



THREE-IN-ONE DEHUMIDIFICATION HEAT PUMP



QW



Applicable to large pools, such as stadiums, athlete training center, water entertainment places.

This series of products are horizontal three-in-one dehumidifier heat pump units, with heat pump assisting heating water cooling condensers and outdoor unit. It simultaneous control indoor air temperature and humidity, has features of dehumidifying function, air conditioning and refrigeration, heating, pool water auxiliary heating function and water thermostat function. Initial pool water is heated by boilers or air-source heat pump or electric heating.

Three-in-one integrated dehumidification and heat pump is sufficient to maintain a constant temperature in the indoor air while the indoor air is dehumidified. For energy saving, the system will fully recover the air heat during operation, the air heat will be transferred to indoor air or water through the regeneration system, to ensure that the indoor air in a constant temperature status. Dehumidified condensate can be directly discharged to the outside or returned into the pool to complement the pool water.

Specification and size:

Indoor Unit Part

Model	QW 15G	QW 25G	QW 30G	QW 40G	QW 50G	QW 60G	QW 75G	QW 90G	QW 105G	QW 125G	QW 150G	QW 180G	QW 210G	QW 250G	QW 300G		
Dehumidification Capacity	kg/h	15	25	30	40	50	60	75	90	105	125	150	180	210	250	300	
Maximum Cooling Capacity	kW	23	37	47	65	74	87	120	125	152	190	248	255	290	320	388	
Maximum Heating Capacity	kW	27	41	54	74	86	120	135	143	178	225	285	315	325	390	480	
Evaporator	type	Internal thread copper tube aluminum fin + Electrophoresis anti-corrosion															
Condenser	type	Internal thread copper tube aluminum fin + Electrophoresis anti-corrosion															
Rated Air Volume	m ³ /h	4800	7000	8000	11000	12000	16000	19000	20000	25000	28000	37000	42000	52000	60000	68000	
Interval Air Supply	m ³ /h	3000~5000	5000~7000	6000~8000	8000~11000	9000~12000	11000~16000	15000~19000	18000~21000	19000~25000	25000~32000	30000~38000	35000~42000	45000~52000	50000~60000	58000~68000	
Supply air pressure	pa	300	300	380	450	600	620	680	700	720	720	750	900	900	1000	1000	
Fresh Air Volume	m ³ /h	0~1050	0~2100	0~2100	0~2550	0~3000	0~3750	0~5000	0~6000	0~7000	0~7500	0~8550	0~9600	0~12000	0~15000	0~15000	
Exhaust Volume	m ³ /h	1050	1500	2100	2550	3000	3750	5000	6000	7000	7500	8550	9600	12000	15000	15000	
Exhaust Wind Pressure	pa	120	120	150	200	250	250	300	300	350	350	350	350	400	400	400	
Compressor Type	type	Fully enclosed scroll compressor															
Pool Water Heat Exchange	type	Externally threaded titanium tube heat exchanger															
Maximum Heating Capacity Of The Pool	kW	27	42	58	80	91	128	132	150	188	236	295	350	420	480	520	
Pool Water Flow Rate	m ³ /h	6	9	11	15	18	21	27	33	40	50	61	68	75	80	120	
Condensate Drain Pipe Size(single unit)	type	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN40	DN50	
Pool Pipe Diameter	type	DE50	DE50	DE50	DE50	DE50	DE110	DE110	DE110	DE110	DE110	DE110	DE110	DE110	DE140	DE140	
Max Total Input Power	kW	7.73	10.08	13.82	15.22	20.87	27.05	32.25	37.5	43.6	57.7	69.2	75.2	95	113.4	136.6	
Filter Type	type	Primary filter															
Power Type	V/PH/Hz	380/3/50															
Dimensions	Length	mm	2480	2580	2580	2580	2580	4300	4300	4550	4800	5500	5500	5500	5500	6400	6400
	Width	mm	1750	1950	1950	1950	2050	1900	1900	2000	2000	2250	2400	2550	2750	2950	3100
	Height	mm	1555	1555	1705	1855	1955	1855	1855	1855	1855	1955	2155	2155	2155	2255	2405
Weight	kg	700	730	750	1050	1400	1650	1980	2400	2800	3260	3680	4170	4250	4450	4650	

Table cooler(MatchingAir)

Coil Type	type	Copper tube aluminum fin + electrophoresis anti-corrosion														
Cooling Capacity	kW	28	50	65	85	110	125	150	165	180	202	225	280	320	380	450
Heating Capacity	kW	36	65	84	110	130	148	180	190	212	240	265	330	380	450	530
Cold Water Flow	m ³ /h	5.5	9.1	9.8	15	18	23	25	27	32	38	41	45	48.5	57	68
Hot Water Flow	m ³ /h	3.6	6.9	7.5	11	12.5	13	16	18	21	23	25	28	32	38	45
Pipe Diameter	type	DN40	DN40	DN50	DN50	DN50	DN65	DN65	DN65	DN65	DN80	DN80	DN80	DN80X2	DN80X2	DN80X2

Outdoor Unit Part

Power Type	V/PH/Hz	380/3/50														
Max Total Input Power	kW	0.8	1.2	1.2	1.2	1.6	1.2x2	1.2x2	1.5x2	1.6x2	1.2x4	1.5x4	1.6x4	1.8x4	2.0x4	2.4x4
Dimensions	Length	mm	775	1420	1420	1420	1420	1420	1420	1420	1420	1420	1420	1420	1800	2005
	Width	mm	760	760	760	760	760	760	760	760	760	760	760	760	1000	1000
	Height	mm	1040	1040	1040	1040	1530	1040	1040	1040	1530	1040	1040	1040	1530	1325
Net Weight	kg	50	80	80	100	150	80x2	100x2	150x2	160x2	100x4	100x4	150x4	160x4	210x4	235x4
Copper pipe size	mm	12.7/16	16/22	19/25	19/25	19/28	(19/25)x2	(19/25)x2	(19/25)x2	(19/28)x2	(19/25)x4	(19/25)x4	(19/25)x4	(19/28)x4	(22/32)x4	(25/32)x4

- Nominal working conditions: return air dry bulb temperature is 28°C, relative humidity is 65%, outdoor dry bulb temperature is 32°C
- Swimming pool water conditions: the pool inlet temperature is 26°C, the pool outlet temperature is 28°C
- Water coil air cooler: cold water inlet and outlet water temperature is 7 °C / 12°C, hot water inlet and outlet water temperature is 60°C / 50°C
- The model, parameters and performance will be changed due to the improvement of the product. Please refer to the product nameplate for specific parameters.