

**Report No. K 3739 2025 B2**

**Residential solid fuel burning  
appliances**

**Mechanically by wood pellets fed  
roomheaters, inset appliances and cookers**

**DIN EN 16510-2-6:2023-02, Table ZA.1**

Type:  
**ECOFIRE EMILY TCA 6 EN**  
**ECOFIRE EMILY TCA 6 US EN**  
**ECOFIRE EMILY TCA 9 EN**  
**ECOFIRE EMILY TCA 9 US EN**  
**ECOFIRE EMILY TCA 9 Pro 2 EN**  
**ECOFIRE EMILY TCA 9 US Pro 2 EN**

Trademark:  
**Palazzetti**

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.**

**Report of relevant clauses for  
Residential solid fuel burning appliances:  
mechanically by wood pellets fed roomheaters, inset appliances and cookers  
DIN EN 16510-2-6:2023-02, Table ZA.1**

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

Trademark: **PALAZZETTI**

Type designations: **ECOFIRE EMILY TCA 6 EN, ECOFIRE EMILY TCA 6 US EN  
ECOFIRE EMILY TCA 9 EN, ECOFIRE EMILY TCA 9 US EN  
ECOFIRE EMILY TCA 9 Pro 2 EN, ECOFIRE EMILY TCA 9 US  
Pro 2 EN**

Appliances description: Residential space heating appliance with fan assisted flue discharge and with internal fuel hopper.

Test fuel: Wood pellets, Ø: 6 mm, Lmax: 30 mm, humidity: 7,1%, Pe.Pe, class A1 according to EN 17225-2.

**Specified data by applicant**

Type of appliance: CC50

Type designations: ECOFIRE EMILY TCA 6 EN, ECOFIRE EMILY TCA 6 US EN  
ECOFIRE EMILY TCA 9 EN, ECOFIRE EMILY TCA 9 US EN  
ECOFIRE EMILY TCA 9 Pro 2 EN, ECOFIRE EMILY TCA 9 US Pro 2 EN

Heat output: See page 3

Space heat output: See page 3

Water heat output: Not applicable

**Remarks:** Test data documented in this report are based on test report no.: K37392025T1 according to DIN EN 16510-1: 2023-02 and DIN EN 16510-2-6:2023-02. The historical assessment report K37392025T1 is based on test reports K33942023T1 and K33942025E2 according DIN EN 14785: September 2006 and Correction 1 DIN EN 14785:10.2007.

**Test basis:** DIN EN 16510-2-6:2023-02, Table ZA.1.

**Test results:** The essential specified characteristics of Table ZA.1 of DIN EN 16510-2-6:2023-02 are assessed. Clause 4.9 is not part of this assessment.  
Performance assessments regarding environmental sustainability is not considered in the present order and is not the subject of this report. A possible NPD declaration by the manufacturer is also not included in the present report.

Dated in Cologne, 2025-09-15

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. Pomp

Dipl.-Ing. M. Reimbold

For the purposes of Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this Assessments of Performance Report under AVCP system 3 applies to the construction product(s)

**Overview types designation table**

Types designation	Heat input (kW)	Heat output (kW)
ECOFIRE EMILY TCA 6 EN ECOFIRE EMILY TCA 6 US EN	2,7-6,6	2,5-6,0
ECOFIRE EMILY TCA 9 EN ECOFIRE EMILY TCA 9 US EN ECOFIRE EMILY TCA 9 Pro 2 EN ECOFIRE EMILY TCA 9 US Pro 2 EN	2,7-10,2	2,5-9,0

A summary of all types with main characteristics is listed on the table below:

Type	Nominal heat output (kW)	Flue gas outlet		Fuel loading system		Sealed appliance
		Horizontal	Upright	Cochlea	Star	
ECOFIRE EMILY TCA 6 US EN	6,0	-	X	-	X	CC50
ECOFIRE EMILY TCA 9 US EN, ECOFIRE EMILY TCA 9 US Pro 2 EN	9,0	-	X	-	X	CC50
ECOFIRE EMILY TCA 6 EN	6,0	X	-	-	X	CC50
ECOFIRE EMILY TCA 9 EN, ECOFIRE EMILY TCA 9 Pro 2 EN	9,0	X	-	-	X	CC50

***Relevant clauses for roomheater for solid fuel intended for space heating in residential buildings acc. DIN EN 16510-2-1:2023-02, Table ZA.1***

ECOFIRE EMILY TCA ...		
Essential characteristics	Clauses of this European Standard related to essential characteristics	Assessment and verification For more information, see Test Report K 3739 2025 Z1
<b>Mechanical resistance and stability</b>		
Load bearing capacity	4.1	Specified: 0 kg
<b>Safety in case of fire</b>		
Protection of combustible materials	4.2	<p>Specified distances:</p> <p>Minimum distance to combustible materials – bottom (<math>d_B</math>): 0 mm</p> <p>Minimum distance to combustible materials – floor in front (<math>d_F</math>): 1500 mm</p> <p>Minimum distance to combustible materials – ceiling (<math>d_C</math>): 750 mm</p> <p>Minimum distance to combustible materials – rear (<math>d_R</math>): 100 mm</p> <p>Minimum distance to combustible materials – side (<math>d_S</math>): 100 mm</p> <p>Minimum distance to combustible materials – side radiation area (<math>d_L</math>): 1500 mm</p> <p>Minimum distance to combustible materials (e.g. furniture) (<math>d_P</math>): 1000 mm</p> <p>Material type and thickness of protective insulation material (s) (if any): -</p>
		Maximum determined temperatures rise at specified distances: $\leq 65$ K

ECOFIRE EMILY TCA 6 US EN, ECOFIRE EMILY TCA 6 US EN			
Essential characteristics	Clauses of this European Standard related to essential characteristics	Assessment and verification For more information, see Test Report K 3739 2025 T1	
		Determined Data (13% O <sub>2</sub> )	Specified Data (13% O <sub>2</sub> )
Hygiene, health and the environment			
At nominal heat output:			
Carbon monoxide emission (CO)	4.3	39 mg/m <sup>3</sup>	50 mg/m <sup>3</sup>
Nitrogen oxides (NO <sub>x</sub> ) emissions	4.4	99 mg/m <sup>3</sup>	99 mg/m <sup>3</sup>
Emission of organic gaseous carbon (OGC)	4.5	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
Particulate matter emissions (PM)	4.6	7 mg/m <sup>3</sup>	7 mg/m <sup>3</sup>
At part. load heat output:			
Carbon monoxide emission (CO)	4.3	275 mg/m <sup>3</sup>	275 mg/m <sup>3</sup>
Nitrogen oxides (NO <sub>x</sub> ) emissions	4.4	62 mg/m <sup>3</sup>	62 mg/m <sup>3</sup>
Emission of organic gaseous carbon (OGC)	4.5	5 mg/m <sup>3</sup>	5mg/m <sup>3</sup>
Particulate matter emissions (PM)	4.6	8 mg/m <sup>3</sup>	8 mg/m <sup>3</sup>

<b>ECOFIRE EMILY TCA 6 US EN, ECOFIRE EMILY TCA 6 US EN</b>		
<b>Essential characteristics</b>	<b>Clauses of this European Standard related to essential characteristics</b>	<b>Assessment and verification For more information, see Test Report K 3739 2025 Z1</b>
<b>Safety and accessibility in use</b>		
Data for installation to a chimney at nominal heat output:		
Flue gas outlet temperature	4.7.2	197 °C
Minimum flue draught	4.7.4	12 Pa
Flue gas mass flow	4.7.6	4,1 g/s
Data for installation to a chimney at part. load heat output:		
Flue gas outlet temperature	4.7.3	120 °C
Minimum flue draught	4.7.5	12 Pa
Flue gas mass flow	4.7.7	3,1 g/s
Data for installation to a chimney regarding fire safety on safety test heat output:		
Fire safety of installation to a chimney	4.7.8	T400 G

ECOFIRE EMILY TCA 6 US EN, ECOFIRE EMILY TCA 6 US EN			
Essential characteristics	Clauses of this European Standard related to essential characteristics	Assessment and verification For more information, see Test Report K 3739 2025 Z1	
		Determined data	Specified data
Energy economy and heat retention			
Appliance's thermal output and energy efficiency at nominal heat output:			
Space heat output	4.8.1	6,0 kW	6,0 kW
Water heat output, if existing	4.8.2	-	-
Efficiency	4.8.3	91 %	90 %
Appliance's thermal output and energy efficiency at part. load heat output:			
Space heat output	4.8.4	2,5 kW	2,5 kW
Water heat output, if existing	4.8.5	-	-
Efficiency	4.8.6	91 %	91 %





Energy efficiency	4.8.8	Index (EEI): 126 Energy efficiency classification: A+	Index (EEI): 126 Energy efficiency classification: A+
Electric power consumption at appliance's nominal heat output, if existing	4.8.9	0.045 kW	0.045 kW
Electric power consumption at appliance's part. load heat output, if existing	4.8.10	0.020 kW	0.020 kW
Standby mode power consumption, if existing	4.8.11	0.002 kW	0.002 kW

The specified heat output, efficiency and emission values are in line with the measured values considering rounding rules of DIN EN 16510-1:2023-02, clause A.5.

ECOFIRE EMILY TCA 9 EN, ECOFIRE EMILY TCA 9 US EN ECOFIRE EMILY TCA 9 Pro 2 EN, ECOFIRE EMILY TCA 9 US Pro 2 EN			
Essential characteristics	Clauses of this European Standard related to essential characteristics	Assessment and verification For more information, see Test Report K 3739 2025 Z1	
		Determined Data (13% O <sub>2</sub> )	Specified Data (13% O <sub>2</sub> )
Hygiene, health and the environment			
At nominal heat output:			
Carbon monoxide emission (CO)	4.3	10 mg/m <sup>3</sup>	50 mg/m <sup>3</sup>
Nitrogen oxides (NO <sub>x</sub> ) emissions	4.4	87 mg/m <sup>3</sup>	99 mg/m <sup>3</sup>
Emission of organic gaseous carbon (OGC)	4.5	1 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
Particulate matter emissions (PM)	4.6	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
At part. load heat output:			
Carbon monoxide emission (CO)	4.3	275 mg/m <sup>3</sup>	275 mg/m <sup>3</sup>
Nitrogen oxides (NO <sub>x</sub> ) emissions	4.4	62 mg/m <sup>3</sup>	62 mg/m <sup>3</sup>
Emission of organic gaseous carbon (OGC)	4.5	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Particulate matter emissions (PM)	4.6	8 mg/m <sup>3</sup>	8 mg/m <sup>3</sup>

<b>ECOFIRE EMILY TCA 9 EN, ECOFIRE EMILY TCA 9 US EN                      ECOFIRE EMILY TCA 9 Pro 2 EN, ECOFIRE EMILY TCA 9 US Pro 2 EN</b>		
<b>Essential characteristics</b>	<b>Clauses of this European Standard related to essential characteristics</b>	<b>Assessment and verification                      For more information, see                      Test Report K 3739 2025 Z1</b>
<b>Safety and accessibility in use</b>		
Data for installation to a chimney at nominal heat output:		
Flue gas outlet temperature	4.7.2	270 °C
Minimum flue draught	4.7.4	12 Pa
Flue gas mass flow	4.7.6	5,4 g/s
Data for installation to a chimney at part. load heat output:		
Flue gas outlet temperature	4.7.3	120°C
Minimum flue draught	4.7.5	10 Pa
Flue gas mass flow	4.7.7	3,1 g/s
Data for installation to a chimney regarding fire safety on safety test heat output:		
Fire safety of installation to a chimney	4.7.8	T400 G

ECOFIRE EMILY TCA 9 EN, ECOFIRE EMILY TCA 9 US EN ECOFIRE EMILY TCA 9 Pro 2 EN, ECOFIRE EMILY TCA 9 US Pro 2 EN			
Essential characteristics	Clauses of this European Standard related to essential characteristics	Assessment and verification For more information, see Test Report K 3739 2025 Z1	
		Determined Data	Specified data
Energy economy and heat retention			
Appliance's thermal output and energy efficiency at nominal heat output:			
Space heat output	4.8.1	9,0 kW	9,0 kW
Water heat output, if existing	4.8.2	-	-
Efficiency	4.8.3	88 %	88 %
Appliance's thermal output and energy efficiency at part. load heat output:			
Space heat output	4.8.4	2,5 kW	2,5 kW
Water heat output, if existing	4.8.5	-	-
Efficiency	4.8.6	91 %	91 %

<b>ECOFIRE EMILY TCA 9 EN, ECOFIRE EMILY TCA 9 US EN  ECOFIRE EMILY TCA 9 Pro 2 EN, ECOFIRE EMILY TCA 9 US Pro 2 EN</b>			
<b>Essential characteristics</b>	<b>Clauses of this European Standard related to essential characteristics</b>	<b>Assessment and verification  For more information, see  Test Report K 3739 2025 Z1</b>	
		<b>Determined Data</b>	<b>Specified data</b>
Space heating efficiency			
Seasonal space heating efficiency at appliance's nominal heat output	4.8.7	84 %	84 %
Energy efficiency	4.8.8	Index (EEI): 124  Energy efficiency classification: A+	Index (EEI): 124  Energy efficiency classification: A+
Electric power consumption at appliance's nominal heat output, if existing	4.8.9	0.045 kW	0.045 kW
Electric power consumption at appliance's part. load heat output, if existing	4.8.10	0.020 kW	0.020 kW
Standby mode power consumption, if existing	4.8.11	0.002 kW	0.002 kW

The specified heat output, efficiency and emission values are in line with the measured values considering rounding rules of DIN EN 16510-1:2023-02, clause A.5.