

Report No. K 1102 2013 Z1

Residential space heating appliances
Initial type test
-Renaming-
DIN EN 14785

Type: **Cristallo, Giovanna**
Civetta, Sofia

Company: **Z.F Srl**

2013



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Publication of page 2 is permitted.

The test results presented in this report refer solely to the test object stated.



Initial Type Testing
Residential space heating appliances fired by wood pellets
-Pellet stove-

DIN EN 14785: September 2006

Corrigenda 1 DIN EN 14785:10.2007

Applicant/contractor: **Z.F Srl**
Via D. Fochesato, 22
I-36040 Meledo di Sarego (VI)

Trademark: **Euro Alpi**

Type designation: **Cristallo, Giovanna**
Civetta, Sofia

Type of appliance: Residential space heating appliance fired by wood pellets without water heat exchanger with fan assisted flue discharge with internal fuel hopper

Total heat input **Cristallo, Giovanna**
3,9 kW – 12,3 kW
Civetta, Sofia
3,9 kW – 14,6 kW

Space heat output **Cristallo, Giovanna**
3,7 kW – 11,0 kW
Civetta, Sofia
3,7 kW – 13,2 kW

Water heat output: Not applicable

Fuels: Wood pellets

Remarks: -

Test results:

The technical requirements cl. 4-8 of the above mentioned standard are fulfilled. The local applicable installation conditions are to be observed.

The electrical safety cl. 5.9. of the standard was not a part of this initial type testing.

Additional details are documented in the initial report K 803 2012T1.

Cologne, 27.08.2013
432/mc

TÜV Rheinland Energie und Umwelt GmbH
Test Centre according to Construction Product
Regulation 305/2011(CPR)
Notified Body: 2456

Expert

Head of Test Centre

Dipl. Ing. M. Ciccarelli

Dipl.-Ing. W. Rückwart

Residential space heating appliances fired by wood pellets, Initial Type Test in accordance with the regulation 305/2011
conformity certification system no. 3



1. Task

The Test Centre for Energy Appliances was instructed to execute an renaming on the above mentioned pellet stoves.

Basic Z.F Srl Via D. Fochesato, 22 I-36040 Meledo di Sarego (VI) Trademark Euro Alpi Report K 803 2012 T1	New Z.F Srl Via D. Fochesato, 22 I-36040 Meledo di Sarego (VI) Trademark Euro Alpi Report K 1102 2013 Z1
Rosa Bianco	Cristallo, Giovanna Civetta, Sofia

2. Testing

The practical tests were carried out in the laboratory in Thiene on 28, 29 and 30 May 2012 (report K 803 2012 T1). Z.F S.r.l. ensures that modifications on the above mentioned products were not carried out.

2.1 Resume of test results

Type designation		Cristallo, Giovanna (removed from report K 803 2012 T1)		
		Full load	Partial load	
Test fuel		Pellets		
Mass of the test fuel fired hourly	kg/h	2,6	0,83	-
Flue gas mass flow	g/s	11,3	4,5	-
Flue gas temperature	°C	131,9	64,9	-
Flue draught	mbar	0,13	0,10	0,12/0,10 +/-0,02
CO ₂ -Content	Vol.-%	7,61	5,99	-
O ₂ -Content	Vol.-%	12,99	14,7	-
CO-emission	ppm	159,3	359,6	-
CO-emission (at 13%-O ₂)	mg/m ³	198,3	570,7	500/750
NOx-content	ppm	54,4	34,2	-
NOx-content (at 13%-O ₂)	mg/m ³	111,6	89,1	-
Dust content (at 13%-O ₂)	mg/m ³	28,8	-	-
Total heat output	kW	11,0	3,74	-
Water heat output	kW	-	-	-
Space heat output	kW	11,0	3,74	-
Efficiency	%	89,54	94,8	75/70
Maximum temperatures at trihedron:				
- Right side	°C	63,7		65K over t _{ambient}
- Back side	°C	31,3		65K over t _{ambient}
- Front side 100 cm	°C	58,3		65K over t _{ambient}
- Front side bottom	°C	49,1		65K over t _{ambient}
- Backside-Pelletstove	mm	100		
- Side-Pelletstove	mm	200		
Ambient temperature	°C	26,3		65K over t _{ambient}
Temp. in fuel hopper	°C	69,9		35K over t _{ambient}
Temp. operating tools 1	°C	45,6		35K over t _{ambient}
Temp. operating tools 2	°C	n.a		

Detailed test results see test report K 8032012T1



Type designation		Civetta, Sofia (removed from report K8032012T1)		
		Full load	Partial load	
Test fuel		Pellets		
Mass of the test fuel fired hourly	kg/h	3,09	0,83	-
Flue gas mass flow	g/s	11,1	4,5	-
Flue gas temperature	°C	139,8	64,9	-
Flue draught	mbar	0,14	0,10	0,12/0,10 +/-0,02
CO ₂ -Content	Vol.-%	9,28	5,99	-
O ₂ -Content	Vol.-%	11,24	14,7	-
CO-emission	ppm	486,7	359,6	-
CO-emission (at 13%-O ₂)	mg/m ³	498,5	570,7	500/750
NOx-content	ppm	59,6	34,2	-
NOx-content (at 13%-O ₂)	mg/m ³	100,2	89,1	-
Dust content (at 13%-O ₂)	mg/m ³	60,0	-	-
Total heat output	kW	13,2	3,74	-
Water heat output	kW	-	-	-
Space heat output	kW	13,2	3,74	-
Efficiency	%	90,32	94,8	75/70
Maximum temperatures at trihedron:				
- Right side	°C	70,1		65K over t _{ambient}
- Back side	°C	30,1		65K over t _{ambient}
- Front side 100 cm	°C	60,2		65K over t _{ambient}
- Front side bottom	°C	52,2		65K over t _{ambient}
- Backside-Pelletstove	mm	100		
- Side-Pelletstove	mm	200		
Ambient temperature	°C	25,6		65K over t _{ambient}
Temp. in fuel hopper	°C	74,2		35K over t _{ambient}
Temp. operating tools 1	°C	47,1		35K over t _{ambient}
Temp. operating tools 2	°C	n.a		

Detailed test results see test report K 8032012T1



3. Statement of the test results

The appliance

**Cristallo, Giovanna
Civetta, Sofia**

of

Z.F Srl

complies with the requirements acc. DIN EN 14785:10.2007. The results of the basic initial type test (see report K 803 2012T1) are not affected by the renaming.

4 Test documents

A 01	Declaration of Conformity Civetta	07.08.2013
A 02	Declaration of equivalence Civetta	07.08.2013
A 03	Type label Civetta	
A 04	Drawing Civetta	ZFZO00458
A05	Drawing Civetta	ZFZO00591
A 06	Declaration of Conformity Cristallo	07.08.2013
A 07	Declaration of equivalence Cristallo	07.08.2013
A 08	Type label Cristallo	
A 09	Drawing Cristallo	ZFZO00458
A 10	Drawing Cristallo	ZFZO00591
A 11	Declaration of Conformity Giovanna	07.08.2013
A 12	Declaration of equivalence Giovanna	07.08.2013
A 13	Type label Giovanna	
A 14	Drawing Giovanna	ZFZO00458
A 15	Drawing Giovanna	ZFZO00637
A 16	Declaration of Conformity Sofia	07.08.2013
A 17	Declaration of equivalence Sofia	07.08.2013
A 18	Type label Sofia	
A 19	Drawing Sofia	ZFZO00635
A 20	Drawing Sofia	
A 21	Drawing with Dimensions	Euro Alpi