

**The Energy Solutions of
Withair Precision Air Conditioners 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

Precision Air Conditioners - The keeper of the machine room operation

The highest criterion for the design strategy of our precision air conditioning products is safe and reliable operation of the system. All our precision air conditioners must meet the highest system efficiency requirements of users and comply with strict environmental protection requirements. Therefore, Withair® offers expanded product series to satisfy various requirements of users.

Withair® precision air conditioners adopt the modular design to implement free combination of modules and the N+1 redundant backup function. Users can easily select the most suitable module system combination. In other words, flexibility of air conditioning system combination is also an excellent characteristic of our precision air conditioner.

Precision Air Conditioners



Precision Air Conditioners

— Product Description —

Withair® precision air conditioning units are designed with comprehensiveness and flexibility and save the time and cost in field installation and system maintenance and management. With simple installation and connection of water supply pipelines and power supply lines in the installation site, the system's safety and reliable operations and the entire air conditioning system can be directly started and debugged and easily installed.

The highest criterion for the design strategy of Withair® precision air conditioning products is safe and reliable operation of the system. All Withair® precision air conditioners must meet the highest system efficiency requirements of users and comply with strict environmental protection requirements. Therefore, Withair® offers expanded product series to satisfy various requirements of users. Withair® precision air conditioners adopt the modular design to implement free combination of modules and the N+1 redundant backup function. Users can easily select the most suitable module system combination. In other words, flexibility of air conditioning system combination is also an excellent characteristic of Withair® precision air conditioner.

— The Key Advantages Include —

- Cooling capacity: 6~128 kW;
- The advanced and reliable technology can implement continuous operation for 24 hours all the year round, and the designed operation life is over 10 years;
- The highly efficient EC fan (optional) saves energy by 45% in comparison to the traditional AC fan;
- The intelligent electronic expansion valve (EEV) (optional) saves energy by 25% in comparison to the common mechanical thermal expansion valve.

— Technical Data —

Air Cooled DX Units Series

Model W02C1P			6	8	10	13	16	20	25	32	42	45	50	55	62	70	80	90	102	
Cooling capacity		kW	6.1	7.9	10.2	12.8	16.2	19.7	25.8	31.5	41.2	44.3	50.5	54.4	61.4	69.7	78.2	90.8	102.6	
Air flow		m³/h	1800	2200	3500	3500	5200	5200	7250	13000	13000	13000	13000	19800	19800	19800	19800	25100	29800	
Compressor	Type		Scroll																	
	Input power	kW	1.5	1.9	2.3	3.2	4.1	4.7	6.5	8.4	11.1	12.2	14.7	15.2	16.9	19.7	22.4	27.2	29.2	
	Quantity		1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	
Evaporator	Frontal surface	m²	0.3	0.3	0.5	0.5	0.5	0.7	0.7	0.9	1.4	1.5	1.5	2	2	2	2	2	2	
	Size	cm	25*22																	
	Row		3	3	3	3	3	3	4	3	4	4	4	4	4	4	4	4	4	4
	Type of fins		Hydrophilic																	
	Pitch of fins	mm	1.8																	
Fan motor	Type		Centrifugal																	
	Quantity		1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
	Rated current	A	1.2	1.7	3.2	3.2	3.2	3.8	3.8	4.5	4.7	4.7	4.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	Rated power	W	173	282	563	563	563	668	668	2200	2500	2600	2700	3750	3880	3900	3900	4200	4200	
	ESP	Pa	245	220	255	255	255	120	120	380	380	380	380	380	380	380	380	380	380	380
Air filter	Grade		EU3							G4										
	Total area	m²	2.2	2.2	3.8	3.8	3.8	5.2	5.2	2.95	2.95	2.95	2.95	4.5	4.5	4.5	4.5	4.5	4.5	
	Fire-proof grade		1																	
Electrical heater	Total heating capacity	kW	1.5	1.5	3	3	3	3	3	9.5	9.5	9.5	9.5	13.2	13.2	13.2	13.2	13.2	16.5	
	Quantity		1	1	2	2	2	2	2	3	3	3	3	4	4	4	4	4	6	
	Material		Aluminium																	
Humidifier	Capacity	kg/h	3	3	3	3	3	3	3	8	8	8	8	8	8	8	8	8	8	
	Rated power	kW	2.3	2.3	2.3	2.3	2.3	2.3	2.3	6	6	6	6	6	6	6	6	6	6	
Dimension	Length	mm	600	600	900	900	900	1200	1200	1750	1750	1750	1750	2500	2500	2500	2500	2500	2500	
	Width	mm	455	455	455	455	455	455	455	800	800	800	800	800	800	800	800	800	800	
	Height	mm	1900	1900	1900	1900	1900	1900	1900	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
Weight	kg	160	165	202	215	235	252	265	485	495	615	715	910	950	970	980	1020	1180		
Noise	dB(A)	45	46	46	47	47	48	48	51	53	55	58	59	59	61	62	63	63		

Notes:

1. Air return temperature 24°C; relative humidity 50%; ambient 35°C.
2. Noise is measured in free 2m apart from the unit.
3. All models, sizes, dimensions, and specifications are subject to change without prior notice, please refer to nameplates for the most accurate specifications

Water Cooled DX Units Series

Model W02CW2P		6	8	12	15	20	25	30	35	40	50	60	70	80	90	100	115	130	150	
Cooling capacity	kW	6.6	8.5	11.6	14.9	20.6	25.3	30.5	35.2	40.8	50.7	61.9	70.4	81.5	90.7	101.8	115.5	129.8	148.2	
Air flow	m³/h	1720	2150	2850	3530	5200	6530	7280	9000	10000	13800	16000	17500	18000	21000	23500	24200	28500	31200	
Compressor	Type	Hermetic scroll																		
	Rated power	kW	1.5	1.9	2.4	3.35	5	5.5	6.6	8.1	8.75	10.8	13.5	16.4	19.4	20.4	22.8	25	28	31
Fin coil evaporator	Frontal surface	m²	0.29	0.29	0.47	0.47	0.65	0.8	0.8	1.4	1.4	1.7	1.7	1.7	2.8	2.8	2.8	3.1	3.1	
	Size	mm	25*21.65																	
	Type of fins		Hydrophilic																	
	Pitch of fins	mm	1.8																	
Fan motor	Type	Centrifugal fan with forward bent blade																		
	Fan quantity		1	1	2	2	2	1	1	1	1	2	2	2	2	3	3	3	3	3
	Rated current	A	1.2	1.6	3.2	3.2	3.8	2.5	2.8	3.5	4.1	5	5	5.2	5.2	6.5	16.5	16.5	18.7	21
	Rated power	W	165	282	500	563	668	1050	1200	1320	2000	2600	3000	3300	3900	3900	6300	6300	7200	8500
	ESP	Pa	180	180	180	250	250	380	380	425	355	350	405	378	378	378	400	400	350	350
Air filter	Grade	G4																		
	Total area	m²	2.2	2.2	3.6	3.6	5	5.8	5.8	6.5	6.5	7.8	7.8	7.8	7.8	13.5	13.5	13.5	14	14
	Fire-proof grade	1																		
Electrical heater	Total heating capacity	kW	2	2	2.5	2.5	5	5	5	5	8	8	10	10	10	12	24	24	24	24
	Quantity			1	1	1	2	2	2	2	2	2	3	3	3	2	4	4	4	4
	Material	PTC																		
Humidifier	Capacity	kg/h	5.8	5.8	5.8	5.8	5.8	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
	Rated power	kW	1.5	1.5	2.25	2.25	2.25	6	6	6	6	6	6	6	6	6	6	6	6	6
Water cooled condenser	Type	Copper welded plate heat exchanger																		
	Water flow	l/s	0.4	0.51	0.64	0.85	1.25	1.44	1.83	2.12	2.4	3.2	3.64	4.23	4.89	5.56	6.02	6.72	7.2	7.9
	Water pressure drop	kPa	47.5	47.5	48	48	49	49	49	51	51	51	53	53	53	53	55	55	60	60
	Condenser quantity		1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
Dimension	Length	mm	600	600	900	900	1200	1200	1000	1000	1750	1750	1750	1750	1750	2500	2500	2500	2500	2500
	Width	mm	455	455	455	455	1200	800	800	800	800	800	800	800	800	800	800	800	800	800
	Height	mm	1900	1900	1900	1900	449	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Weight	kg	162	169	207	265	285	375	393	490	590	610	620	625	625	979	992	1020	1080	1150	
Noise	dBA	46	48	48	51	53	52	53	56.5	60	60	64	65	65	65	65	66	68	69	

Notes:

- Standard working condition: entering chilled water temperature 30°C, leaving chilled water temperature 35°C.
- Noise is measured in free 2m apart from the unit.
- All models, sizes, dimensions, and specifications are subject to change without prior notice, please refer to nameplates for the most accurate specifications

Chilled Water Units Series

Model W02CW2P		8	11	14	16	20	25	40	50	60	70	85	95	110	125	135	160		
Cooling capacity		kW	8.1	10.9	14.2	15.8	19.3	24.2	39.7	50.5	61.2	69.8	85.6	95.7	110.5	127.6	137.6	166.8	
Air flow		m ³ /h	1750	2200	3200	3500	4800	5200	8200	13500	16500	16800	17500	19000	26000	28800	37000	42000	
Water flow		L/S	0.4	0.56	0.73	0.78	0.96	1.14	1.89	2.5	3.1	3.48	4.3	4.78	5.3	6.1	7.05	7.5	
Water pressure drop		kPa	37	37	39	52	52	52	46	52	53	55	56	56	62	63	62	64	
Chilled water coil	Surface area	m ²	0.29	0.29	0.47	0.47	0.65	0.65	1.1	1.75	1.9	1.9	2.8	2.8	2.8	3.95	3.95	3.95	
	Sensible heat ratio		0.83	0.83	0.84	0.83	0.84	0.83	0.83	0.84	0.83	0.82	0.86	0.84	0.82	0.84	0.83	0.82	
Fan	Type		Centrifugal fan with forward bent blade																
	Fan quantity		1	1	2	2	2	2	1	1	2	2	2	2	3	3	3	3	
	ESP	Pa	20-240						20-350										
Air filter	Level		G4																
	Overall surface	m ²	2.2	2.2	3.6	3.6	5	5	5.8	5.8	7.8	7.8	7.8	7.8	7.8	13.5	13.5	13.5	
Electrical heater	Total heating capacity	kW	2	2	2.5	2.5	5	5	5	5	12	12	18	18	24	24	24	24	
	Quantity	PC	1	1	1	1	2	2	2	2	2	2	3	3	4	4	4	4	
Humidifier	Capacity	kg/h	5.8	5.8	5.8	5.8	5.8	5.8	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	
	Rated power	kW	2.25	2.25	2.25	2.25	2.25	2.25	6	6	6	6	6	6	6	6	6	6	
Dimension	Length	mm	600	600	900	900	1200	1200	1000	1000	1750	1750	1750	1750	1750	2500	2500	2500	
	Width	mm	455	455	455	455	455	455	455	800	800	800	800	800	800	800	800	800	
	Height	mm	1900	1900	1900	1900	1900	1900	1900	2000	2000	2000	2000	2000	2000	2000	2000	2000	
Weight	kg	125	135	150	160	170	175	310	370	410	430	450	490	510	730	750	850		
Noise	dBA	48	50	51	51	52	52	58	58	60	61	63	63	63.5	68	68	68		

Notes:

- Standard working condition: entering chilled water temperature 7°C, leaving chilled water temperature 12°C.
- Noise is measured in free 2m apart from the unit.
- 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.

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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