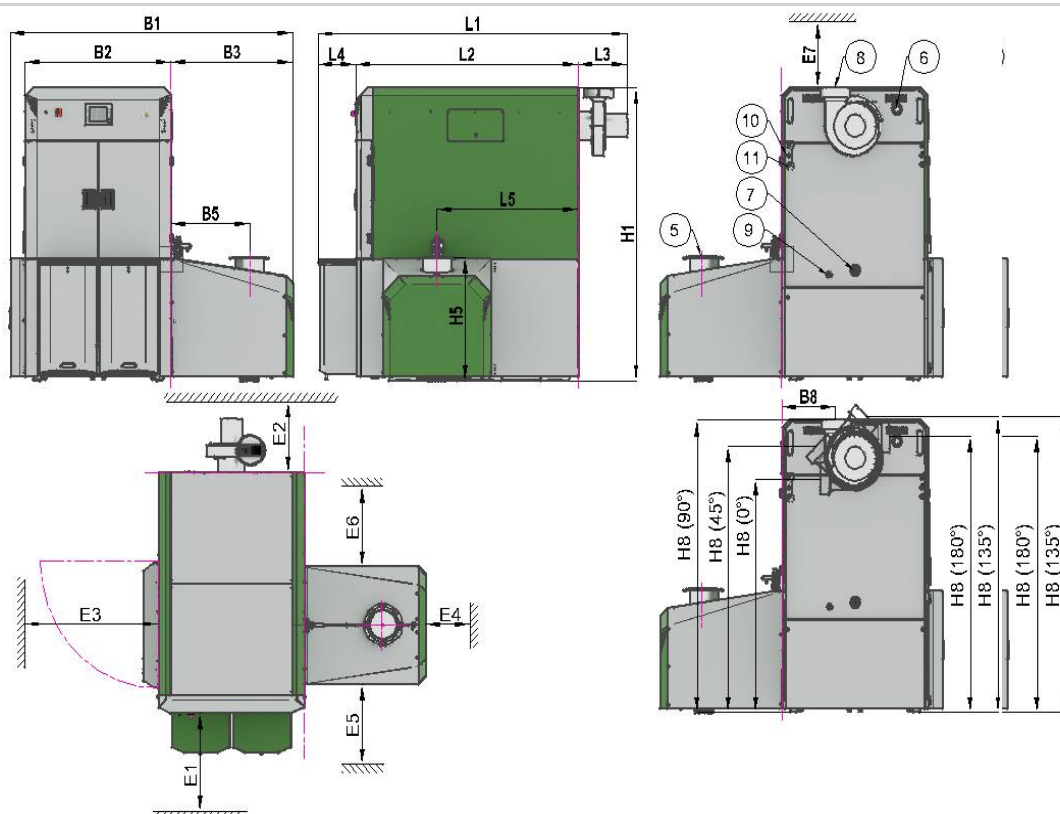


HEIM-Energie HP-F 120-200



Dimensions			120 - 150	180 - 200
L1	length	mm	2085	2250
L2	length	mm	1500	
L3	length	mm	330	490
L4	length	mm	255	
B1	width	mm	1910	
B2	width	mm	985	
B3	height	mm	820	
H1	height	mm	1830	

minimal gap			120 - 150	180 - 200
E1	minimal gap (front)	mm	1000	
E2	minimal gap (back)	mm	750	
E3	minimal gap (left)	mm	700	
E4	minimal gap (right)	mm	300	
E5	minimal gap	mm	500	
E6	minimal gap	mm	500	
E7	minimal gap (over boiler)	mm	450	600

Inserting Dimensions			120 - 150	180 - 200
	length	mm	1625	
	width	mm	985	
	height	mm	1830	

Inserting Dim. (without insertion)			120 - 150	180 - 200
	length	mm	1485	
	width	mm	965	
	height	mm	1795	

Connections			120 - 150	180 - 200
5	Einschubflansch Rückbrandschutz	Øi 150 mm		
LA5	BFP (length)	mm	950	
B5	BFP (width)	mm	525	
HA5	BFP (height)	mm	770	
6	Flow	2" IG		
BA6	Flow (width)	mm	210	
HA6	Flow (height)	mm	1690	
7	Backflow	2" IG		
B7	Backflow (length)	mm	490	480
H7	Backflow (height)	mm	685	
8	Flue gas pipe connection	Øa 200mm		
BA8	Flue gas pipe (90°)	mm	620	610
HA8	Flue gas pipe (90°)	mm	1820	1870
HA8	Flue gas pipe (0°)	mm	1460	1420
HA8	Flue gas pipe (45°)	mm	1660	1670
HA8	Flue gas pipe (135°)	mm	1845	1900
HA8	Flue gas pipe (180°)	mm	1720	1750
9	Filling / Depletion	3/4" IG		
BA9	Filling / Depletion (width)	mm	665	655
HA9	Filling / Depletion (height)	mm	655	
10	Input Safety heat exchanger	1/2" IG		
BA10	SHE (width)	mm	940	935
H10	SHE (height)	mm	1400	
11	Output Safety heat exchanger	1/2" IG		
BA11	SHE (width)	mm	940	935
HA11	SHE (height)	mm	1340	

Changes in the sense of the technical progress reserved

HEIM-Energie HP-F 120-200

Power Data (woodchips/pellets)		120	150	180	200
Power range - declaration at rating plate	kW	35,9 - 120	35,9 - 151	35,9 - 180	35,9 - 199
Fuel heat output	kW	117.3	151.4	173.9	198.9
Efficiency - Nominal Load*	%	92	93,7	92,3	91,8
Boiler class EN 303-5		5			
Energy efficiency class		A+			
Boiler Data (woodchips/pellets)		120	150	180	200
Boiler weight	kg	1570			
Operation temperature [max]	°C	90			
Setting Safety Temperature Limiter [max]- STL	°C	95			
Size of combustion surface	m²	0.307			
Number of thermal safety valve		1			
opening temperature thermal safety valve	°C	95			
Volume ash drawer heat exchanger	l	75			
Volume ash drawer combustion chamber	l	75			
Volume combustion chamber	m³	0.3181			
Chimney draft (underpressure) [min-max]	Pa	5 - 10			
Operating overpressure [min - max]	bar	1,5 - 5			
Heat Exchanger (woodchips/pellets)		120	150	180	200
Heat exchanger [Nr. conduits / Nr. tubes]		2 / 3x10 ; 3x10			
Heat exchanger surface	m²	8.6			
Safety-Heat-Exchanger surface	m²	0.57			
Flow safety heat exchanger [min]	l/h	1200			
Pressure cold water [min]	bar	2			
Hydraulic Data (woodchips/pellets)		120	150	180	200
Water capacity	l	295			
Min. recomm. flow rate $\Delta t=18K$	l/h	6831	7022	8742	9506
Flow rate $\Delta t=15K$	l/h	8197	8426	10490	11407
Resistance of boiler at $\Delta T=10K$	mBar	51,4	51,4	50,2	65,2
Resistance of boiler at $\Delta T=20K$	mBar	13,4	13,4	13,0	16,9
Recommended minimal volume of the buffer	l	1500	1500	2000	3000
Electrical Data (woodchips/pellets)		120	150	180	200
Power consumption	kW	2.8	2.8	4	4
Electrical connection	V/Hz/A	~230/50/16	~230/50/16	~400/50/16	~400/50/16
Electrical power consumption (nominal)*	kW	0,145	0.161	0,239	0,261
Electrical power consumption (partial)*	kW	0,073	0,073	0,106	0,106
Electrical power consumption (Stand By)*	kW	0.17			
Test Report Data		120	150	180	200
Test report reference number		31-10133/T8	31-10133/T9	31-10133/T11	31-10133/T14
Test institute		SZU			

Changes in the sense of the technical progress reserved

HEIM-Energie HP-F 120-200

Emmission Data (Nominal Load) (woodchips/pellets)		120	150	180	200
Flue gas temperature****	°C	140		160	180
Flue gas mass flow**	kg/h	277,2	313,2	388,8	421,2
Flue gas flow rate**	Nm ³ /h	213,8	241,2	298,6	324,1
Flue gas flow rate**	***Bm ³ /h	323,4	365,7	473,5	537,7
CO ₂ content*	Vol. %	13,32	14,54	14,33	14,75
Efficiency*	%	92	93,7	92,3	91,8

Emmission Data (Partial Load) (woodchips/pellets)		120	150	180	200
Flue gas temperature****	°C	85			
Flue gas mass flow**	kg/h	91.3			
Flue gas flow rate**	Nm ³ /h	70.2			
Flue gas flow rate**	***Bm ³ /h	92.1			
CO ₂ content*	Vol. %	10.75			
Efficiency*	%	94.7			

Note:

* measured value according test report

** calculated with fuel values from test report

*** cubic metres at operating pressure with fuel values from test report

**** empirical values

Nm³/h = Standard cubic meters / hour

Bm³/h = Operating cubic meters / hour

Technical note:

Acceptable fuel:

wood pellets according - EN ISO 17225-2 property class: A1 u. A2 - Enplus - DINplus - Swisspellet

Heating water:

Please note the ÖNORM H 5195 (current edition), EN 12828 part 1, for the quality of the heating water, and the VDI 2035 for Germany.

Regardless of the respective standards or guidelines, the following values apply as a minimum requirement for filling and make-up water:

Conductivity: <150µS / pH: 8,2 - 10 / total hardness: <0,1mmol/l

If a standard or guideline requires a lower value, this is to be used. The heating water must be checked at regular intervals in accordance with the applicable regulations. The results must be documented and kept

Buffer tank:

A buffer tank is not required if guaranteed:

permanent minimum heat decline: 100% of the nominal power for min. 0,75 hours or 30% of the nominal power for min. 1 hour.

The size of the buffer depends on the system. This must be calculated by a planner in accordance with the present heating system!

Maintenance/service:

The specified free areas must be strictly adhered to when carrying out maintenance and service work.

Changes in the sense of the technical progress reserved