



### Summary report and classification based on laboratory test measurements of hot water boiler :

Producer	MCZ GROUP SPA – via La Croce 8 – 33074 Vigonovo di Fontanafredda (PN) – Italy
Testing laboratory	"ITEM – Consult" Ltd , Sofia 1220 str. 202 №8
Accreditation certificate	BSA reg. Num. № 143 ЛИ from 19.07.2010
Trademark	<b>RED</b>
Series model	<b>Variomatic</b>
Type of the appliance	Hot water pellet boiler
Model	<b>Variomatic 33</b>
Test laboratory report	366 / 12.04.2011
Nominal – Minimal thermal capacity	30 kW – 9.0 kW
Operation mode	Automatic
Fuel type	Biogenic - wood pellets

The above described heating appliances comply the requirements according to the standard : EN 303-5:2001 „Heating boilers for solid fuels, hand and automatically fired, nominal heat output up to 300 kW. Terminology, requirements, testing and marking”.

The hot water boilers have been tested at nominal thermal capacity, as well as minimal thermal capacity, according to the operating mode of the fuel loading system.

The following table shows a summary of the test results:

Model	Operating thermal capacity	Efficiency	CO		NO <sub>x</sub>		OGC*		Dust*		Class**
			mg/m <sup>3</sup> at O <sub>2</sub>		mg/m <sup>3</sup> at O <sub>2</sub>		mg/m <sup>3</sup> at O <sub>2</sub>		mg/m <sup>3</sup> at O <sub>2</sub>		
			%	10%	13%	10%	13%	10%	13%	10%	
<i>Variomatic</i> 33	<i>Nominal</i>	93.4	221	161	167	122	17	12	34	25	3
	<i>Minimal</i>	91.1	477	347	102	74	14	10	-	-	3

\* the measurements of **OGC** and **dust**, have been carried out by “TESTING LABORATORY FOR ATMOSPHERE AIR” at „ECOEXPERT 6” LTD , Varna , „Petko Staynov” str. № 1 phone/fax 052/500-950 , Accredited by IA “BAA” - certificate № 40-LI/05.05.2010, valid until 31.03.2012. The measurement protocols are: 136/ 13.04.2011 and 137/ 13.04.2011.

\*\* - classification of the hot water solid fuel boilers according to standard EN 303-5:2001;

**Boiler class (EN 303-5:2001): 3**

Sofia, Bulgaria, Date: 10.06.2011

Executive director: .....  
/M.Sc. L. Vasilev /



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*This certificate for the hot water boilers of series "Variomatic" verifies that the boilers are in accordance with the requirements of standard EN 303-5:2001 – "Heating boilers for solid fuels, hand and automatically fired, nominal heat output up to 300 kW. Terminology, requirements, testing and marking", based on the test results of the testing laboratory protocols.*

*The limit values for emissions of the agreement according to clause 15a B-VG „Sicherheitsmaßnahmen betreffend Kleinfeuerungen“(Protective provisions concerning small firing plants) for automatically loaded small firing plants are fulfilled. The efficiency as required in the agreement according to clause 15a B-VG "Einsparung von Energie" (The economy of energy) is achieved. The specified nominal heat output is achieved.*

*The values according to the guidelines for promotion of measures to use renewable energies in the heat market dated back to the 20th December 2009 of the Federal Office for Economy and Export Control (BAFA) are fulfilled.*

*The hot water boilers of series "Practika":*

- Is provided with an automatic ignition system*
- Is provided with an extraction combustion products system*
- Is fired by wood pellet, as indicated by the manufacturer on the data plate and in the maintenance manual*

*According to the test results, the MCZ company declares that the hot water boilers of series:*

*Trade name : "RED - Variomatic"*

*Are representatives of the following models :*

*Model : **Variomatic 33***