# 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 Recovery Heat Pumps - The most common, easiest and most profitable solution for cooling, heating and hot water

Not only do Withair® heat pumps offer economical heating of residential and commercial settings, they can also provide a total solution for domestic heating and hot water supply. Heat recovery from the ventilation air. A complete exhaust air heat pump providing heating, hot water, ventilation, preheated supply air and heat recovery. In a word, the energy from the warm indoor air is reused before it leaves the house through the ventilation system. With a Withair® heat recovery air heat pump, you only pay half at least, for cooling, heating and hot water. when cooling model, you can get free charge of hot water.

#### Air Cooled Scroll Heat Pump with Domestic Hot Water







#### **Air Cooled Scroll Heat Pump with Domestic Hot Water**

#### — Product Description ——

Withair® Air-Cooled Heat Pump Unit is a kind of central air conditioner which adopts air as the cooling & heating source and water as cooling & heating medium. Withair® offer quiet, reliable, energy efficient equipment. These units incorporate high quality compressors, state-of-the-art coil design, and innovative packaging. As a sort of integrated equipment, it needs no cooling tower, cooling water pump, boiler and correspoding auxiliary parts, which makes the system more simple, saves installation space, convenient maintenance and energy saving, thus it is very suitable for areas that are short of water. several modules can be formed in to a air-cooled heat pump module unit by connecting each module's inlet & outlet pipeline in parallel. the whole unit consists of 1~16 modules and the max.capacity is 3200kW.

Withair® Air-Cooled Heat Pump Unit can 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 therre 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.
- Heat recovery function provides free hot water using heat removed from room during cooling.
- 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			W01R1-68HR	W01R1-90HR	W01R1-102HR	W01R1-136HR	W01R1-200HR
Nominal cooling capacity		kW	68	90	102	136	200
Nominal heating capacity		kW	72.5	95	108	143	215
DHW (domestic hot water)	Heat recovery capacity	kW	21	27	31	41	60
	Entering temperature	$^{\circ}\!\mathbb{C}$	50				
	Leaving temperature	$^{\circ}\!\mathbb{C}$	55				
Power supply		V/Ph/Hz	380/3/50				
Compressor	Туре		Hermetic scroll compressor				
	Brand		Hitachi, Panasonic, Copeland				
	Quantity		4	6	6	6	6
	Power	kW	22	29.75	33.05	40.6	65.6
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)		Туре	High efficiency finned tube heat exchanger				
Water side (Evaporator)	Type		High efficiency shell-and-tube heat exchanger				
	Water flow	m³/h	11.7	15.5	17.5	21.4	33.5
	Water pressure drop	kPa	40-60				
	Max. pressure drop	kPa	1.0Mpa				
Dimension	Length	mm	2065	3000	3000	3216	2650
	Width	mm	1030	1030	1030	2156	2050
	Height	mm	1974	1820	2062	2156	2230
Noise		dB(A)	65	67	69	71	73
Refrigerant	Туре		R410A				
	Charging rate	kg	3.8×4	6×4	3.8×6	4.5×6	6×7
Net weight		kg	840	1200	1350	1480	2120
A/C side entering/leaving water pipe			DN65	DN65	DN65	DN65	DN80
DHW side entering/leaving water pipe			DN32	DN32	DN32	DN32	DN32

#### 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: entering hot water temperature 40℃, leaving temperature 45℃; dry bulb temperature 7℃, wet bulb temperature 6℃.
- 3. As an optional function, heat recovery for domestic hot water is available, maximum heat recovery rate: 40%.
- 4. Units can realize 1~16 unit's modular connection and control energy-regulation automatically.
- 5. 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 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 ——



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

Notes:	

# 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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