

BWL air heat pumps BWS brine heat pumps

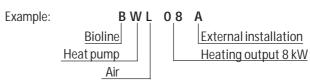




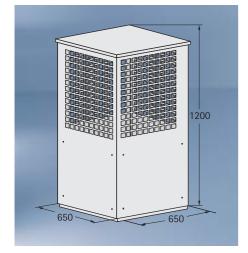
Benefits offered by Wolf heat pumps

- From each 1 kWh power, heat pumps generate between 3 and 5 kWh heat
- Free environmental energy from the ground and air for DHW and central heating is available without limit
- High efficiency and a long service life for all functional parts, such as, for example, the rotary screw compressor (well developed technology, as in fridges)
- No boiler or tank room or fuel storage required
- · No chimney or flue gas system required
- · Clear design lines with control from the front
- · Fully wired and programmed control unit
- Fully automatic and low-maintenance heating technology

Type explanation:



BWL 08 A



Equipment: Electric booster heater 6 kW, fully fitted into the device

Accessories: HP programming unit (control unit) in a wall mounting base for one

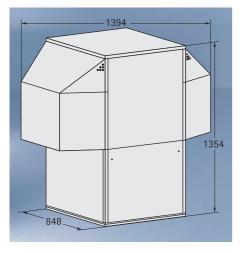
mixer circuit, heating circuit, DHW and DHW circulation

Specification:

Туре		BWL 08 A	BWL 12 A
Heating output A2/W35*	[kW]	8.1	12
COP A10/W35*		4.3	3.7
COP A2/W35*		3.4	3.2
Weight	[kg]	165	250
Sound pressure level 1 m from device	[dB(A)]	53	55
Air volume flow	[m³/h]	3000	3400
Heating water flow rate min/rated/max	[l/h]	1200/1200/2000	1200/1400/3000
Flow temp. range	[°C]	20-55	20-55
Air operating temperature	[°C]	-20 to +35	-20 to +35
Refrigerant		R404A	R404A

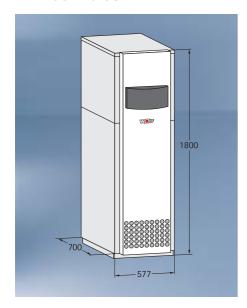
^{*} Values in accordance with EN 255, A2/W35 = Outside air temp. 2 °C and heating water flow temp. 35 °C

BWL 12 A





BWL 06 KI / 08 KI



Air/Water heat pump, compact device with buffer cylinder - internal installation - for mono-energetic operation covering the entire heat demand of a building.

Equipment:

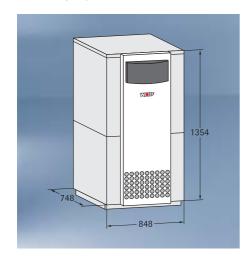
Heating circuit pump, expansion vessel, DHW diverter valve, safety valve, pressure gauge, automatic air vent valve, overflow valve, buffer cylinder 55 I, electric booster heater 6 kW, HP programming unit (control unit) for one mixer circuit, heating circuit, DHW and DHW circulation fully fitted inside the device

Specification:

Туре		BWL 06 KI	BWL 08 KI
Heating output A2/W35*	[kW]	6.1	8.1
COP A10/W35*		3.5	4.0
COP A2/W35*		3	3.2
Weight	[kg]	245	255
Sound pressure level 1 m from device	[dB(A)]	45	45
Air volume flow	[m ³ /h]	1800	2500
Heating water flow rate min./rated/max.	[l/h]	900/900/2000	900/900/2000
Flow temperature range	[°C]	20-55	20-55
Air operating temperature	[°C]	-20 to +35	-20 to +35
Refrigerant		R404A	R404A

 $^{^{\}star}$ Values in accordance with EN 255, A2/W35 = Outside air temp. 2 °C and heating water flow temp. 35 °C

BWL 10 I / 12 I



Air/Water heat pump - internal installation - for mono-energetic operation covering the entire heat demand of a building.

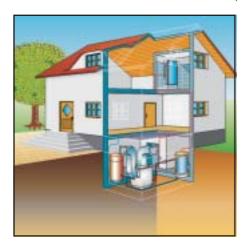
Equipment:

Electric booster heater 6 kW, HP programming unit (control unit) for one mixer circuit, heating circuit, DHW and DHW circulation, fully fitted inside the device

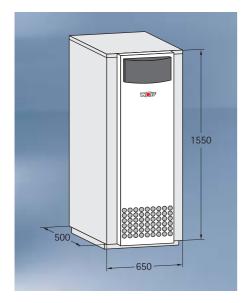
Specification:

Туре		BWL 10 I	BWL 12 I
Heating output A2/W35*	[kW]	9.6	12
COP A10/W35*		3.6	3.7
COP A2/W35*		3.2	3.2
Weight	[kg]	215	215
Sound pressure level 1 m from device	[dB(A)]	50	50
Air flow rate	[m³/h]	3400	3400
Heating water flow rate			
min./rated/max.	[l/h]	1000/1100/3000	1200/1400/3000
Flow temperature range	[°C]	20-55	20-55
Air operating temperature	[°C]	-20 to +35	-20 to +35
Refrigerant		R404A	R404A

 $^{^{\}star}$ Values in accordance with EN 255, A2/W35 = Outside air temp. 2 $^{\circ}$ C and heating water flow temp. 35 $^{\circ}$ C



BWS ... K



Brine/Water heat pump, compact device - internal installation - for mono-energetic operation covering the entire heat demand of a building.

Equipment:

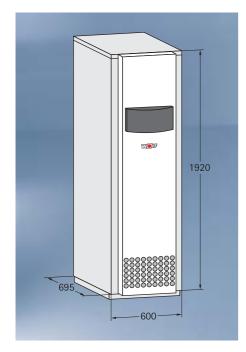
Heating circuit pump, brine circuit pump, expansion vessel, heating safety valve, brine safety valve, heating pressure gauge, brine pressure gauge, automatic air vent valve, automatic brine air vent valve, overflow valve, electric booster heater 6 kW, 9 kW for BWS 14 K, HP programming unit (control unit) for one mixer circuit, heating circuit, DHW and DHW circulation fully fitted inside the device

Specification:

Туре		BWS 06 K	BWS 09 K	BWS 12 K	BWS 14 K
Heating output B0/W35*	[kW]	5.8	9.1	11.9	13.9
COP B0/W35*		4.7	4.7	4.7	4.7
Weight	[kg]	195	198	204	207
Max. heating flow temp.	[°C]	65	65	65	65
Min./max. brine temp.	[°C]	-5/+25	-5/+25	-5/+25	-5/+25
Heating water flow rate					
min./rated/max.	**[l/h]	0.5/0.95/1.4	0.8/1.5/1.9	1.3/2.0/2.4	1.2/2.4/2.9
Brine flow rate					
min./rated/max.	**[l/h]	1.0/1.4/2.5	1.45/1.9/4.0	1.8/2.6/3.9	2.35/3.1/4.7
Refrigerant		R407C	R407C	R407C	R407C

^{*} Values in accordance with EN 255, BO/W35 = Heat source temp. 0°C and heating water flow temp. 35 °C

BWS ... **Z**



Brine/Water heat pump, heating centre with DHW cylinder - internal installation - for mono-energetic operation covering the entire heat demand of a building.

Equipment:

DHW cylinder 200 I contains the DHW diverter valve, heating circuit pump, brine circuit pump, heating safety valve, heating pressure gauge, automatic air vent valve, overflow valve, electric booster heater 6 kW, HP programming unit (control unit) for one mixer circuit, heating circuit, DHW and DHW circulation fully fitted inside the device

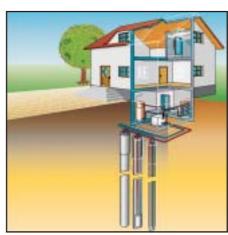
Specification:

Туре		BWS 06 Z	BWS 09 Z	BWS 11 Z
Heating output B0/W35*	[kW]	5.8	8.6	10.3
COP B0/W35*		4.7	4.6	4.7
Weight	[kg]	290	295	298
Max. heating flow temp.	[°C]	65	65	65
Min./max. brine temp.	[°C]	-5/+25	-5/+25	-5/+25
Heating water flow rate				
min./rated/max.	**[l/h]	0.5/0.95/1.2	0.75/1.4/1.8	0.9/1.8/2.2
Brine flow rate min/rated/max	**[l/h]	0.9/1.4/2.8	1.2/1.8/3.0	1.4/2.2/3.5
Refrigerant		R407C	R407C	R407C

^{*} Values in accordance with EN 255, BO/W35 = heat source temp. 0°C and heating water flow temp. 35 °C

^{**} Flow rate I/h x1000





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WPM control unit for DHW and central heating



DHW cylinder

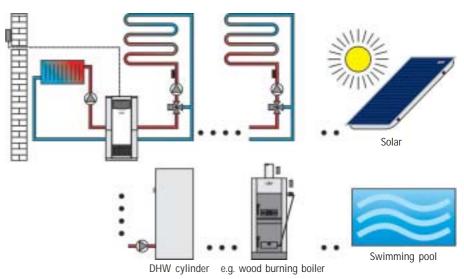
- Heat pump manager
- Weather-compensated control unit for one mixer circuit, heating circuit, DHW and DHW circulation
- Easy operation with Turn & Push selector plus a backlit pain text display
- Graphic display showing all operating details. Self-explanatory menu guide.
- Individual operating levels for the customer and the contractor where the most important heating system adjustments can be made swiftly and simply
- Quick DHW heat up (starting all heat sources)
- Control of a DHW circulation pump with its own time program
- · Pasteurisation switch for DHW
- Optional priority for central heating / DHW
- Pump optimisation program (heating circulation pump runtime optimisation)
- · Automatic summer / winter time changeover
- · Holiday functions (holiday clock)



Accessories Comfort extension PCB

Additional functions:

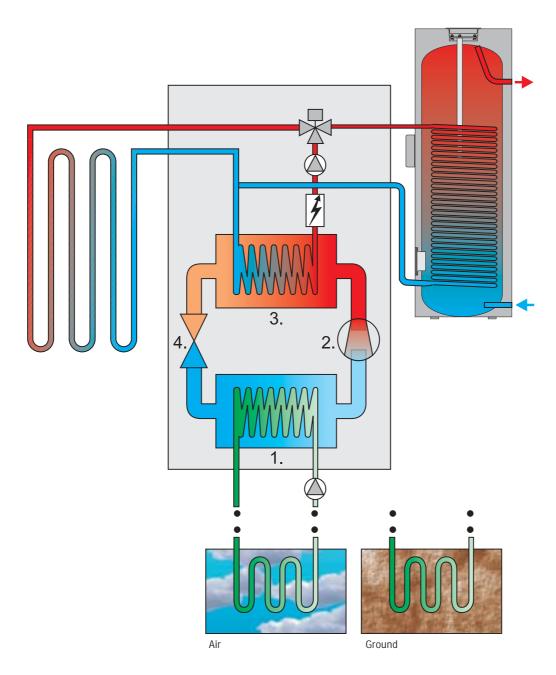
- Control of an additional heat source (wood burning / oil or gas fired boiler)
- · Control of a second mixer circuit
- Prepared for swimming pool water heating
- Temperature differential control unit (solar)



Standard delivery

Part of the standard deliveryAccessories	BWL A	BWL KI	BWL I	BWS K	BWS Z
Electric booster heater 6 kW	•	•	•	•	•
DHW cylinder, 200 litre capacity	-	-	-	-	•
DHW diverter valve	0	•	0	0	•
Buffer cylinder 55 I contents	-	•	-	-	-
Heating circuit pump	0	•	0	•	•
Brine circuit pump	-	-	-	•	•
Expansion vessel, heating	0	•	0	0	0
Expansion vessel, brine (Note: adjust the inlet pressure on site to 0.5 bar)	-	-	-	•	0
Connection set for expansion vessel with cap valve for heating	0	0	0	0	0
Heating safety valve	-	•	-	•	•
Brine safety valve	-	-	-	•	•
Safety valve with heating pressure gauge	0	-	0	-	-
Heating pressure gauge	-	•	-	•	•
Brine pressure gauge	-	-	-	•	•
Automatic heating air vent valve	0	0	0	•	•
Manual heating air vent valve	-	•	-	-	-
Automatic brine air vent valve	-	-	-	•	•
Heating overflow valve	0	•	0	•	•
Flexible connection set, heating	0	0	0	0	•
Flexible connection set, brine	-	-	-	0	•
Flexible connection set heating and brine (set)	-	-	-	0	-
HP programming unit (control unit for integration)	-	•	•	•	•
HP programming unit (wall mounted controller)	0	-	-	-	-
DHW cylinder SEW 300-35 300 litre capacity	0	0	0	0	-
DHW cylinder SEW 400-50 400 litre capacity	0	0	0	0	-
DHW cylinder, below SPW 150 140 litre capacity	-	-	0	-	-
Buffer cylinder SPU 200	0	-	0	0	0
Pipe assembly for DHW and central heating	BWL 08 A	-	BWL 10 I	-	-
Pipe assembly for heating operation	BWL 08 A	-	BWL 10 I	-	-
Pipe assembly, heating (excl. heating circuit pump)	BWL 12 A	-	BWL 12 I	-	-
Pipe assembly, DHW heating (excl. primary pump)	BWL 12 A	-	BWL 12 I	-	-
Brine distributor	-	-	-	0	0
Air duct (short or long)	-	0	0	-	-
Air duct bend	-	0	0	-	-
Air duct bezel	-	0	0	-	_
Weather protection grille	-	0	0	-	-
Guard grille	-	0	0	-	-
Air duct joiner	-	0	0	-	-
Air duct sealing tape	-	0	0	-	-
Control cable and sensor lead	0	-	-	-	-
Sensor for mixer, cylinder or buffer	0	0	0	0	0
Extension PCB 2nd mixer circuit + solar	0	0	0	0	0
Sensor for solar control unit (set)	0	0	0	0	0
Brine concentrate 20 I	-	-	-	0	0

Function of a heat pump with DHW heating



Heat pump function

The environmental energy from the air or the ground evaporates the medium (with a 1. Evaporator lower boiling point) circulating inside the heat pump and thereby transfers it into a

gaseous state.

2. Compressor The electric compressor sucks the evaporated medium into itself. There, it is severely

compressed and, as a result, raised to a high temperature level.

3. Condenser This heating energy at a high temperature level is transferred to the heating circuit. During this process, the gaseous medium cools down and returns into a liquid state.

The pressure is reduced, the cooled medium can hold environmental energy again and

4. Expansion valve the cycle starts again.



Wolf solar heating:

A system composed of perfectly matching components for solar DHW and central heating that leaves no wish regarding design flexibility and energy saving unfulfilled.

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