



2014/68/EU DIRECTIVE
"Pressure Equipment Directive"

STEAM BOILERS **THREE PASS, PASSING FLAME** **PB EU series**



COMPLETE WITH ECONOMIZER

Datasheet



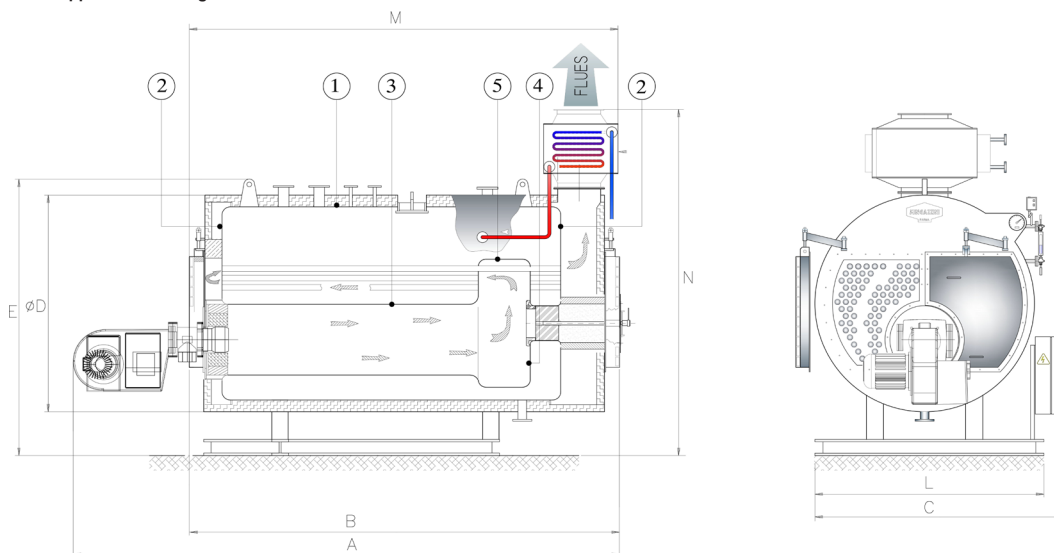
TECHNICAL FEATURES		PB 20 EU	PB 25 EU	PB 30 EU	PB 40 EU	PB 50 EU	PB 60 EU	PB 70 EU	PB 80 EU	PB 100 EU	PB 120 EU	PB 150 EU	PB 180 EU	PB 200 EU	PB 250 EU
RATED STEAM OUTPUT	kg/h	2.000	2.500	3.000	4.000	5.000	6.000	7.000	8.000	10.000	12.000	16.000	18.000	20.000	25.000
HEAT CAPACITY	kcal/h	1.200.000	1.500.000	1.800.000	2.400.000	3.000.000	3.600.000	4.200.000	4.800.000	6.000.000	7.200.000	9.600.000	10.800.000	12.000.000	15.000.000
	kW	1.395	1.744	2.093	2.790	3.488	4.185	4.880	5.580	6.975	8.370	11.160	12.550	13.950	17.445
HEATED SURFACE	m²	42	50	65	85	100	120	156	170	200	240	330	380	420	570
MAXIMUM PRESSURE (*)	bar	12	12	12	12	12	12	12	12	12	12	12	12	12	12
HYDRAULIC TEST PRESSURE	bar	18	18	18	18	18	18	18	18	18	18	18	18	18	18
THERMAL EFFICIENCY WITHOUT ECO	%	90	90	90	90	90	90	90	90	90	90	90	90	90	90
THERMAL EFFICIENCY WITH ECO	%	94	94	94	94	94	94	94	94	94	94	94	94	94	94
FEEDING WATER TEMPERATURE	°C	80	80	80	80	80	80	80	80	80	80	80	80	80	80
MAXIMUM NATURAL GAS CONSUMPTION WITHOUT ECO (NCV 8570**)	Nm³/h	151,7	189,6	227,5	303,4	379,2	455,1	530,9	606,8	758,5	910,2	1.213,5	1.365,2	1.516,9	1.896,1
MAXIMUM NATURAL GAS CONSUMPTION WITH ECO (NCV 8570**)	Nm³/h	145,2	181,5	217,9	290,5	363,1	435,7	508,3	580,9	726,2	871,4	1.161,9	1.307,1	1.452,4	1.815,5
RECOVERED NATURAL GAS	Nm³/h	6,5	8,1	9,6	12,9	16,1	19,4	22,6	25,9	32,3	38,8	51,6	58,1	64,5	80,6
TOTAL WATER CONTENT	l	4.320	5.170	6.360	7.820	9.900	11.880	14.900	15.260	17.530	18.920	24.700	28.300	35.500	42.900
WATER CONTENT IN RUNNING CONDITIONS	l	3.700	4.430	5.470	6.400	8.200	9.800	12.700	12.500	14.400	15.000	20.000	23.000	28.300	34.600
WATER CONTENT AT MIN LEVEL	l	3.600	4.310	5.280	6.050	7.800	9.300	12.150	12.100	13.900	14.600	19.350	22.200	27.400	33.500
CO² AT FLUE WITH GAS	%	10,5	10,5	10,8	10,5	10,5	10,5	10,5	10,5	10,5	10,5	10,5	10,5	10,5	10,5
SMOKE TEMPERATURE AT EXHAUST BEFORE ECO	°C	220-230	220-230	220-230	220-230	220-230	220-230	220-230	220-230	220-230	220-230	220-230	220-230	220-230	220-230
SMOKE TEMPERATURE AT EXHAUST AFTER ECO	°C	120-130	120-130	120-130	120-130	120-130	120-130	120-130	120-130	120-130	120-130	120-130	120-130	120-130	120-130
INSTALLED POWER WITH GAS BURNER	kW	10,5	14,5	15	20	20	26	26	26	38	38	56,5	68	78	106

* Higher maximum pressure on request

** NCV = Net Calorific Value, expressed in kcal/Nm³ for natural gas.

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STEAM BOILER WEIGHT	kg	7.800	8.500	10.600	13.200	14.600	16.500	21.000	26.000	27.500	30.000	42.100	44.500	46.000	59.000
LENGTH WITH BURNER (REF. A)	mm	4.440	4.940	5.430	5.410	6.110	7.036	7.560	6.900	7.700	7.960	9.150	9.550	9.750	10.820
LENGTH WITHOUT BURNER (REF. B)	mm	3.815	4.315	4.625	4.605	5.235	6.035	6.355	5.695	6.395	6.655	7.645	8.350	8.145	9.115
WIDTH (REF. C)	mm	2.300	2.300	2.385	2.610	2.710	2.710	2.940	3.130	3.130	3.180	3.560	3.550	3.860	4.060
HEIGHT WITHOUT ECO (REF. E)	mm	2.520	2.520	2.730	2.930	3.017	3.017	3.185	3.355	3.355	3.425	3.660	3.650	4.010	4.050
HEIGHT WITH ECO (REF. N)	mm	3.280	3.280	3.605	3.805	3.880	3.960	4.300	4.300	4.300	4.370	4.950	4.950	5.305	
TEMPERATURE OF FRONT AND BACK DOORS, AND CYLINDRICAL BODY	°C	35 + room temperature													
TUBE PLATES	type	cold formed and normalized													
FIRETUBE		plain (***)								FOX CORRUGATED					
CYLINDRICAL BODY THICKNESS (REF. 1)	mm	15	15	15	15	15	15	15	18	18	18	18	18	22	22
TUBE PLATES THICKNESSES (REF. 2)	mm	18	18	18	18	18	18	18	22	22	22	22	22	25	25
FIRETUBE THICKNESS (REF. 3)	mm	15	15	15	15	18	18	18	22	18	18	18	18	18	22
THICKNESS OF SMOKE REVERSAL CHAMBER PLATES (REF. 4)	mm	18	18	18	18	18	18	18	22	22	22	22	22	25	25
THICKNESS OF SMOKE REVERSAL CHAMBER CYLINDRICAL BODY (RIF. 5)	mm	18	18	18	18	18	18	18	22	22	22	22	22	25	25
PIPES DIAMETERS	mm	60,3	60,3	60,3	60,3	60,3	60,3	60,3	60,3	60,3	60,3	60,3	60,3	60,3	60,3
PIPES THICKNESSES	mm	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2
MANHOLES	N.	1	1	1	1	1	1	1	1	3	3	3	3	3	3
SMOKE OUTLET DIAMETER	mm	400	400	450	500	550	550	600	600	750	750	800	800	850	1.100

(***) On request it can be supplied with corrugated Fox firetube.



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Values are approximate and indicative. According to the continuous search for improvements and due to the fact that boilers are strongly customized MINGAZZINI S.R.L. reserves the right to make changes without any advance notice.



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