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**TESTING LABORATORY OF BOILERS AND HEATING DEVICES**

93-231 Łódź, ul. Dostawcza 1

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**CERTIFICATE ED/92/17**  
**The K-8-20 DG water boiler**

**with rated output of 20 kW**  
**fired with pressed wood granules (pellets)**  
manufactured by:

**UAB KALVIS**  
**Pramonės g. 15, LT-78135, Šiauliai, Lithuania**

The **K-8-20 DG** water boiler meets the ecodesign requirements specified in the Commission Regulation (EU) 2015/1189 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for solid fuel boilers.

Parameter	Symbol	Value	Unit of measure	Ecodesign requirements
Seasonal space heating energy efficiency	$\eta_s$	78	%	$\geq 75$ for boilers with rated heat output of $\leq 20$ kW $\geq 77$ for boilers with rated heat output of $> 20$ kW

	Parameter		Parameter		Parameter			Seasonal space heating emissions for preferred fuel			
	at rated heat output	at 30% of rated heat output	at rated heat output	at 30% of rated heat output	at rated heat output	at 30% of rated heat output	in standby mode	particulate matter PM	organic gaseous compounds OGC	carbon monoxide CO	nitrogen oxides NO <sub>x</sub>
Symbol	$P_n$	$P_p$	$\eta_n$	$\eta_p$	$el_{max}$	$el_{min}$	$P_{SB}$	$E_{s PM}$	$E_{s OGC}$	$E_{s CO}$	$E_{s NOx}$
Value	20.0	4.8	82.9	81.6	0.115	0.045	0.005	33	11	445	133
Unit of measure	kW	kW	%	%	kW	kW	kW	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>
Characteristic	Ecodesign requirements:							$\leq 40$	$\leq 20$	$\leq 500$	$\leq 200$
	Energy efficiency index EEI = 115							Class		<b>A+</b>	

\* The certificate has been issued based on the results of laboratory tests specified in Report no. 97/17-LG.

Laboratory Director

(signature)

Department Head

(signature)

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