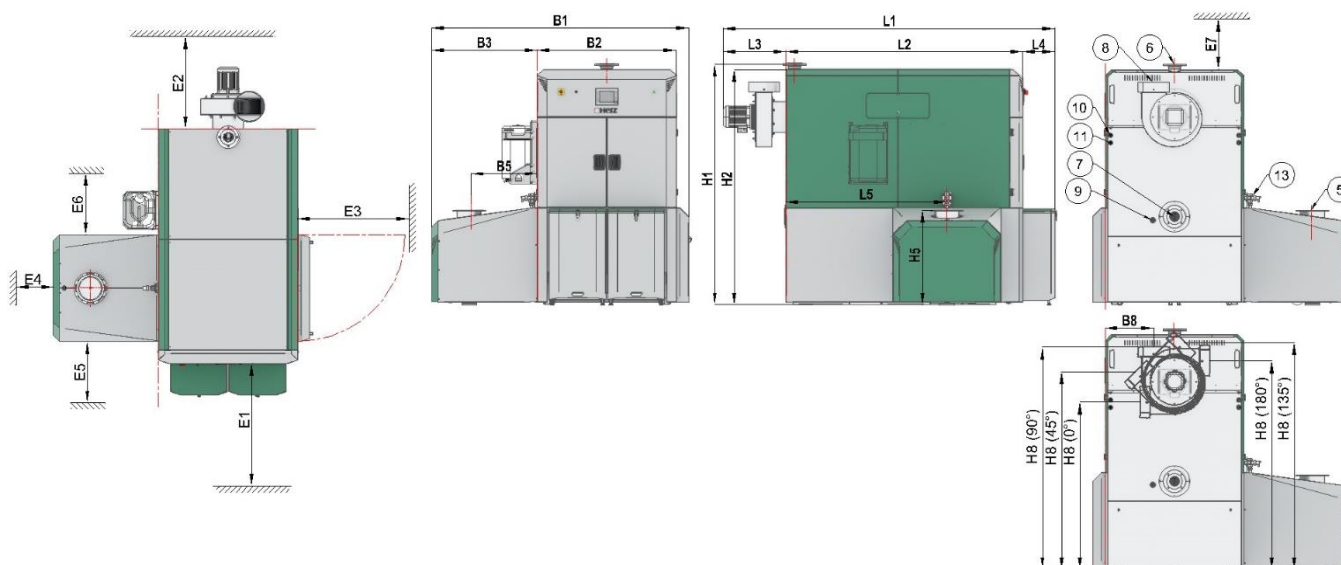


Created: PK

Responsible: RST (Construction)

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Dimensions			249 - 251 - 299 - 301
L1	length	mm	2670
L2	length	mm	1910
L3	length	mm	505
L4	length	mm	260
B1	width	mm	2070
B2	width	mm	1120
B3	width	mm	850
H1	height	mm	1990
H2	height	mm	1910

minimal gap			249 - 251 - 299 - 301
E1	minimal gap (front)	mm	1000
E2	minimal gap (back)	mm	750
E3	minimal gap	mm	700
E4	minimal gap	mm	300
E5	minimal gap	mm	500
E6	minimal gap	mm	500
E7	minimal gap (over boiler)	mm	480

Inserting Dimensions			249 - 251 - 299 - 301
	length	mm	2070
	width	mm	1120
	height	mm	2010

Connections			249 - 251 - 299 - 301
5	Insert-Flange - BFP		Øi 182,5 mm
L5	BFP (length)	mm	1800
B5	BFP (width)	mm	530
H5	BFP (height)	mm	770
6	Flow		DN80 / PN6
B6	Flow (width)	mm	560
H6	Flow (height)	mm	1990
7	Backflow		DN80 / PN6
B7	Backflow (length)	mm	560
H7	Backflow (height)	mm	715
8	Flue gas pipe connection		Øa 250mm
B8	Flue gas pipe (90°)	mm	395
H8	Flue gas pipe (90°)	mm	1820
H8	Flue gas pipe (0°)	mm	1360
H8	Flue gas pipe (45°)	mm	1610
H8	Flue gas pipe (135°)	mm	1850
H8	Flue gas pipe (180°)	mm	1700
9	Filling / Depletion		3/4" IG
B9	Filling / Depletion (width)	mm	385
H9	Filling / Depletion (height)	mm	690
10	Input Safety heat exchanger		1/2" IG
B10	SHE (width)	mm	45
H10	SHE (height)	mm	1380
11	Output Safety heat exchanger		1/2" IG
B11	SHE (width)	mm	45
H11	SHE (height)	mm	1320
13	Self-triggering extinguishing system		

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Power Data		249		251		299		301	
		woodchips	pellets	woodchips	pellets	woodchips	pellets	woodchips	pellets
Power range - declaration at rating plate	kW	72,5-249	71,6-249	72,5-251	71,6-251	72,5-299	71,6-299	72,5-301	71,6-301
Fuel heat output	kW	262,4	261,8	264,5	263,9	318,1	317,1	320,2	319,2
Efficiency - Nominal Load*	%	94,9	95,1	94,9	95,1	94,0	94,3	94,0	94,3
Boiler class EN 303-5		5							
Energy efficiency class		A+							
Boiler Data		249		251		299		301	
		woodchips	pellets	woodchips	pellets	woodchips	pellets	woodchips	pellets
Boiler weight	kg	2264							
Operation temperature [max]	°C	90							
Setting Safety Temperature Limiter [max] - STL	°C	95							
Grate area	m²	0,48							
Thermal safety valve - BFP		1							
Opening temperatur Thermal safety valve	°C	95							
Volume ash drawer heat exchanger	l	85							
Volume ash drawer combustion chamber	l	85							
Volume combustion chamber	m³	0,56							
Chimney draft (underpressure) [min-max]	Pa	5 - 10							
operating overpressure [min - max]	bar	1,5 - 5							
Heat Exchanger		249		251		299		301	
		woodchips	pellets	woodchips	pellets	woodchips	pellets	woodchips	pellets
Heat exchanger [Nr. conduits / Nr. tubes]		2 / 5x12; 5x12							
Heat exchanger surface	m²	13,53							
Safety-Heat-Exchanger surface	m²	0,86							
Flow safety heat exchanger [min]	l/h	> 1200							
Pressure cold water [min]	bar	2							
Hydraulic Data		249		251		299		301	
		woodchips	pellets	woodchips	pellets	woodchips	pellets	woodchips	pellets
Water capacity	l	436							
Water flow rate (ΔT=15K) [min]	l/h	14273		11990		17140		17254	
Flow resistance (ΔT=10K)	mBar	33,8	35,5	33,8	35,5	48,7			
Flow resistance (ΔT=20K)	mBar	8,7	9,1	8,7	9,1	12,4			
Recommended buffer volume [min]	l	3000				4000			
Electrical Data		249		251		299		301	
		woodchips	pellets	woodchips	pellets	woodchips	pellets	woodchips	pellets
Power consumption	kW	3							
Electrical connection	V/Hz/A	3x ~ 400 / 50 / 16							
Electrical power consumption (nominal)*	kW	0,910				1,100			
Electrical power consumption (partial)*	kW	0,300				0,390			
Electrical power consumption (Stand-by)*	kW	0,17							
Test Report Data		249		251		299		301	
		woodchips	pellets	woodchips	pellets	woodchips	pellets	woodchips	pellets
Test report reference number		32-10821/2/T							
Test institute		SZU							

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Emission Data (Nominal Load) ($\Delta T=20K$)		249		251		299		301	
		woodchips	pellets	woodchips	pellets	woodchips	pellets	woodchips	pellets
Flue gas temperature	°C	~ 140				~ 160			
Flue gas mass flow**	kg/h	548,7	526,7	553,1	530,9	659,4	644,2	663,8	648,5
Flue gas flow rate**	Nm ³ /h	422,1	405,1	425,5	408,4	507,2	495,5	510,6	498,8
Flue gas flow rate**	Bm ³ /h	638,4	612,8	643,5	617,7	804,3	785,8	809,7	791,0
CO ₂ -Content*	Vol. %	14,08	14,08	14,08	14,08	14,15	13,92	14,15	13,92
Efficiency*	%	94,9	95,1	94,9	95,1	94	94,3	94	94,3

Emission Data (Partial Load) ($\Delta T=20K$) (woodchips/pellets)		249		251		299		301	
		woodchips	pellets	woodchips	pellets	woodchips	pellets	woodchips	pellets
Flue gas temperature	°C	~ 85							
Flue gas mass flow**	kg/h	189,3 / 176,2							
Flue gas flow rate**	Nm ³ /h	145,7 / 135,5							
Flue gas flow rate**	Bm ³ /h	191,0 / 177,7							
CO ₂ -Content*	Vol. %	11,65 / 11,88							
Efficiency*	%	95,8 / 95,7							

Note:

* measured value according to test report

** calculated with fuel values from test report

Nm³/h = Standard cubic meters / hour

Bm³/h = Operating cubic meters / hour

Permissible fuel:
Woodchips for non-industrial use with low fines content according to EN ISO 17225-4 in accordance with the following specification:

.) Property class: A1, A2, B1

.) Particle size: P16S, P31S

.) Water content: min. 15 m-%, max. 40 m-% (M40)

.) Calorific value as delivered: ≥ 3.1 kWh/kg

.) Bulk density as delivered: ≥ 150 kg/m³
Wood pellets for non-industrial use according to Enplus, Swissspellet, DINplus or pellets according to EN 17225-2 according to the following specification:

.) property class A1, A2

.) the maximum permissible fines content in the fuel store must not exceed 8% of the stored fuel volume (determined with perforated screen hole diameter 5mm)!

.) fine fraction at the time of loading: < 1.0 m-%

.) heating value in delivery condition > 4.6 kWh/kg

.) bulk density BD in delivery condition > 600 kg/m³

.) mechanical strength DU, EN 15210-1 in delivery condition, m-%: DU97.5 ≥ 97.5

.) diameter 6mm

Heating water:

Please observe ÖNORM H 5195 (current edition), EN 12828 Part 1 with regard to the condition of the heating water and VDI 2035 for Germany.

Irrespective of the respective standards or directives, the following values apply as minimum requirements for filling and supplementary water:

.) pH: 8,2 - 10

.) conductivity: $< 150 \mu S$

.) total hardness: $< 0,1$ mmol/l

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

Chimney:

The chimney system must be moisture-resistant and approved for solid fuels. The diameter of the chimney system must be calculated according to EN 13384-1, but the diameter must be at least equal to the diameter of the flue pipe connection (connection 8). The chimney system must achieve tightness class N1 or P1 according to the calculation. The connecting pipe must be installed so that it rises steadily (min. 5%). In addition, all regional regulations must be observed.

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 mind. 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.