TÜV Rheinland Energy GmbH
Test Centre for Energy Appliances

TÜVRheinland®
Precisely Right.

Report No. K 1085 2022 B3
Verification of the requirements according to:

COMMISSION REGULATION (EU) 2015/1185
(Ecodesign Directive 2009/125/EC)
and
COMMISSION DELEGATED REGULATION (EU) 2015/1186
(Energy Labelling Directive 2010/30/EU)

Solid fuel local space heater:
Slimquadro Idra 14

Trademark:
Thermorossi

Company:
Thermorossi S.p.A.

2022

ilac-MRA DAkkS 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

Test Report according the Commission Regulation (EU) 2015/1185 – Ecodesign and the Commission Delegated Regulation (EU) 2015/1186 – Energy Labelling

Appliance manufacturer / contractor:	**Thermorossi S.p.A.** Via Grumolo 4 36011 Arsiero (VI) - Italy		
Trademark:	**Thermorossi**		
Model:	**Slimquadro Idra 14**		
Type of construction:	Pellet stove in acc. to EN 14785:2006		
Fuel:	Compressed wood pellets, Ø 6 mm, L_{max} 30 mm, class A1 according to EN 17225-2		
Nominal heat output (P_{nom})	13,3 kW	Direct:	1,5 kW
		Indirect:	11,9 kW
Minimum heat output (P_{min})	4,7 kW	Direct:	0,6 kW
		Indirect:	4,1 kW
Reference type test report:	K10852013T1		
Test basis: Regulations no. 2015/1185 and no. 2015/1186. This examination has been carried out in a test laboratory equipped in accordance to the EN 14785:2006. The test results were reviewed by the impartial test centre of TÜV Rheinland. Test results: the requirements of the implementing Directives 2009/125/EC and 2010/30/EU for the appliance are fulfilled with the following values:			
Seasonal space heating energy efficiency	**89,5 %**		
Energy efficiency class	**A++**		
Cologne, 14.03.2022 432/mc	TÜV Rheinland Energy GmbH Test Centre for Energy Appliances DIN- and DVGW-test laboratory		
Assessor:	Report released after review:		
			
Dipl.-Ing. M. Ciccarelli	Dipl.-Ing. A. Pomp		

1 Task

The Test Centre for Energy Appliances was instructed to execute the measurements and calculations on the appliance **Slimquadro Idra 14** according to the Commission Regulation (EU) 2015/1185 and the Commission Delegated Regulation (EU) 2015/1186.
The tests were carried out by the laboratory of TÜV Rheinland/CMC Centro Misure Compatibilità S.r.l. in Thiene (Italy).
Test details on the reference test report K10852013T1.

2 Description of the appliance

Residential space heating appliance fired by wood pellets with water heat exchanger for domestic central heating system. The flue discharge for pellet operation is fan assisted. The stove is equipped with an automatic ignition.

See the reference test report K10852013T1 for further details.

Control features

Room temperature control

Single stage heat output, no room temperature control	No
Two or more manual stages, no temperature control	Yes
With mechanic thermostat room temperature control	No
With electronic room temperature control	No
With electronic room temperature control plus day timer	No
With electronic room temperature control plus week timer	No

Controls for indoor heating comfort

Room temperature control with presence detection	No
Room temperature control with open window detection	No
With distance control option	No

3 Test data

Working condition	Description	Parameter	Result	Unit
Nominal heat output	Useful efficiency at nominal heat output	$\eta_{th,nom}$	93,3	%
	Nominal heat output	P_{nom}	13,3	kW
	Electric power requirement at nominal heat output*	el_{max}	50	W
	Particulate matter emissions**	PM	13	mg/m³
	Organic gaseous compounds emissions**	OGC	2	
	Carbon monoxide emissions**	CO	61	
	Nitrogen oxides emissions**	NO_X	177	
Minimum heat output	Useful efficiency at minimum heat output	$\eta_{th,min}$	95,5	%
	Minimum heat output	P_{min}	4,7	kW
	Electric power requirement at minimum heat output*	el_{min}	35	W
	Particulate matter emissions**	PM	9	mg/m³
	Organic gaseous compounds emissions**	OGC	3	
	Carbon monoxide emissions**	CO	144	
	Nitrogen oxides emissions**	NO_X	186	
Standby	Standby mode power consumption*	el_{sb}	3,0	W

* Declared values by the manufacturer.
** Values standardised to a dry flue gas basis at 13 % oxygen and conditions at 273 K and 1013 mbar.

4 Test results

Seasonal space heating energy efficiency in active mode	η_{son}	93,3	%
Contributions of controls of indoor heating comfort (mutually exclusive temperature controls)	F(2)	7,0	%
Contributions of controls of indoor heating comfort	F(3)	0,0	%
Negative contribution to the seasonal space heating energy efficiency by auxiliary electricity consumption	F(4)	0,8	%
Negative contribution to the energy efficiency index by energy consumption of a permanent pilot flame	F(5)	0	%
Biomass label factor	BLF	1,45	---
Seasonal space heating energy efficiency	**η_s**	**89,5**	**%**
Energy efficiency index	**EEI**	**131**	**---**
Energy efficiency class	**---**	**A++**	**---**

5 Evaluation of the Energy Labelling Requirements

Energy efficiency class	Energy efficiency index (EEI)
A++	EEI ≥ 130
A+	107 ≤ EEI < 130
A	88 ≤ EEI < 107
B	82 ≤ EEI < 88
C	77 ≤ EEI < 82
D	72 ≤ EEI < 77
E	62 ≤ EEI < 72
F	42 ≤ EEI < 62
G	EEI < 42

According to the Directive 2010/30/EU, the local space heater shall be marked as following:

Appliance: Slimquadro Idra 14	**Energy efficiency class**
Trademark: Thermorossi	**A++**

6 Statement of test results

The local space heater

Slimquadro Idra 14

of the company

Thermorossi S.p.A.

fulfils and corresponds to the requirements of the Commission Regulation (EU) 2015/1185 with regard to Ecodesign requirements for local space heaters and achieved a seasonal space heating energy efficiency of:

89,5 %

and an energy efficiency class of:

A++

in accordance with Annex II Energy Efficiency Classes table 1 of the Commission Delegated Regulation (EU) 2015/1186.

The evaluation of the results of this report with respect of conformity with the related commission regulations (2015/1185 and 2015/1186) is only a part of the conformity assessment to fulfil the Ecodesign (Directive 2009/125/EC) and Energy Labelling (Directive 2010/30/EU) prescriptions.