

Report No. K 3164 2024 E6
Residential space heating appliances fired by wood pellets
Supplement to type testing
DIN EN 14785

Model:
PF 861 S

Trademark:
Jøtul

Company:
Jøtul AS



Deutsche
Akkreditierungsstelle
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. 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.

Supplement to testing reports
K31642021T1, K31642022E5, K32282022Z1
Residential space heating appliances fired by wood pellets
DIN EN 14785: September 2006
Correction 1 DIN EN 14785: 10/2007

Applicant/contractor: **Jøtul AS**
P.o. box 1411,
1602 Fredrikstad - Norway

Trademark: **Jøtul**

Appliance description: Residential space heating appliance fired by wood pellets without water heat exchanger, with fan assisted flue discharge and with internal fuel hopper.

Model designation: **PF 861 S**

Total heat input: 3,9 - 9,0 kW

Total heat output: 3,6 - 8,0 kW

Water heat output: Not applicable.

Type of fuel charging: Automatic load.

Flue spigot: 80 mm.

Remarks:

-

Test result:

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

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

Additional details are documented on reports K31642021T1, K31642022E5 and K32282022Z1.

Dated in Cologne, 2024-02-22
667 / pom

TÜV Rheinland Energy & Environment GmbH
Test Centre according to Construction Product
Regulation 305/2011(CPR)
Notified Body: 2456

Assessor:

Report released after review:



Dipl.-Ing. A. Pompp

Dipl.-Ing. M. Reibold

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 definition

History test report K 3164 2021 T1

The Test Centre for Energy Appliances was instructed to execute the initial type testing / calculations on the appliances **Circular 7**, **Circular 9**, **Circular 7 CX** and **Circular 9 CX** for the operation with wood pellets according to DIN EN 14785:2006, cl. 4-8.

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

The practical tests were carried out by the laboratory CMC Centro Misure Compatibilità S.r.l., via della Fisica 20, Thiene (VI) – Italy, on the 05th - 06th - 09th - 10th of November 2020 and on the 02nd of September 2021.

History test report K 3164 2022 E5

The manufacturer adds new models to K31642021T1 report family, called **Triad 660 S** and **Triad 860 S**. The following technical modifications were carried out, compared to the already-tested appliances:

- _new external design;
- _concentric combustion air inlet – exhaust flue gas outlet pipe;
- _alternative electrical components (gear motor, control board).

The practical tests were carried out by the laboratory CMC Centro Misure Compatibilità S.r.l., via della Fisica, 20, Thiene (VI) – Italy on the 11th of April 2022.

History test report K 3228 2022 Z1

The Test Centre for Energy Appliances was instructed to execute a renaming of the following appliances:

<p>Initial type Testing: Aico S.p.A. Via Consorzio Agrario 3/D 25032 Chiari (BS) – Italy</p> <p>Report: K31642021T1</p>	<p>Supplement: Aico S.p.A. Via Consorzio Agrario 3/D 25032 Chiari (BS) – Italy</p> <p>Report: K31642022E5</p>	<p>Renaming: Jøtul SAS Chemin du Jubin 3, 69574 Dardilly - France</p> <p>Report: K32282022Z1</p>
<p>Trademark: Ravelli</p>	<p>Trademark: Ravelli</p>	<p>Trademark: Jøtul</p>
<p>Models: Circular 7, Circular 7 CX, Circular 9, Circular 9 CX</p>	<p>Models: Triad 660 S, Triad 860 S</p>	<p>Models: PF 660 S, PF 860 S</p>

New test report K 3164 2024 E6

The manufacturer added a new model to the K31642021T1, K31642022E5 and K32282022Z1 reports family, named **PF 861 S**, with the following characteristics:

- different external design;
- different control board / display;
- different fuel motor.

The Test Centre did a comparison test with the gear motor FB1439 in report K19302024E8. The comparison combustion measurements shown no significant differences.

2. Description of the appliance

2.1 Construction

Residential space heating appliance fired by wood pellets without water heat exchanger. The flue discharge for pellet operation is fan assisted. The stove is equipped with an automatic ignition. The appliance is equipped with a concentric combustion air inlet – exhaust flue gas outlet pipe and is sealed for France requirements (acc. to EN613, cl. 6.2.2.2 and to prEN 16510-2-6:2016).

2.2 General declared technical data of the pellet appliance

Model:	PF 861 S
Nominal power:	8,0 kW
Fuel:	Wood pellets Ø 6 mm, Lmax 30 mm, class A1 according to EN 17225-2
Total dimension: Height x Width x Depth	1250 x 560 x 582 mm
Distance from adjacent combustible materials:	Backside distance: 100 mm Side distance: 200 mm Front distance: 800 mm
Max water pressure:	Not applicable.
Max water temperature:	Not applicable.

For more information see test reports K31642021T1, K31642022E5 and K32282022Z1.

3. Resume of test results

PF 861 S		Nominal	Partial	Requirement
Mass of the test fuel fired hourly	kg/h	1,833	0,800	-
Flue gas mass flow	g/s	5,79	3,35	-
Flue gas temperature	°C	175,0	101,4	-
Flue draught	mbar	0,10	0,10	0,12/0,10 +/-0,02 or declared value
CO ₂ -concentration	Vol.-%	10,6	7,8	-
O ₂ -concentration	Vol.-%	10,2	13,0	-
CO-concentration	ppm	15	149	-
CO-emission (at 13%-O ₂)	mg/m ³	14	187	≤ 500/750
CO-emission	mg/kWh	32	419	-
CO-emission	mg/MJ	9	116	-
NO _x -concentration	ppm	105	71	-
NO _x -emission (at 13%-O ₂)	mg/m ³	159	145	-
NO _x -emission	mg/kWh	356	325	-
NO _x -emission	mg/MJ	99	90	-
CnHm-concentration measured acc. to CEN/TS 15883	ppm	1	1	-
CnHm-emission (at 13%-O ₂)	mg/m ³	2	2	-
CnHm-emission	mg/kWh	4	5	-
CnHm-emission	mg/MJ	1	1	-
Dust concentration measured acc. to CEN/TS 15883 and EN13284-1 *	mg	5	3	-
Dust emission (at 13%-O ₂)	mg/m ³	14,9	9	-
Dust emission	mg/kWh	33	20	-
Dust emission	mg/MJ	9	6	-
Total heat input	kW	9,0	3,9	-
Nominal heat output	kW	8,0	3,6	-
Water heat output	kW	-	-	-
Space heat output	kW	8,0	3,6	-
Efficiency	%	89,3	92,6	≥ 75/70

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

4. Statement of the test results

The appliance

PF 861 S

of the company

Jøtul AS

with trademark

Jøtul

fulfils the requirements acc. to
EN 14785:2006, clauses 4-8.

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

Additional details are documented on Type Test reports n. K31642021T1, K31642022E5 and K32282022Z1.

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5. Test documents

TÜV Rheinland Energy & Environment GmbH declines any responsibility derived from missing or wrong information in the documents provided by the applicant.

Appendix	Subject	Reference
A 01	Type label	-
A 02	Extension Declaration	18/01/2024
A 03	Instruction and installation manual	JØTUL PF 861 S
A 04	List of electrical components	18/01/2024
A 05	Gear motor	Mellor FB1439
A 06	Safety electrical circuit	M31
A 07	Setup parameters	-
A 08	Overview drawings	80035DJ01, 80035DJ01/0