

CADIZ

Test objective:	Hygiene, health and the environment Safety and accessibility in use Energy economy and heat retention
Exact name of the test procedure:	1.4*, 1.5* - Tests of tightness, pressure resistance, thermal technical parameters, combustion efficiency, safety functions
Test method:	ČSN EN 16510-1 ed. 2:2023, Art. A.4, A.4.1, A.4.2, A.4.3, A.4.4, A.4.6, A.4.7, A.4.10.4, A.6.2.1
Sample tested:	CADIZ
Measuring equipment used:	see Chapter III
Date of test:	2020-02-24
Ambient conditions:	21.0 °C 30.0 % 100.6 kPa Temperature Relative humidity Barometric pressure

Variables measured and calculated: Nominal heat output	Unit	Tests n.				Limit according to:
		1	2	3	Average	ČSN EN 16510-2-1:2023
Fuel used: Beech wood	mm	330				
Combustion air setting – primary/secondary	%	48				
Fuel consumption	kg/hour	2.53	2.54	2.50	2.50	
Achieved input	kW	10.7	10.7	10.7	10.7	
Ambient temperature in the room and combustion air temperature	°C	22	21	21	21	
Chimney draught	Pa	12	11	11	11	
Combustion product average temperature	°C	175	191	179	182	
Flue gas outlet temperature	°C	218				
CO ₂	%	9.60	11.40	11.73	10.91	
CO – measured	%	0.0695	0.1360	0.0653	0.0903	
CO – at O ₂ = 13 %	%	0.0545	0.0926	0.0434	0.0635	
CO – at O ₂ = 13 %	mg/Nm ³	682	1157	542	794	≤ 1500
CO – at O ₂ = 0 %	mg/MJ	449	763	357	523	
NO _x – measured	ppm	93	93	87	91	
NO _x – at O ₂ = 13 %	mg/Nm ³	150	130	119	133	≤ 200
NO _x – at O ₂ = 0 %	mg/MJ	99	85	78	87	
OGC – measured	ppm	28	58	39	42	
OGC – at O ₂ = 13 %	mg/Nm ³	39	73	47	53	≤ 120
OGC – at O ₂ = 0 %	mg/MJ	26	48	31	35	
Chimney loss	%	12.1	11.6	10.5	11.4	
Loss of gas underburning	%	0.5	0.8	0.4	0.5	
Loss of solid underburning	%	0.5	0.5	0.5	0.5	
Efficiency	%	86.9	87.2	88.6	87.6	
Total heat capacity achieved	kW	9.3	9.4	9.5	9.4	
Uncertainty of total heat output	kW	0.3	0.3	0.3	0.3	
Nominal capacity	kW	9.0				
Mass flow rate of dry combustion products	g/s	7.6	6.4	6.3	6.8	

CO ₂	%	9.87	12.41	12.27	11.52	
Dust – measured	mg/Nm ³	34	43	38	38	
Dust – at O ₂ = 13 %	mg/Nm ³	26	27	24	26	≤ 40
Dust – at O ₂ = 0 %	mg/MJ	18	19	17	18	