

Report No. K 2878 2020 Z1

Residential space heating appliances
Type testing
in accordance with DIN EN 14785
-Renaming-

Models:

MATTIA 8; FILIPPO 8 E; LEONARDO 8 ET
MATTIA 9; FILIPPO 9 E; LEONARDO 9 ET
ILDE AIR 80; DORA AIR 80; GRAZIA E AIR 80 US

Trademarks:

CASATELLI
ROYAL

Company:

PALAZZETTI LELIO S.p.A.



Deutsche
Akkreditierungsstelle
D-PL-11120-04-00

This accreditation is valid only for the listed standards as stated in the accreditation annex of D-PL-11120-04-00

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Publication of page 2 is permitted.

The test results presented in this report refer solely to the test object stated as described on page 2. The report does not represent a general statement about the serial production of the test object and gives not an authorization for use of a TÜV Rheinland test/certification mark.

Type testing
Residential space heating appliances fired by wood pellets
DIN EN 14785: September 2006
Correction 1 DIN EN 14785: October 2007

Applicant/contractor: **PALAZZETTI LELIO S.p.A.**
Via Roveredo, 103
33080 Porcia (PN) - Italy

Type of construction: Residential room sealed heating appliances fired by wood pellets without water heat exchanger, with fan assisted flue discharge and with internal fuel hopper

Trademarks:	CASATELLI		ROYAL
Model designation:	MATTIA 8 FILIPPO 8 E LEONARDO 8 ET	MATTIA 9 FILIPPO 9 E LEONARDO 9 ET	ILDE AIR 80 DORA AIR 80 GRAZIA E AIR 80 US
Heat input:	2,6 kW – 7,7 kW	2,6 kW – 8,9 kW	2,6 kW – 8,9 kW
Nominal heat output:	2,5 kW – 7,2 kW	2,5 kW – 8,2 kW	2,5 kW – 8,2 kW

Water heat output: Not applicable

Type of fuel: wood pellets, Ø: 6 mm, L_{max}: 30 mm, class A1 acc. to EN 17225-2

Type of loading: automatic load

Max. allowable water temperature: Not applicable

Max. allowable water pressure: Not applicable

Remarks:

The data at nominal heat output of the stoves **MATTIA 8**, **FILIPPO 8 E** and **LEONARDO 8 ET** are achieved by linear interpolation.

The appliances **LEONARDO 8 ET**, **LEONARDO 9 ET** and **GRAZIA E AIR 80 US** are arranged for the concentric flue gas system connection (Poujoulat).

Test basis:

DIN EN 14785: September 2006; Correction October 2007.

Test results:

The technical requirements clauses 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, is not a part of this assessment.

Additional details are documented on the type testing report K20612020E18.

Cologne, 02.072020

432 / mc


TÜV Rheinland Energy GmbH

Test Centre according to Construction


Product Regulation 305/2011(CPR)

Notified Body: 2456

Assessor:


Dipl.-Ing. M. Ciccarelli

Report released after review:


Dipl.-Ing. A. Pomp

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 a renaming on the above mentioned pellet stoves.

Basic: DELKA S.r.l. Via Crevada, 63 31020 Refrontolo (TV) - Italy Report: K20612020E18	New: PALAZZETTI LELIO S.p.A. Via Roveredo, 103 33080 Porcia (PN) - Italy Report K28782020Z1			
Trademark: DFF	Trademarks: <table border="1" data-bbox="722 748 1402 797"> <tr> <td data-bbox="722 748 1046 797">CASATELLI</td> <td data-bbox="1046 748 1402 797">ROYAL</td> </tr> </table>		CASATELLI	ROYAL
CASATELLI	ROYAL			
Models: MARIA 8.0 MARIA 9.0 LORENA 9.0 PJ	Models: <table border="1" data-bbox="722 848 1402 1072"> <tr> <td data-bbox="722 848 1046 1072"> MATTIA 8 FILIPPO 8 E LEONARDO 8 ET MATTIA 9 FILIPPO 9 E LEONARDO 9 ET </td> <td data-bbox="1046 848 1402 1072"> ILDE AIR 80 DORA AIR 80 GRAZIA E AIR 80 US </td> </tr> </table>		MATTIA 8 FILIPPO 8 E LEONARDO 8 ET MATTIA 9 FILIPPO 9 E LEONARDO 9 ET	ILDE AIR 80 DORA AIR 80 GRAZIA E AIR 80 US
MATTIA 8 FILIPPO 8 E LEONARDO 8 ET MATTIA 9 FILIPPO 9 E LEONARDO 9 ET	ILDE AIR 80 DORA AIR 80 GRAZIA E AIR 80 US			

2. Testing

The practical tests were carried out in the laboratory in Thiene (VI) - Italy on December 2019 and on March 2020. The appliances **MARIA 9.0** and **LORENA 9.0 PJ** were tested. The data at nominal heat output of the stove **MARIA 8.0** were achieved by linear interpolation (see the type testing report n. K20612020E18).

The appliances with CASATELLI's and ROYAL's trademarks are equal to the tested products MARIA 8.0, MARIA 9.0 and LORENA 9.0 PJ, except for the different external covering, the different trademarks and for the different model names.

The resume of the results can be seen in the following chapter 2.1.

2.1 Resume of test results

MATTIA 8 FILIPPO 8 E LEONARDO 8 ET		Nominal	Partial	Requirement
Mass of the test fuel fired hourly	kg/h	1,59	0,54	-
Flue gas mass flow	g/s	4,5	2,2	-
Flue gas temperature	°C	143,5	96,6	-
CO ₂ -concentration	Vol.-%	12,5	8,2	-
O ₂ -concentration	Vol.-%	7,7	12,1	-
CO-concentration	ppm	52	108	-
CO-emission (at 13%-O ₂)	mg/m ³	38	122	500/750
CO-emission	mg/kWh	91	294	-
CO-emission	mg/MJ	26	82	-
NO _x -concentration	ppm	126	93	-
NO _x -emission (at 13%-O ₂)	mg/m ³	155	172	-
NO _x -emission	mg/kWh	377	414	-
NO _x -emission	mg/MJ	105	115	-
CnHm-emission (at 13%-O ₂)	mg/m ³	1	1	-
CnHm-emission	mg/kWh	3	4	-
CnHm-emission	mg/MJ	1	1	-
Dust emission (at 13%-O ₂)	mg/m ³	15	19	-
Dust emission	mg/kWh	36	47	-
Dust emission	mg/MJ	10	13	-
Total heat input	kW	7,7	2,6	-
Water heat output	kW	-		
Nominal heat output	kW	7,2	2,5	-
Efficiency	%	92,4	93,3	75/70 (EN14785)

MATTIA 9 FILIPPO 9 E LEONARDO 9 ET ILDE AIR 80 DORA AIR 80 GRAZIA E AIR 80 US		Nominal	Partial	Requirement
Mass of the test fuel fired hourly	kg/h	1,83	0,54	-
Flue gas mass flow	g/s	4,7	2,2	-
Flue gas temperature	°C	167,8	96,6	-
Flue draught	mbar	0,12	0,10	0,12/0,10 +/-0,02 (or declared value)
CO ₂ -concentration	Vol.-%	13,6	8,2	-
O ₂ -concentration	Vol.-%	6,5	12,1	-
CO-concentration	ppm	78	108	-
CO-emission (at 13%-O ₂)	mg/m ³	54	122	500/750
CO-emission	mg/kWh	129	294	-
CO-emission	mg/MJ	36	82	-
NO _x -concentration	ppm	140	93	-
NO _x -emission (at 13%-O ₂)	mg/m ³	158	172	-
NO _x -emission	mg/kWh	382	414	-
NO _x -emission	mg/MJ	106	115	-
CnHm-emission (at 13%-O ₂)	mg/m ³	1	1	-
CnHm-emission	mg/kWh	2	4	-
CnHm-emission	mg/MJ	1	1	-
Dust emission (at 13%-O ₂)*	mg/m ³	14	19	-
Dust emission*	mg/kWh	33	47	-
Dust emission*	mg/MJ	9	13	-
Total heat input	kW	8,9	2,6	-
Water heat output	kW	-	-	-
Nominal heat output	kW	8,2	2,5	-
Efficiency	%	91,7	93,3	75/70 (EN14785)

*) Average of 3 samples, based on separate calculation.

3. Statement of the test results

The appliances:

**MATTIA 8; FILIPPO 8 E; LEONARDO 8 ET
MATTIA 9; FILIPPO 9 E; LEONARDO 9 ET
ILDE AIR 80; DORA AIR 80; GRAZIA E AIR 80 US**

with the trademarks:

**CASATELLI
ROYAL**

of the company:

PALAZZETTI LELIO S.p.A.

comply for the operation with wood pellets with the requirements acc. to
DIN EN 14785: September 2006, clauses 4-8.

The results of the type testing report (see report K20612020E18) are not affected by the renaming.

The electrical safety, cl. 5.9. of the standard, is not a part of this assessment.

The presumption of conformity with the relevant European Directives respectively Regulations could only be confirmed by full compliance with Annex ZA.

This statement was given based on the documentation submitted by the manufacturer and the tested sample. The statement is valid only for products / appliances which are manufactured according to the tested specimen.

4. Test documents

Appendix	Subject	Reference
A 01	Marking plates	--
A 02	EU Declaration of Conformity	22/06/2020
A 03	Declarations of Performances	n. 000001355 n. 000001351 n. 000001349 n. 000001356 n. 000001352 n. 000001350 n. 000001389 n. 000001390 n. 000001391
A 04	Declarations of extension	24/06/2020
A 05	Sale authorization	24/06/2020
A 06	Purchase declaration from PALAZZETTI	24/06/2020
A 07	Drawing with dimensions MATTIA 8 / MATTIA 9	--
A 08	Drawing with dimensions FILIPPO 8 E / FILIPPO 9 E	--
A 09	Drawing with dimensions LEONARDO 8 ET / LEONARDO 9 ET	--
A 10	Drawing with dimensions DORA AIR 80	--
A 11	Drawing with dimensions GRAZIA E AIR 80 US	--
A 12	Drawing with dimensions ILDE AIR 80_	--