

ATTESTATION

Number WG / 2023 / 807K/ 12

Manufacturer: Przedsiębiorstwo Produkcyjno Handlowe Kostrzewa Spółka Jawna, ul. Przemysłowa 11A, 11-500 Giżycko

Product: Heating boiler for solid fuel with automatic stoking

Trade designation: TWIN BIO LUXURY 12

Fuel: wood pellets

Boiler category: 1

Condensing boiler NO

Test method: PN-EN 303-5:2021-09

Boiler class 5

		Parameter	Symbol	Unit	Value	Criterion
Emissions	Nominal heat output	Carbon monoxide	E _{CO}	mg/m ³ _n	112,52	≤ 500
		Nitrogen oxides, calculated as NO ₂	E _{NOx}	mg/m ³ _n	144,02	-
		Organic gaseous compounds	E _{OGC}	mg/m ³ _n	2,35	≤ 20
		Dust	E _{PM}	mg/m ³ _n	16,99	≤ 40
	Minimum heat output	Carbon monoxide	E _{CO}	mg/m ³ _n	272,84	≤ 500
		Nitrogen oxides, calculated as NO ₂	E _{NOx}	mg/m ³ _n	95,04	-
		Organic gaseous compounds	E _{OGC}	mg/m ³ _n	8,86	≤ 20
		Dust	E _{PM}	mg/m ³ _n	12,44	≤ 40
	Seasonal	Carbon monoxide	E _{s,CO}	mg/m ³ _n	248,79	≤ 500
		Nitrogen oxides, calculated as NO ₂	E _{s,NOx}	mg/m ³ _n	102,39	≤ 200
		Organic gaseous compounds	E _{s,OGC}	mg/m ³ _n	7,88	≤ 20
		Dust	E _{s,p}	mg/m ³ _n	13,12	≤ 40
Heat properties	Seasonal space heating energy efficiency in active mode		η _{son}	%	85,66	-
	Seasonal space heating energy efficiency		η _s	%	81,19	≥ 75
	Nominal heat output	Generated useful heat	P _n	kW	12,27	-
		Useful efficiency	η _n	%	86,70	-
		Efficiency	η _{cn}	%	93,72	≥ 88,08
	Minimum heat output	Generated useful heat	P _p	kW	2,30	-
		Useful efficiency	η _p	%	85,48	-
		Efficiency	η _{cp}	%	93,40	≥ 87,56
Electrical characteristics	Auxiliary electricity consumption Load I		e _{l,max}	kW	0,045	-
	Auxiliary electricity consumption Load II		e _{l,min}	kW	0,014	-
	Auxiliary electricity consumption in standby mode		P _{SB}	kW	0,0028	-
	Energy efficiency index		EEl	-	119,74	-
	Energy efficiency class		-	-	A+	-

*) the emissions listed above are related to dry exhaust gas containing 10% oxygen in the normal state, at a temperature of 273.15K and a pressure of 1013.25 mbar

Comparison of the results of the completed test, registered under number B/2023/807K in the Accredited Testing Laboratory No. AB024 with the requirements of the PN-EN 303-5:2021-09 standard for Class 5 in which the requirements of Commission Regulation (EU) 2015/1189 were implemented of April 28, 2015 on the implementation of Directive 2009/125/EC of the European Parliament and of the Council and Commission Delegated Regulation (EU) 2015/1187 of 27 April 2015 with regard to the requirements for solid fuel boilers.

LABORATORY MANAGER
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THE DEPUTY MANAGING
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dr inż. Maciej Jodkowski

Katowice, 21.08.2023 r.

Zakłady Badań i Atestacji "ZETOM" im. Prof. F. Stauba w Katowicach sp. z o.o.

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