

# Indoor Pool Environment Control System

One System Delivers Everything You Need!



- Dehumidification
- Air Heating
- Pool Water Heating
- Air Conditioning
- Ventilation

## Indoor Pool Environment Control System

**Blueway Indoor Pool Environment Control System** provides effective control of damaging moisture common within indoor pool facilities. The system maintains a delicate balance of humidity control and manage air and water temperatures for maximum comfort at the lowest cost. This series uses heat pump technology to dehumidify the space and recycle the waste energy to heat both the air and pool water, which is available in many sizes and a variety of configurations for large indoor pools found in hotels, schools, natatoriums, aquatic centers and water parks.

### ■ Built for the Corrosive Pool Environment

Blueway dehumidifier has many special design features to minimize maintenance and extend the life of the unit. All critical components are located out of the corrosive air stream, and coils are constructed from all copper and coated aluminum fins for long life. Blueway uses full-size air/water condensers for maximum pool and air heating or cooling. It utilizes a sophisticated PLC (Programmable Logic Controller) that offers highly efficient control strategies for more efficient intelligent pool operation. All units are constructed of heavy-gauge steel with side and roof panels galvanized and epoxy powder coated to resist corrosion. Panel insulation provides additional energy efficiency along with sound control for indoor and outdoor installations.



## Technical Specifications

Model	BHP-15	BHP-20	BHP-25	BHP-30	BHP-40	BHP-50	BHP-60	BHP-80	BHP-100	BHP-120	BHP-140	BHP-160	BHP-180	BHP-200	BHP-220	BHP-240	
Power Supply	1/10/20/30																
Dehumidification capacity	kg/h	17	22	28	33	43	51	62	84	102	124	142	160	182	205	224	240
Cooling capacity	kWh/h	25	33	43	51	65	82	94	120	140	162	192	215	241	269	290	307
Heating capacity	kWh/h	30	39	47	60	73	102	114	150	174	243	260	280	328	360	400	420
Indoor airflow	m <sup>3</sup> /h	4000/5000	5000/6000	6000/7000	7000/8000	9000/12500	10000/15000	13000/18000	14000/24000	21000/32000	27000/38000	33000/40000	40000/48000	48000/58000	58000/68000	68000/80000	80000/90000
Water flow	m <sup>3</sup> /h	4.7	6.1	7.2	9.4	12.2	14.5	18.8	24.6	30.6	37.5	43	48	55	62	70	72
Current of installation	A	20	30	35	45	60	70	80	100	120	150	160	180	200	230	260	280
Refrigerant		R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Water connection	mm	DN50	DN50	DN50	DN50	DN50	DN50	DN75	DN75	DN110	DN110	DN110	DN110	DN110	DN110	DN110	DN110
Copper tube	φ	φ15.875	φ22.71	φ22.71	φ15.875	φ22.71	φ22.71	φ22.71	φ22.71	φ22.71	φ22.71	φ22.71	φ22.71	φ22.71	φ22.71	φ22.71	φ22.71
Noise level	dB(A)	65	67	67	67	68	68	69	67	67	67	67	67	67	67	67	67
Net dimension (outdoor condenser)	W mm	706	1470	1470	1470	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	D mm	686	860	860	860	950	950	950	1100	950	950	1150	1150	1150	950	950	950
	H mm	940	990	990	990	1450	1450	1450	1390	1450	1450	1390	1390	1390	1450	1450	1450
Quantity (outdoor condenser)	WT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	W mm	3200	3300	3300	3200	3600	4000	4100	4800	5000	6100	6400	6600	6800	7000	7200	7300
	D mm	1370	1530	1530	1670	1670	1910	1910	2000	2200	2300	2150	2150	2150	2150	2150	2150
	H mm	1160	1160	1260	1360	1430	1480	1550	1950	2000	2000	2200	2300	2300	2400	2400	2400
Net weight (indoor main unit)	kg	500	800	900	1300	1500	1650	1850	2200	2500	2700	3000	3100	3500	4000	4200	4300

**Note:**  
The above ratings are based on AHRI standard 910-2011 (Performance Rating of Indoor Pool Dehumidifiers). Outdoor ambient DB35°C, pool water temp. 27°C, chiller water temp. 7°C.  
Blueway reserves the right to modify the above specifications without notice for product improvement. Please contact us for updated information.

### ■ High Efficiency and Environmentally Friendly

All models adopt environmentally-friendly R410A refrigerant and deliver excellent performance characteristics. Staged compressor cycling ensures minimum compressor operation for any given load for greater efficiency, and also maintains a high quality environment. And the system can be configured to return condensate back to the pool, saving the equivalent of the entire pool's volume over one year. For improved air quality, plasma filters can be added.

### ■ Recycled Energy Lessens the Need for Fossil Fuel Heating

Indoor pools demand large quantities of heat to maintain space and water comfort conditions. Rather than relying on fossil fuel as the primary heat source, Blueway units utilize waste heat generated during dehumidification to heat the space and pool water, and they return much more energy than they use with average recorded savings ranging from 40% to 60% over conventional outside air dilution systems. For every kilowatt of electrical power used to operate a Blueway system, five kilowatts of heat are delivered to the natatorium air and water.

### ■ Rugged Features delivers Unrivaled Performance

- Scroll compressor, efficient and quiet operation
- Titanium tube-in-shell water heat exchanger
- Powder coated cabinet, corrosion resistant
- PLC controller with user friendly interface
- Remote monitoring by phone or internet
- Coated evaporator & reheat condenser coils, long life
- Self diagnosis

