

# Heat Pump Residential Water Heater

## **Features**

- A+ ErP Efficiency Rating.
- IEC Compliant.
- COP 4.4—(based on A20/W10-55).
- Operating Air Temperature Range: 7°C to 40°C (45°F to 104°F) for Heat Pump— (Unit operates in Standard/Electric Mode outside of this range).
- Electronic control with mechanical buttons and LED indicator enables:
  - Switch on/off.
  - Setting water temperature ranging from 10°C (50°F) to 75°C (167°F).
  - Display of water temperature in the tank.
  - Automatic anti-Legionella control system.
  - Fault/error diagnostics.
- Operating Modes Offer Flexibility.
  - Heat Pump (Only) Mode Maximizes consumer savings.
     The most energy-efficient mode as it only utilizes the heat pump.
  - Turbo mode—Combines the heat pump and heating element to quickly recover the hot water in the tank.
  - Back-up Operating Mode—If the inlet air temperature is lower than 7°C (45°F) or higher than 40°C (104°F), the heat pump switches to backup operating mode, utilizing the integrated heating element. When heat pump operating conditions are met, the unit automatically switches back to heat pump mode.
- Turbo recovery to the setpoint temperature with simultaneous heat pump and element operation.
- High-quality Steel Tank Protected with Enameled Coating and Multiple Anode Rods.
- Quiet Operation—Operating sound level of approximately 59 DBA.
- Maximum Temperature Ranges—65°C (149°F) with heat pump or up to 75°C (167°F) with supplemental heating element.
- 2 kW Dry Element as an Additional or Spare Source of Water Heating.
- **Non-CFC Foam Insulation**—Covers the sides and top of the tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies, and jacket rigidity.
- Water Connections
  - G 3/4 for 200 liter models
  - G 1 for 300 liter models



Photo is of BWHP200



IEC



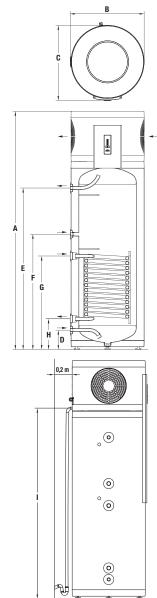
<sup>\*</sup> Indoor installation only

## **Heat Pump** Residential Water Heater

#### **SPECIFICATIONS**

Model Number	Capacity Liters	A Floor to Top of Heater mm.	B Jacket Dia. mm.	C Depth mm.	D Floor to Cold Water Inlet mm.	E Floor to Hot Water Outlet mm.	F Floor to Recirc. Conn. mm.	G Floor to Heat Exch. Inlet mm.	H Floor to Heat Exch. Outlet mm.	I Floor to Condensate Conn. mm.	Approx. Shipping Weight kg.
BWHP200	200	1860	570	585	155	1265	905	N/A	N/A	1490	97
BWHP200C	190	1860	570	585	155	1265	905	733	243	1490	114
BWHP300	285	1960	670	685	165	1275	905	N/A	N/A	1525	130
BWHP300C	275	1960	670	685	165	1275	905	760	270	1525	147

MODEL	Unit	BWHP200	BWHP200C	BWHP300	BWHP300C
Declared load profile		L	L	XL	XL
Energy efficiency class (2)		A+	A+	A+	A+
Energy efficiency ŋwh (2)	%	177.6	177.3	179.2	178.9
AEC annual electricity consumption_ACC (2)	kWh	576	578	935	936
Daily electricity consumption Qelec_ACC (2)	kWh	2.709	2.719	4.352	4.362
Thermostat temperature settings	°C	55	55	55	55
Sound power level LWA, indoors (4)	dB(A)	58.3	58.3	59	59
Storage volume V	I	200.0	190.0	285.0	275.0
Mixed water at 40°C V40 (2)	I	275	260	395	380
TECHNICAL CHARACTERISTICS					
Heating up Period A15 / W10-55 (1)	h:min	8:07	7:43	8:15	7:55
Heating up Period A20 / W10-55 (2)	h:min	7:19	6:59	7:14	6:57
Heating up energy input A15 / W10-55 (1)	kWh	2.25	2.14	3.32	3.18
Heating up energy input A20 / W10-55 (2)	kWh	2.05	1.95	3.14	3.01
Energy consumption with profile A15 / W10-55 (1)	kWh	3.01	3.05	4.74	4.77
Energy consumption with profile A20 / W10-55 (2)	kWh	2.72	2.73	4.36	4.37
COPDHW (A15 / W10-55) EN 16147 (1)		3.9	3.9	4.0	4.0
COPDHW (A20 / W10-55) EN 16147 (2)		4.3	4.3	4.4	4.4
Standby power input according to EN16147 (2)	W	15	16	17	18
Refrigerant, R134a		GWP 1430	GWP 1430	GWP 1430	GWP 1430
Quantity of refrigerant	kg	0.950	0.950	1.100	1.100
Working range - air temparature	°C	+7 / +40	+7 / +40	+7 / +40	+7 / +40
ELECTRICAL SPECIFICATIONS					
Nominal electrical power - compressor	W	350	350	490	490
Maximum power consumption	W	2350	2350	2490	2490
Voltage/Frequency	V/Hz	230/50	230/50	230/50	230/50
Protection		IP21	IP21	IP21	IP21
STORAGE TANK					
Enamelled steel / Protection Mg anode		+/+	+/+	+/+	+/+
Working pressure	bar	7	7	7	7
MAXIMUM TEMPERATURE					
Hot water tank_ heat pump	°C	65	65	65	65
Hot water tank_ electric heater	°C	75	75	75	75
Hot water tank heat exchanger	°C	-	95	-	95
DIMENSIONS AND CONNECTIONS					
Height	mm	1860	1860	1960	1960
Width	mm	570	570	670	670
Depth	mm	585	585	685	685
Average thickness of insulation	mm	60	60	67	67
Connections to the watter supply network		G 3/4	G 3/4	G 1	G 1
Connections to the heat exchanger		-	G 1	-	G 1
Max working pressure heat exchanger	Mpa (bar)	_	1,2 (12)	-	1,2 (12)
Heat exchanger surface bottom /top	m2	-	1,1/-	-	1,1/-
Heat exchanger volume bottom /top	1	-	7	-	7
Exchange power in continuous mode (max. coil output) (3)	kW	-	30.3	-	29.1
Continuous output $\Delta T$ =35K (3)	l/hour	-	745	-	715
Net/Gross/with water	kg	85/97/285	102/114/292	118/130/403	135/147/410
TRANSPORT DATA	9	55,5.,250	. 52,, 202	. 10, 100, 100	. 33, 1 11, 110
Packaging dimensions	mm	760x680x2060	760x680x2060	760x760x2160	760x760x2160
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All models are manufactured in accordance with IEC Standards. All models certified up to 7 bar (102 PSI) working pressure.

- (1) by air inlet temperature of 15°C (59°F), 74% humidity and 10°C (50°F) water on beginning heated up till 55°C (131°F) regarding to EN16147.
  (2) by air inlet temperature of 20°C (68°F), 58% humidity and 10°C (50°F) water on beginning heated up till 55°C (131°F) regarding to EN16147 and EU Regulation 812/2013.
- (3) Heating of sanitary water from 10°C (50°F) to 45°C (113°F) at inlet temperature of heat transfer fluid 80°C (176°F) and flow rate 3000 l/h.
- (4) EN 12102:2013.

### **GENERAL:**

All models are manufactured in accordance with IEC Standards. All models certified up to 7 bar (102 PSI) working pressure. Models are not available in USA or Canada.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

