

BOILER TECHNICAL DATA SHEET: BLAZE NATURAL PLUS

Table 1. Basic parameters of the BLAZE NATURAL PLUS boiler

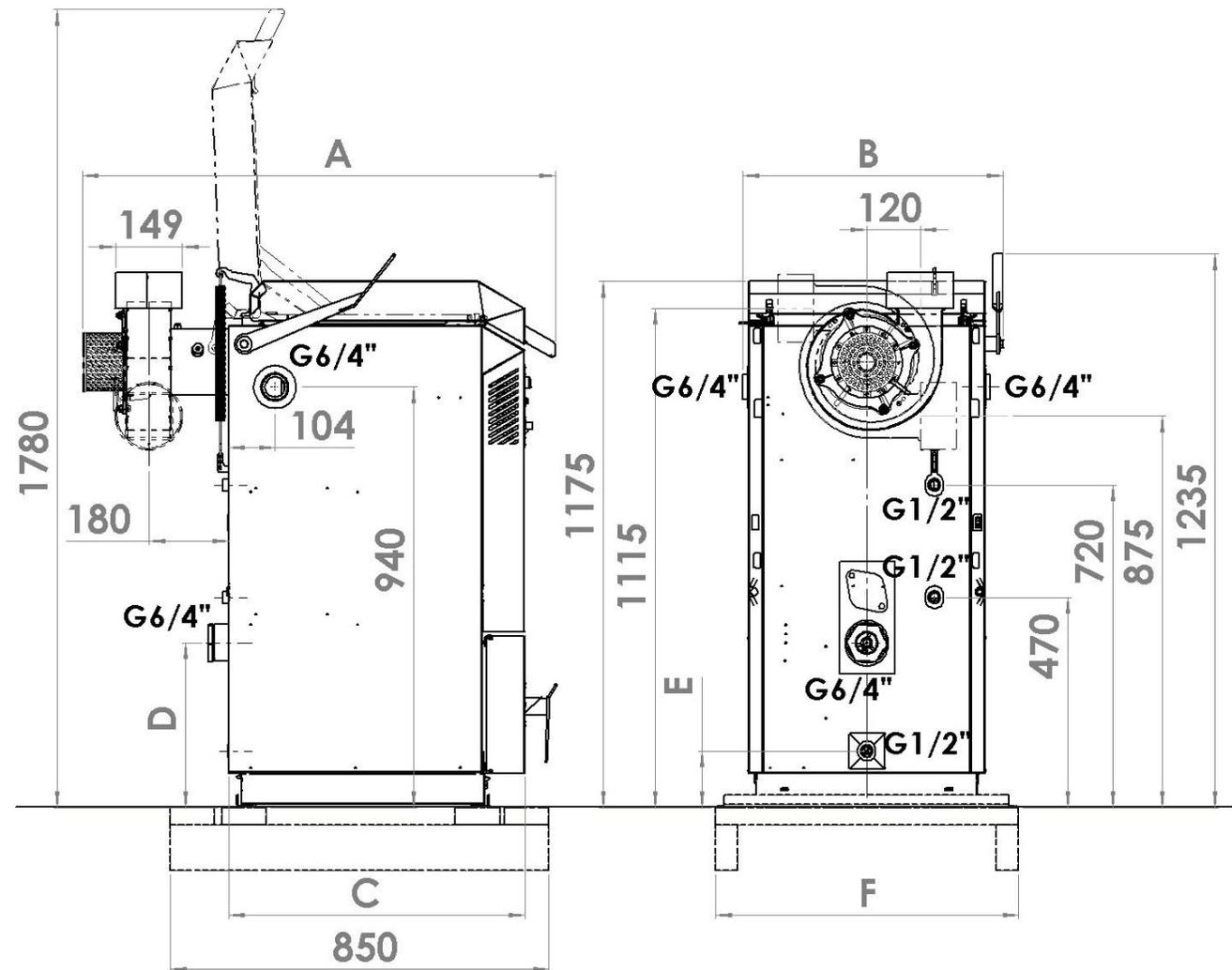
Boiler type		BN PLUS 17	BN PLUS 25	BN PLUS 40
Maximum heat loss of the heated building (where the boiler is the sole source of heat)	kW	8 - 14	14 - 24	21 - 36
		depending on fuel type and other circumstances (see Operating and Installation Instructions)		
Storage tank required		if the heated building has adequate heat storage properties (see Operating and Installation Instructions) NOT REQUIRED		
Minimum heat loss of the heated building in an installation without a storage tank	kW	5 - 8	8 - 14	12 - 21
		depending on heat storage properties (defined in the operating and installation instructions)		
Minimum – maximum recommended storage tank volume	l	450 - 1000	750 - 2000	1200 - 3000
		depending on fuel type and other circumstances (see Operating and Installation Instructions)		
Nominal / minimum output (during continuous operation)	kW	17 / 5	26 / 7.6	40 / 12
		(with correct settings and guaranteed fuel)		
Fuel consumption at rated power	kg . h ⁻¹	4.1	6.4	9.6
Burning time of full fuel load				
- at rated power during certification	h	2.5	4	3
- during normal boiler operation	h	2.5 - 6	4 - 6	3 - 6
Boiler class according to EN 303-5			5	
Ecodesign		Yes		
Energy efficiency class		A+		
Efficiency at rated power	%	90.1	89.5	90.0
Efficiency at minimum power output	%	91.2	90.5	91.0
Seasonal energy efficiency	%	80	78	78
Power consumption at rated output	W	20	29	33
Power consumption in standby mode	W	3	3	3
Maximum power consumption	W	150	150	150
Minimum chimney draught	mbar	0.05		
CO ₂ content at rated output	%	11.49	12.01	13.42
CO ₂ content at minimum power output	%	9.39	11.42	13.45
Flue gas temperature ¹⁾				
at rated output	°C	140	150	160
At reduced power	°C	110	110	110
Minimum return water temperature without integrated thermostat	°C	50		
Mass flow rate of flue gas at the outlet at nominal output	kg . s ⁻¹	0.012	0.017	0.024
Mass flow rate of flue gas at the outlet at minimum output	kg . s ⁻¹	0.004	0.006	0.008
Flue diameter	mm	150		
Volume of the feeding chamber	dm ³	40	80	120
Boiler dimensions: width x depth x height	mm	504 x 960 x 1230	584 x 1040 x 1230	768 x 1040 x 1230
Feeding opening dimensions	mm	276 x 276	356 x 356	540 x 356
Boiler connections: - heating water	Js	G 6/4"		
- return water	Js	G 6/4"		
Connection voltage		1 PEN ~ 230V / 0.5A / 50 Hz		

Environment		basic AA5 / AB5		
Electrical protection		IP 20		
Maximum permissible operating pressure	bar	3.0		
Test pressure for type testing	bar	6.0		
Outlet water temperature control range	°C	70 - 95		
Minimum operating temperature of return water to the boiler	°C	20		
Maximum permissible operating temperature	°C	95		
Hydraulic loss of the boiler at $\Delta T = 20 K$	mbar	2.4	1.9	6.4
Maximum noise level	dB	55		
Water capacity	dm ³	32	40	55
Weight	kg	245	340	440

¹⁾ applies to a clean exchanger (with normal clogging, the flue gas temperature is approx. 10 to 20 °C higher)

Table 2. Basic dimensions of the BLAZE NATURAL PLUS boiler

	BN PLUS 17	BN PLUS 25	BN PLUS 40
A [mm]	960	1040	1040
B [mm]	504	584	768
C [mm]	584	664	664
D [mm]	280	370	370
E [mm]	100	130	130
F [mm]	680	680	870



Boiler location in the boiler room

