



EU DATASHEET

LIN-KA® H Boiler 200 - 5000 (3-pass)

LIN-KA® Energy A/S
 Nylandsvej 38, DK-6940 Lem St.
 P: +45 9734 1655
 W: www.linka.dk

LIN-KA® TYPE		200	400	600	800	1000	1500	2000	3000	4000	5000
BOILER DATA											
DESIGN DATA											
Nom. Heating output	kW	200	400	600	800	1000	1500	2000	3000	4000	5000
Nom. Heating output	kcal/h	172	344	516	688	860	1290	1720	2580	3440	4300
Standard design pressure	bar(o)	4	4	4	4	4	4	4	4	4	4
Standard design temperature	°C	110	110	110	110	110	110	110	110	110	110
Water side resistance	kPa	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85
Pressure drop (flow/return)	kPa	40	40	40	40	40	40	40	40	40	40
CE-marked	°C	120	120	120	120	120	120	120	120	120	120
Max. flow temperature	°C	110	110	110	110	110	110	110	110	110	110

DIMENSIONS											
Volume	l	1600	2700	3100	4100	4800	5700	6900	9700	16700	20600
Weight incl. grate	kg	3000	4150	4950	5800	6100	7900	12500	14500	18900	24100
Length	mm	2975	3225	3275	3415	3515	3725	3925	4305	5065	5080
Width	mm	1400	1650	1800	2050	2150	2330	2595	3365	3310	3700
Height	mm	1730	1855	2175	2445	2460	2710	2985	2900	3760	4035
Grate area	m ²	0,6	1,0	1,1	1,5	1,6	1,8	2,3	3,1	3,6	4,8
Combustion chamber volume	m ³	0,7	1,2	1,5	2,2	2,5	3,4	4,7	6,9	10,2	13,8
Heating surface - chamber	m ²	4,9	6,8	8,0	9,4	10,2	13,1	15,4	19,6	26,7	31,5
Heating surface - exchanger	m ²	8,5	16,7	23,0	30,0	35,7	56,2	77,1	109,9	170,8	183,2
Load on grate	kW/m ²	349	403	545	545	627	820	864	960	1123	1047
Load on heating surface	kW/m ²	14,9	17,0	19,4	20,3	21,8	21,6	21,6	23,2	20,3	23,3
Fire box load	kW/m ³	289	326	396	366	407	441	423	436	391	363

OTHERS											
Flue gas temperature	°C	Depends on heat output, but normally between 150 - 170°C									
Flue gas amount	Nm ³ /h	400	800	1150	1550	1950	2900	3850	5750	7650	9600
Diameter flue gas outlet	mm	153	248	248	348	348	348	348	478	483	488
Height flue gas outlet	mm	175	175	175	175	175	175	175	175	175	175
Numbers of soot valves	pcs.	2	3	4	5	8	10	12	16	20	24
Flow and return flanges	DN	65	80	80	100	100	125	125	200	200	200
Safety valve	DN	50	50	50	50	50	2 x 40	2 x 50	2 x 50	2 x 50	2 x 65
Inspection door	DN	500	500	500	500	500	500	500	500	500	500
Emission levels	mg/Nm ³	Depends of local emission levels, whether cyclone, filter etc. is needed									
Diameter chimney stack	mm	150	200	200	250	250	300	350	450	500	550

LIN-KA® TYPE		200	400	600	800	1000	1500	2000	3000	4000	5000
BIOMASS TYPES according to DS/EN 17225-1:2014											
STRAW (table 10)											
Moisture	Class	M15	M15	M15	M15	M15	M15	M15	M15	M15	M15
Dimensions	Class	P3	P3	P3	P3	P3	P3	P3	P3	P3	P3
Density	Class	BD160	BD160	BD160	BD160	BD160	BD160	BD160	BD160	BD160	BD160
Ash	Class	A5.0	A5.0	A5.0	A5.0	A5.0	A5.0	A5.0	A5.0	A5.0	A5.0
Fuel consumption ¹⁾	kg/h	56	111	166	221	276	413	550	825	1100	1375
Min. return temperature	°C	Min. 80°C, and regulated by shunt arrangement to keep $\Delta t < 30^\circ\text{C}$									
Mass flow	kg/h	464	927	1390	1852	2315	3471	4629	6942	9255	11568
Pressure drop - flue gas	kPa	0,6	0,6	0,6	0,6	0,6	0,7	0,7	0,8		
Min. efficiency ¹⁾	%	90,2	90,7	90,9	91,0	91,1	91,1	91,2	91,2	91,2	91,2
Main fuse	Amp.	25	35	35	50	63	63	80	100		
In at max. load	Amp.	18	21	26	39	46	50	62	72		

WOOD PELLET (table 4)											
Moisture	Class	M10	M10	M10	M10	M10	M10	M10	M10	M10	M10
Dimensions	Class	D08	D08	D08	D08	D08	D08	D08	D08	D08	D08
Durability	Class	DU95.0	DU95.0	DU95.0	DU95.0	DU95.0	DU95.0	DU95.0	DU95.0	DU95.0	DU95.0
Ash	Class	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5
Fuel consumption ¹⁾	kg/h	46	91	137	182	228	341	455	682	910	1137
Min. return temperature	°C	Min. 70°C, and regulated by shunt arrangement to keep $\Delta t < 30^\circ\text{C}$									
Mass flow	kg/h	428	854	1281	1708	2135	3202	4268	6402	8535	10669
Pressure drop - flue gas	kPa	0,6	0,6	0,6	0,6	0,6	0,7	0,7	0,8		
Min. efficiency ¹⁾	%	90,9	91,4	91,6	91,7	91,7	91,8	91,8	91,9	91,9	91,9
Main fuse	Amp.	20	25	25	35	50	50	63	100		
In at max. load	Amp.	14	16	19	23	38	38	42	72		

WOOD CHIP (table 5)											
Moisture	Class	M35	M35	M35	M35	M35	M35	M35	M35	M35	M35
Dimensions	Class	P45S	P45S	P45S	P45S	P45S	P45S	P45S	P45S	P45S	P45S
Ash	Class	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5	A1.5
Fuel consumption ¹⁾	kg/h	69	136	204	271	339	508	677	1016	1354	1692
Min. return temperature	°C	Min. 90°C, and regulated by shunt arrangement to keep $\Delta t < 30^\circ\text{C}$									
Mass flow	kg/h	469	936	1404	1871	2339	3507	4675	7013	9349	11687
Pressure drop	kPa	0,6	0,6	0,6	0,6	0,6	0,7	0,8	0,9		
Min. efficiency ¹⁾	%	89,9	90,4	90,6	90,7	90,8	90,8	90,9	90,9	90,9	90,9
Main fuse	Amp.	35	35	35	40	63	63	80	125		
In at max. load	Amp.	22	24	27	31	46	46	65	80		

¹⁾ Flue gas temperature 160°C and convectional loss 1,5%