



Certified translation from the Polish language:-----

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INSTITUTE OF POWER ENGINEERING

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BOILERS AND HEATING EQUIPMENT RESEARCH LABORATORY

93-231 Łódź, ul. Dostaweza 1
tel. (042) 64 00 821 fax (042) 64 00 828

ENVIRONMENTALLY FRIENDLY DEVICE

CERTIFICATE

No. OS/170/CUE/14

confirms that:

Mini Bio Luxury boiler type series

with automatic fuel supply,

nominal power 10 and 20 kW, burning wood pellets

Symbols: PKWiU 28.22.12-00.50

PN-EN 303-5: 2012

manufactured by

PPH Kostrzewa Sp.j.

11-500 Giżycko, ul. Suwalska 32A

meets the requirements for the environment protection set out in Technical Criteria:

KT/OS 01-2005

The certificate has been issued on the basis of the results of laboratory research conducted by: Boilers and Heating Equipment Research Laboratory in Łódź; Dostaweza 1 - presented in research report: no. 54/14-LG: "Type examinations of Mini Bio Luxury boiler type series with automatic fuel supply. Research report of Mini Bio Luxury 10 boiler", and no. 55/14-LG: "Type examinations of Mini Bio Luxury boiler type series with automatic fuel supply. Research report of Mini Bio Luxury 20 boiler".

The certificate retains validity provided the manufacturer does not make any technical changes to the tested devices without earlier agreement with the Laboratory issuing this certificate.

**Certificate validity period
from July 2014 to July 2017**

Head of
Boilers and Heating Equipment Research Laboratory
[hand-written signature]
(signature)

Head of
Power Engineering Equipment Research Department
[hand-written signature]
(signature)

Łódź; 05/08/2014



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CERTIFICATE

No. OS/170/CUE/14

Mini Bio Luxury boiler type series tested in accordance with
PN-EN 303-5: 2012, complies with class 5.

Parameter	Unit	Obtained value		Requirements of the standards and regulations	
		Mini Bio Luxury10	Mini Bio Luxury20		
Wood pellets $\Phi 6$ mm					
Fuel	Q_i^r	MJ/kg	17.96	no requirements	
	A^r	%	0.1	≤ 0.5	
	W^r	%	6.1	≤ 12	
Thermal power		kW	10.0	20.0	$\geq Q_N$
Efficiency η		%	90.1	91.0	≥ 88.0 for 10 kW
Emission ^x	CO	mg/m ³	84	41	≤ 500
	OGC	mg/m ³	4	4	≤ 20
	Dust	mg/m ³	13	19	≤ 40
$T_{sp_{av}}$		°C	124	135	300 ^{xx)}
Flue gas stream		g/s	8.0	11.9	no requirements

^{x)} expressed as 10% oxygen content in dry flue gas

^{xx)} maximal instantaneous flue gas temperature

Łódź: 05/08/2014

I, Marek Kądzelski, the undersigned duly commissioned Sworn Translator of the English language, in Warsaw Poland, do hereby certify the conformity of this true translation version with the original document in Polish presented to me on this fifth day of September, A.D. 2014.----

Warsaw, dated 5th September, 2014.-----

Repertorium nr 793/2014.-----

Pobrano opłatę zgodnie z obowiązującą taksą za trzy (3) strony uwierzytelnione.-----

Marek Kądzelski

