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[CUE]

Certified translation from the Polish language:----

INSTITUTE OF POWER ENGINEERING

[IEN]

Notified Body No. 1452

Research Institute 01-330 Warszawa, ul. Mory 8 e-mail:

instytut.energetyki@ien.com.pl www.ien.com.pl account no.: 22 1160 2202 0000 0000

Tel. 22 3451-200 Fax 22 836 63 63

National Business Registration No.: 000020586

VAT ID: 525-00-08-761

National Court Register (KRS): 0000088963

BOILERS AND HEATING EQUIPMENT RESEARCH LABORATORY

Accredited laboratory No. AB 087

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

ENVIRONMENTALLY FRIENDLY DEVICE

CERTIFICATE

Nr OS/171/CUE/14

confirms that:

Water Boiler Maxi Bio 50

with automatic fuel supply, 50 kW nominal power, 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 tested device, in accordance with PN-EN 303-5:2012, is classified as class 5

The certificate has been issued on the basis of the results of laboratory research conducted by: Boilers and Heating Equipment Research Laboratory in Łódź; Dostawcza 1 - presented in research report: No. 29/13-LG: Type examinations of boilers Maxi Bio 50, 100, 200 and 285 with automatic fuel supply and burning wood pellets. Type examination of 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 August 2014 to August 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: 20/08/2014



INSTITUTE OF POWER ENGINEERING

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

CERTIFICATE No. OS/171/CUE/14

The tested device (boiler **Maxi Bio 50**), in accordance with PN-EN 303-5:2012, is classified as class 5

Parameter		Unit	Obtained value	Requirements of the standards and regulations	
		Wood pellets Stelmet-"Lava" φ 6 mm			
iel	Q,d	MJ/kg	19.3	> 17	
	Q;	MJ/kg	18.3	no requirements	
Fuel	A ^r	o o	0.3	≤ 0.5	
	W ^r	%	5.5	≤ 12	
Thermal power		kW	51.3	≥QN	
Efficiency η		0/0	89.4	≥ 88.7 for 50 kW	
n x	CO	mg/m³	123	≤ 500	
Emission ^x	OGC	mg/m³	3	≤ 20	
	Dust	mg/m³	16	≤ 40	
	Tsp _{av}	°С	161	300 xx)	
	Flue gas stream	g/s	33	no requirements	

expressed as 10% oxygen content in dry flue gas

maximal instantaneous flue gas temperature

Lódź: 20/08/2014

I, Marek Kądzielski, 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 792/2014.----

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

March to derich + E,