

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.

Inverter Air Cooled Heat Pumps



Inverter Air Cooled Heat Pumps

— Product Description —

Withair® DC Inverter Heat Pump is a very intelligent heat pump system with flexible capacity output. It could adjust heating capacity output automatically according to requirements. It is much more energy-saving with a long lifespan.

Withair® DC Inverter Heat Pump provides energy-efficient room heating and domestic hot water 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 and are able to be integrated with energy systems such as solar heater and boiler.

— The Key Advantages Include —

- ECO friendly refrigerant R410A, R407C.
- Running ambient range from -27°C to 43°C.
- DC inverter technology to sure heating capacity “0” loss when ambient temperature > -15°C.
- 10~120rps inverter technology to fast higher water temp. as room load (accordingly suddenly cold weather).
- Intelligent defrost totally.
- Digital LED display pressure: built-in high & low pressure sensor.
- Built-in hydraulic module for your option.
- 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.
- Hydrophilic and corrosion-resistant material ensures adaptability to poor weather.
- Advanced & world-famous inverter 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.
- The independent design and manufacturing of high efficiency shell and tube heat exchanger of water side, strong energy saving and anti-freezing.
- 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
- Heat recovery function provides free hot water using heat removed from room during cooling.
- Remote monitoring and control features enable the unit's operational schedule to be set via internet or phone.
- 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.
- 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.
- EVI unit rated heating capacity is 15% higher than normal unit, 10% higher coefficient of performance; under -10°C temperature, heating capacity is 20% higher than the normal unit, 25% higher coefficient of performance.

— Technical Data —

Model			W01R-8I	W01R-10I	W01R-12I	W01R-15I
Cooling condition	Rated cooling capacity	kW	8.2	10.1	12.2	15.4
	Rated cooling input power	kW	2.5	3.1	3.7	4.6
	Rated EER	w/w	3.28	3.26	3.30	3.35
	Cooling capacity range	kW	3.5~11	4.5~14.0	6.0~16.0	7.0~20.0
	Input power range	kW	1.0~4.0	1.3~5.0	1.6~6.0	1.8~6.5
	EER range	w/w	2.0~4.1	2.0~4.1	2.0~4.1	2.3~4.2
Heating condition	Rated heating capacity	kW	9.3	12.0	14.0	17.0
	Rated heating input power	kW	2.6	3.1	4	4.8
	Rated COP	w/w	3.58	3.87	3.50	3.54
	Heating capacity range	kW	4.5~11	6.0~14.0	7.0~16.0	8.0~20.0
	Input power range	kW	1.0~4.0	1.3~5.0	1.6~6.0	1.8~6.5
	COP range	w/w	2.8~4.6	2.8~4.7	2.8~4.6	2.8~4.6
Hot water temperature range in heating		℃	30℃~50℃			
Cold water temperature range in cooling		℃	5℃~20℃			
Working ambient temp.		℃	-25℃~43℃			
Power supply		V/Ph/Hz	380V/50Hz			
Refrigerant			R410A			
Compressor			Scroll MITSUBISHI DC inverter compressor			
Controller system			HITACHI DCBL controller			
Throttle way			Electronic expansion valve			
Fan motor			Brushless DC Motor			
Pressure device			Built-in high and low pressure sensor			
Electronic component			Schneider AC contactor			
Safe protection device			High/low pressure switch,overload protection,counter clockwise and short phase protection(power phases sequence protection),lack water(water-flow switch),anti-freeze protection,ect			
Noise		dB(A)	49	51	52	53
Connecting pipe size		Inch	Rc1"	Rc1"	Rc1"	Rc1"
Dimension (ceiling type indoor)	Length	mm	500	500	650	650
	Width	mm	320	320	450	450
	Height	mm	365	365	365	365
Dimension (outdoor)	Length	mm	1050	1050	1050	1050
	Width	mm	420	420	420	420
	Height	mm	870	1400	1400	1500
Weight	Indoor	kg	38	45	51	61
	Outdoor	kg	110	130	139	151

Model			W01R-20I	W01R-28I	W01R-35I
Cooling condition	Rated cooling capacity	kW	20.0	28.0	35.0
	Rated cooling input power	kW	5.8	7.9	10.1
	Rated EER	w/w	3.45	3.54	3.46
	Cooling capacity range	kW	9.0~24.0	11.0~32.0	13~38
	Input power range	kW	2.4~9.2	3.0~11.5	3.6~13.8
	EER range	w/w	2.2~4.2	2.2~4.2	2.2~4.2
Heating condition	Rated heating capacity	kW	21.0	28.0	34.0
	Rated heating input power	kW	5.8	7.8	9.7
	Rated COP	w/w	3.6	3.6	3.5
	Heating capacity range	kW	10.0~24.0	12.5~32.0	15.0~38.0
	Input power range	kW	2.4~9.2	3.0~11.5	3.6~13.8
	COP range	w/w	2.7~4.6	2.7~4.6	2.7~4.5
Hot water temperature range in heating		°C	30°C~50°C		
Cold water temperature range in cooling		°C	5°C~20°C		
Working ambient temp.		°C	-25°C~43°C		
Power supply		V/Ph/Hz	380V/50Hz		
Refrigerant			R410A		
Compressor			Scroll MITSUBISHI DC inverter compressor		
Controller system			HITACHI DCBL controller		
Throttle way			Electronic expansion valve		
Fan motor			Brushless DC Motor		
Pressure device			Built-in high and low pressure sensor		
Electronic component			Schneider AC contactor		
Safe protection device			High/low pressure switch,overload protection,counter clockwise and short phase protection(power phases sequence protection),lack water(water-flow switch),anti-freeze protection,ect		
Noise		dB(A)	55	57	59
Connecting pipe size		Inch	Rc1-1/4"	Rc1-1/4"	Rc1-1/2"
Dimension	Length	mm	1200	1200	1200
	Width	mm	400	550	550
	Height	mm	1700	1800	1800
Weight	Net weight	kg	175	195	216

Notes:

- 1.Standard cooling work condition: entering chilled water temperature 12°C, leaving temperature 7°C; dry bulb temperature 35°C, wet bulb temperature 24°C;
- 2.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.
- 3.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.
- 4.All models, sizes, dimensions, and specifications are subject to change without prior notice, please refer to nameplates for the most accurate specifications

— Delivery & Packaging —

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

— You May Like —



DC Inverter 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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