

REVERSIBLE HEAT PUMPS

BWHE - Air-to-water heat pump from 6 kW to 41kW

Range of **air-to-water heat pumps** with axial fans and R410a gas designed and developed to provide optimum comfort and the highest levels of environmental well-being.

Rotary vane compressor in sizes 061 and 081, hermetic scroll compressor in sizes 101 to 411, including thermal protection in electric motor windings, casing heater and rubber anti-vibration pads.

Condenser consisting of a coil with copper pipes and aluminium fins with a high exchange surface area.

Helical fans directly coupled to 6-pin external rotor electric motor, IP 54 protection class with grille guard;

AlSI 316 stainless steel brazed plate heat exchanger on the utility side, insulated with a closed-cell foam shell. The exchanger is equipped with a temperature probe for frost protection and a vane flow switch supplied as standard.

The unit includes

- General disconnection device,
- Protection of auxiliary and power circuits,
- Meter,
- Coil protection mesh,
- Microprocessor control (evaporation in the heat pump version) with fan speed controller,
- Flow switch (supplied),
- Summer/Winter selection from digital input,
- Remote On/Off from digital input,
- Condensate drip tray (standard for sizes 061 to 161),
- Phase monitor (only for units with three-phase power supply).



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MODEL		061	081	101	141	161	181	211	251	281	311	371	411
Power supply	V/Ph/Hz	230/1/50			400/3+N/50								
Cooling capacity (1)	kW	5.7	7.1	8.8	13.0	14.9	17.7	19.0	23.7	27.1	30.2	35.6	40.1
EER (1)		2.76	2.54	2.48	2.81	2.66	2.73	3.09	2.85	2.84	2.83	2.94	2.94
Heating Capacity (2)	kW	6.5	8.0	10.0	14.1	16.4	19.5	20.5	26.3	30.5	33.5	38.1	43.6
COP (2)		2.80	2.84	2.86	2.97	2.92	2.99	3.14	3.20	3.27	3.12	3.15	3.18
Number of compressors	No.	1	1	1	1	1	1	1	1	1	1	1	1
Number of fans	No.	1	1	1	2	2	2	2	2	2	2	2	2
Air flow volume	m³/h	4,000	4,000	3,800	8,000	8,000	7,600	14,000	14,000	13,200	19,000	19,000	17,800
Useful pump pressure (optional)	kPa	55	51	50	44	42	40	153	108	93	76	135	104
Tank capacity (opt)	L	70	70	70	70	70	70	140	140	140	140	140	140
Dimensions (basic v.) WxDxH	mm	925x375x700			925x375x1350			1105x505x1385			1305x505x1585		
Dimensions (W&C) WxDxH	mm	925x375x1049			925x375x1699			1105x505x1850			1305x505x2050		
Refrigerant	charge / tons CO ₂	R410A / 2088											
CODE		0008B001	0008B002	0008B003	0008B004	0008B005	000B006	0008B007	0008B008	0008B009	0008B010	0008B011	0008B012

(1) Outdoor air temperature 35°C; evaporator inlet-outlet water temperature 12-7°C, EN14511;

(2) Outdoor air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 40-45 °C, EN14511;

NOTE: THE ABOVE HERMETICALLY SEALED PRODUCTS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL;

BWHE - Accessories

BWHE MODEL
Hydraulic module options
Pump
Pump and tank
Fan Accessories
EC fans
Hydraulic module options
Filling unit w/pressure gauge (a)
Elem. antifreeze (basic v.)
Antifreeze element (v. w/pump)
Antifreeze element (v. w/pump and tank)
Water Filter (a)
Electrical accessories
Power supp. 230/1/50
Power supp. 400/3+N/50
RS485 serial board
Re-assembled user terminal (a)
Electric soft-starter (b)
Miscellaneous accessories
Rubber vibration dampers (a)
Coil anti-corrosion treatment
Condensate collection tray

(a): accessory supplied;

(b): not compatible with three-phase power supply models 61/81/101;