taken these benefits to a new level with horizontal and vertical water source heat pumps. 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. And we incorporated non-ozone depleting R-410A refrigerant, which–along with high Energy Efficiency Ratios (EER's)–helps preserve our environment and precious energy resources.Withair® Water source heat pumps offer you the ability to achieve industry-leading energy efficiency in boiler/tower and geothermal applications.You can benefit from lower energy bills and higher energy rebates.

Withair® is among the original suppliers of water source heat pump systems and has remained at the forefront in expertise and the breadth of our product offering. Known for their compact size, quiet operation and durable with low maintenance requirements and quality construction. WSHPs are available in wide range of capacities and can be combined with electrical heating elements.The units are suitable for cooling tower installations, ground water sources or open water circuits.

Withair® ceiling-horizontal water source heat pumps are typically installed above hallways and other corridors, away from the occupied space for reduced sound and to allow easier service access. each single circuit unit provides heating and cooling to a specific space within the building. Withair® units allow easy access to critical components for maintenance and service access in a ceiling-hung application.Withair® floor-vertical water source heat pumps are typically installed in closets or small mechanical rooms near the occupied space. each single circuit unit provides cooling and heating for a specific zone within the building. we offers some of the quietest water source heat pump units in the industry, allowing units to be located near the occupied space with minimal acoustic impact.

Withair® continues to enhance the application of Geothermal and other WSHP systems to help your buildings work better. Superior Withair® design makes our units among the quietest and most efficient on the market. A Withair® water source heat pump is easy to access and service components; meets high indoor air quality standards; offers quiet operation; and higher operating efficiencies to reduce total cost of ownership. Efficient systems for lighting, plumbing, and comfort can significantly reduce the operating expense of doing business. The extra high efficiency units provide energy savings that not only contribute to lowering the life cycle cost, but also reduce the waste impact on the environment.

—— The Key Advantages Include ——

● Non-CFC, ECO friendly refrigerant R410a, R407c.
● Smart microchip control and large LCD user interface, capable of one-key startup.
● Standard model is air return working condition, fresh air working condition is optional.
● Large diameter coaxial shell-and-tube heat exchanger for high performance, reliability, and resistance to freezing.
● Large panels for accessibility to compressor and fan sections.
● Standard or geothermal application flexibility.
● Easy, low cost design and installation.
● High EER promotes low operating costs and may qualify for rebates.
● Superior indoor air quality and quiet operation.
● Flexible control options include standalone or network operation.
● Performance rated with ISO Standard 13256-1.
● Unit choose efficient rotary or scroll compressor, the use of high efficient heat exchanger technology processing, condensation temperature greatly reduced, the COP is more 4.5 and higher 70% than air cooled heat pump.
● Unique compressor anti-vibration technology (patent ZL 2020 2 0246589.1) and sound attenuation material ensure ultra-quiet performance.
● Multi-system design and wear-and-tear management technology reduces electric impulse and extend service life.
● Modular network function: unit control system is equipped with the network communication, the user can control operating units quantity according to the actual use load,make user side water system utilities, to realize the automatic device management automation and energy management.
● Automatic intelligent reset. Unit shall automatically restart 5 minutes after shutdown if the fault has cleared. Should a fault occur 3 times sequentially, then lockout will occur.
● Humanized design, widened application scope: the unit’s temperature settings for room, hot water, water intake/outlet, freeze protection, and compressor exhaust can be adjusted on-site according to environmental conditions.
● Communication adapter connection the unit to BMS(Building Management System) is an optional accessory, please get in touch with us or our distributor if required.
● Unit with multi-protection to guarantee the unit running stability and security, such as: high/low voltage, low oil level protection, exhaust temperature, antifreeze,power lack/reverse phase, water system cut off. operating condition with small change range stable operation, safe, reliable and long service life.

—— Technical Data ——

Small Capacity Package Water Source Heat Pump

Model			W01R2-2.6P	W01R2-3.5P	W01R2-4.5P	W01R2-5.8P	W01R2-7.2P	W01R2-8.6P	W01R2-10.5P	W01R2-12.6P	W01R2-14.6P
Rated cooling capacity		kW	2.6	3.5	4.5	5.8	7.2	8.6	10.5	12.6	14.6
Rated heating capacity		kW	3	3.95	5.1	6.48	8.1	9.4	11.4	13.6	15.8
Rated cooling input power		kW	0.59	0.82	1.02	1.35	1.65	1.94	2.51	3.02	3.47
Rated heating input power		kW	0.63	0.85	1.1	1.45	1.74	2.03	2.71	3.24	3.7
Air circulation		m^3/h	520	715	910	1190	1480	1760	2150	2570	3010
External static pressure		Pa	12(8)	20(12)			30(20)		50(30)		
Power supply		V/Ph/Hz	220/1/50								
Rated cooling input current		A	2.7	3.9	4.9	6.5	7.8	9.3	11.6	14	16
Rated heating input current		A	3	4	5.2	6.9	8.2	9.7	12.6	15	17.1
Water flow		m^3/h	0.58	0.72	0.92	1.25	1.52	1.85	2.25	2.66	3.12
Compressor	type		Rotary								
	quantity		1	1	1	1	1	1	1	2	2
Refrigerant	type		R410A								
	charge	kg	0.6	0.8	1.1	1.3	1.45	1.5	2x0.9	2x0.95	2x1.25
Noise dB(A)			38.5	38.5	40	40	41	42.5	43.5	43.5	45
Dimension	Length	mm	1050	1050	1050	1050	1100	1100	1300	1300	1400
	Width	mm	500	500	500	500	560	560	680	680	680
	Height	mm	360	360	420	420	485	485	525	525	525
Weight		kg	60	65	75	85	100	110	130	150	160
Inlet/outlet water pipe			R3/4(DN20)				R1(DN25)		R1-1/4(DN32)		
Condensate water pipe			R3/4(DN20)								

Heavy Capacity Package Water Source Heat Pump

Model			W01R2-17.5P	W01R2-21P	W01R2-25P	W01R2-30P	W01R2-35P	W01R2-40P	W01R2-52P	W01R2-68P	W01R2-140P
Rated cooling capacity		kW	17.5	21.0	25.0	30.0	35.0	40.0	52.0	68.0	140.0
Rated heating capacity		kW	19.6	23.62	28	33.6	39.2	44.8	58.2	76.2	162.9
Rated cooling input power		kW	4.18	5.13	6.04	7.2	8.3	9.5	12.4	16.5	43.7
Rated heating input power		kW	4.4	5.43	6.75	8.08	9.1	10.2	13.1	18.6	47.2
Air circulation		m^3/h	3600	4320	5400	6500	7500	8200	10800	14000	27500
External static pressure		Pa	80(50)	80(50)	120(150)			150(200)	200(250)		
Power supply		V/Ph/Hz	380/3/50								
Rated cooling input current		A	6.54	7.9	9.3	11.1	12.8	14.6	19	25.5	51.6
Rated heating input current		A	7	8.3	10.3	12.3	13.9	15.7	20	28.3	61.1
Water flow		m^3/h	3.65	4.32	5.14	6.17	7.2	8.23	10.69	13.99	26.5
Compressor	type		Scroll								
	quantity		1	1	1	2	2	2	2	2	4
Refrigerant	type		R410A								
	charge	kg	2.1	3.2	3.6	2x2.1	2x2.6	2x3.0	2x5.5	2x6.5	4x12.5
Noise dB(A)			50	53	56	60	64	66	68	69	75
Dimension	Length	mm	1700	1580	1580	2000	2100	2230	2380	2380	2560
	Width	mm	680	1000	1000	1180	1180	1180	1180	1400	2203
	Height	mm	550	730	730	730	730	730	880	1030	1476
Weight		kg	240	350	380	440	480	530	610	670	1580
Inlet/outlet water pipe			R1-1/4(DN32)		R1-1/2(DN40)				R2(DN50)		
Condensate water pipe			R1(DN25)								

Split Type Water Source Heat Pump

Model	indoor		W01R2-2.6S1	W01R2-3.5S1	W01R2-4.5S1	W01R2-5.8S1	W01R2-7.2S1	W01R2-8.6S1	W01R2-10.5S1	W01R2-12.6S1	W01R2-14.6S1
	outdoor		W01R2-2.6S2	W01R2-3.5S2	W01R2-4.5S2	W01R2-5.8S2	W01R2-7.2S2	W01R2-8.6S2	W01R2-10.5S2	W01R2-12.6S2	W01R2-14.6S2
Rated cooling capacity		kW	2.6	3.5	4.5	5.8	7.2	8.6	10.5	12.6	14.6
Rated heating capacity		kW	3	3.95	5.1	6.48	8.1	9.4	11.4	13.6	15.8
Rated cooling input power		kW	0.59	0.82	1.02	1.35	1.65	1.94	2.51	3.02	3.47
Rated heating input power		kW	0.63	0.85	1.1	1.45	1.74	2.03	2.71	3.24	3.7
Air circulation(m³/h)		m³/h	500	700	910	1190	1480	1760	2150	2570	3010
External static pressure		Pa	12(8)	20(12)			30(20)		50(30)		
Power supply		V/Ph/Hz	220/1/50						380/3/50		
Rated cooling input current		A	2.7	3.9	4.9	6.5	7.8	9.3	3.9	4.7	5.4
Rated heating input current		A	3	4	5.2	6.9	8.2	9.7	4.2	5	5.7
Compressor type/quantity			Rotary/1						Scroll/1		
Refrigerant	type		R410A								
	charge	kg	0.65	0.84	0.95	1.1	1.5	1.8	2.1	2.3	2.8
Noise	indoor	dB(A)	35	35	37	37	40	41	42	42	42
	outdoor	dB(A)	30	31	32	32	35	36	36	38	38
Dimension (LxWxH)	indoor	mm	855*475*235	1005*475*235	1125*475*235	1355*475*235	1605*475*235	1750*475*235	2005*475*235	2065*490*285	
	outdoor	mm	550*430*385		590*430*385	550*490*420	635*520*510		695*520*535	720*580*535	
Weight (kg)	indoor		18	22	26	30	34	36	40	50	55
	outdoor		34	35	40	48	66	68	90	90	100
Water flow		m³/h	0.58	0.72	0.92	1.25	1.52	1.85	2.25	2.66	3.12
In/Out water balance rate		kPa	18	22	30	35	35	35	35	38	38
Connection pipe	liquid	mm	¢6×0.75				¢9.52×0.75			¢12.7×0.75	
	gas	mm	¢9.52×0.75		¢12.7×0.75		¢16×1.0		¢19×1.0		
Cooling water pipe			R3/4(DN20)					R1(DN25)		R1-1/4(DN32)	
Condensate water pipe			R3/4(DN20)					R3/4(DN20)			

Notes:

1. These parameter were tested according to pure water,not include anti-freezing liquid and water pump power.
2.All models, sizes, dimensions, and specifications are subject to change without prior notice, please refer to nameplates for the most accurate specifications

Ground Loop Working Condition:

1. Cooling standard working condition: User side inlet/outlet water temperature 12℃/7℃; Source side inlet/outlet water temperature 25℃/30℃;
2. Heating standard working condition: User side inlet/outlet water temperature 40℃/45℃; Source side inlet water temperature 10℃;

Ground Water Working Condition:

1. Cooling standard working condition: User side inlet/outlet water temperature 12℃/7℃; Source side inlet/outlet water temperature 18℃/29℃;
2. Heating standard working condition: User side inlet/outlet water temperature 40℃/45℃; Source side inlet water temperature 15℃;

Water Loop Working Condition:

1. Cooling standard working condition: User side inlet/outlet water temperature 12℃/7℃; Source side inlet/outlet water temperature 30℃/35℃;
2. Heating standard working condition: User side inlet/outlet water temperature 40℃/45℃; Source side inlet water temperature 20℃;

—— Delivery & Packaging ——

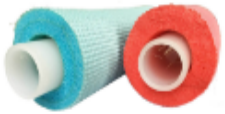
- 100% test before deliverying products.
- Products catalogue, installation & operation manual will be sent together.
- Tracking number will be sent to customer as soon as we ship the products.
- Item shipped in 25 working days against payment depends on the quantity.
- Four steps of pakacges, plastic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

—— You May Like ——

Air Cooled Heat Pump +

Hydraulic Module +

Air Vents +



Insulation pipe +

Thermostat

Feel free to contact us to receive further information about our products and energy solutions.

Notes:

Withair, your perfect partner for successful projects.

Withair®

R410A environmental refrigerant

RoHS

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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