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2013-08-16
M107386/03 EDR/TAN

RHI Emissions Certificate

ÖKOTHERM® C995 (WP) biomass boiler

Report No. M107386/03

Client:	A.P. Bioenergietechnik GmbH Träglhof 2 92242 Hirschau
Order date:	2013-08-02
Total number of pages:	7 pages

Certified quality management system according to ISO 9001
Accredited testing laboratory according to ISO/IEC 17025

Müller-BBM GmbH
Niederlassung Stuttgart
HRB Munich 86143
VAT Reg. No. DE812167190

Managing directors: Horst Christian Gass,
Dr. Carl-Christian Hantschk, Stefan Schierer,
Dr. Edwin Schorer, Norbert Suritsch

1 Test House

- a) name of test house: Müller-BBM GmbH
- b) official logo of test house: MÜLLER-BBM
- c) was testing done before
1 October 2012?: no
- d) was the test house accredited to
ISO 17025 at the time of testing? yes
- e) organisation with which the test house
was accredited at the time of testing
if not accredited to ISO 17025: not applicable
- e) accreditation number: D-PL-14119-02-00

2 Appliance

- | | |
|---|-------------------------------|
| a) name of the appliance tested | ÖKOTHERM® C995 biomass boiler |
| b) model of the appliance tested | ÖKOTHERM® C995 biomass boiler |
| c) manufacturer of the appliance tested | A. P. Bioenergietechnik GmbH |
| d) what is the nominal heat output of the appliance in kilowatts (kW)? | 995 KW |
| e) is the appliance a manually stoked, natural draught boiler (that is without a fan providing forced or induced draught)? | no |
| f) has this appliance been assessed on the basis of family rules (paragraphs 11.1 and 11.2 of the Government emissions methodology)? | no |
| g) if the answer to 2f) is 'yes', give name and model of the related appliance which has been tested and the RHI emissions certificate number | not applicable |

3 Fuels

- a) what were the fuels used when testing? woodchips as per EN14961-2
and miscanthus
- b) based on the testing, what range
of fuels can be used in compliance
with the emission limits for total
particulate matter (PM) and oxides
of nitrogen (NOx)? Please describe
using the fuels table below
- woodchips as per EN14961-2
and miscanthus

4 Tests

- | | | |
|---|----------------|------------|
| a) were the tests conducted to EN 303-5 (applies to appliances $\leq 500\text{kW}$)? | No | |
| b) was condensable PM measured (applies to appliances $\leq 500\text{kW}$ which are manually stoked, natural draught boilers)? | not applicable | |
| c) were the tests conducted to EN 14792:2005 and either EN 13284-1:2002 or ISO 9096:2003, with the results an average of a minimum of three PM tests each of at least 30-minute duration and the average NO _x measurement determined from continuous measurements undertaken throughout the PM measurement period (applies to $>500\text{kW}$ appliances)? | yes | |
| d) was the product tested a production sample which is fully representative of the current production? | yes | |
| e) was the appliance tested at • 85% of its rated output? | yes | |
| f) did the tests show that emissions were no greater than 30 g/GJ PM and 150 g/GJ NO _x ? | yes | |
| g) what were the measured emissions of PM: give figures in grams per GigaJoule (g/GJ) net thermal input? | woodchips | 13,7 g/GJ |
| | miscanthus | 17,2 g/GJ |
| h) what were the measured emissions of NO _x : give figures in grams per GigaJoule (g/GJ) net thermal input? | woodchips | 61,8 g/GJ |
| | miscanthus | 113,6 g/GJ |

fuel table

Category of fuel		Description of test fuel	Description of the range of fuels certified as useable in compliance with the PM and NOx limits, based on the tests				
	Tick all categories of fuel tested	Class/type of fuel + any additional fuel description	Class/type of fuel + any additional fuel description	Size/ dimensions	Moisture content	Ash content	Calorific Value
Wood log							
Wood chip	x	woodchips as per EN14961-4	woodchips as per EN14961-4	main fraction: 3 – 45 mm	≤ 35 %	≤ 1,5 %	≥ 11,0 MJ/kg
Wood pellet							
Wood briquette							
Sawdust							
Other fuels, listed in EN303-5 or EN 14961							
Other fuels, not listed in EN303-5 or EN 14961	x	miscanthus		D=6±1 mm	10 %	4,0 %	17,8 MJ/kg

name and signature of the person authorised to issue the certificate:



Dipl.-Ing. (FH) Jochen Eder

place and date of issue of the certificate:

Reutlingen, 2013-08-16

certificate reference number for quoting in any correspondence:

M107386/03

Important notice:

Fraud will have been committed if, for the purposes of securing RHI funding or marketing a product as eligible for such funding, any person produces or knowingly submits a certificate or permit which has been falsely created, or submits a certificate or permit that does not apply to the appliance for which approval is sought, or otherwise produces or submits a certificate or permit that is false, misleading or a forgery or is in a form likely or intended to deceive.

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