

# ATTESTATION

Number **WG / 2025 / 225K**

**Manufacturer:** Mareli Systems LTD, Lyulin, bl.821, ap.1: Sofia 1336 Bulgaria

**Product:** Solid fuel heating boiler with automatic fuel feeding

**Trade designation:** **UnicPel 18 heat output 18 kW**

**Fuel:** Wood pellets

**Boiler category:** 1

**Condensing boiler** NO

**Test method:** PN-EN 303-5:2021+A1:2023-05

**Boiler class** 5

		Parameter	Unit	Value	Criterion	Kryterium
Emissions	Rated output	Carbon monoxide	$E_{CO}$	$mg/m^3_n$	317,78	$\leq 500$
		Nitrogen oxides, calculated as $NO_2$	$E_{NOx}$	$mg/m^3_n$	162,39	-
		Organic gaseous compounds	$E_{OGC}$	$mg/m^3_n$	16,56	$\leq 20$
		Dust	$E_{PM}$	$mg/m^3_n$	19,19	$\leq 40$
	Minimum output	Carbon monoxide	$E_{CO}$	$mg/m^3_n$	266,59	$\leq 500$
		Nitrogen oxides, calculated as $NO_2$	$E_{NOx}$	$mg/m^3_n$	160,51	-
		Organic gaseous compounds	$E_{OGC}$	$mg/m^3_n$	16,81	$\leq 20$
		Dust	$E_{PM}$	$mg/m^3_n$	19,39	$\leq 40$
	Seasonal	Carbon monoxide	$E_{s,CO}$	$mg/m^3_n$	274,27	$\leq 500$
		Nitrogen oxides, calculated as $NO_2$	$E_{s,NOx}$	$mg/m^3_n$	160,79	$\leq 200$
		Organic gaseous compounds	$E_{s,OGC}$	$mg/m^3_n$	16,77	$\leq 20$
		Dust	$E_{s,p}$	$mg/m^3_n$	19,36	$\leq 40$
Heat properties	Seasonal space heating energy efficiency in active mode		$\eta_{son}$	%	84,83	-
	Seasonal space heating energy efficiency		$\eta_s$	%	81,16	$\geq 75$
	Rated output	Generated useful heat	$P_n$	kW	18,21	-
		Useful efficiency	$\eta_n$	%	85,71	-
		Efficiency	$\eta_{cn}$	%	92,61	$\geq 88,26$
	Minimum output	Generated useful heat	$P_p$	kW	4,80	-
		Useful efficiency	$\eta_p$	%	84,67	-
		Efficiency	$\eta_{cp}$	%	91,68	$\geq 87,73$
Electrical characteristics	Auxiliary energy consumption, rated output		$e_{l,max}$	kW	0,026	-
	Auxiliary energy consumption, minimum output		$e_{l,min}$	kW	0,012	-
	Auxiliary energy consumption, standby mode		$P_{SB}$	kW	0,0031	-
	Boiler energy efficiency index		EEI	-	119,34	-
	Energy efficiency class		-	-	A+	-

\*) the emissions listed above are related to dry exhaust gas containing 10% oxygen in the normal state, at a temperature of 273.15K and a pressure of 1013.25 mbar

Comparison of the results of the completed test, registered under number B/2025/225K in the Accredited Testing Laboratory No. AB024 with the requirements of the PN-EN 303-5:2021+A1:2023-05 standard for Class 5 in which the requirements of Commission Regulation (EU) 2015/1189 were implemented of April 28, 2015 on the implementation of Directive 2009/125/EC of the European Parliament and of the Council and Commission Delegated Regulation (EU) 2015/1187 of 27 April 2015 with regard to the requirements for solid fuel boilers.

**LABORATORY MANAGER**  
 Heating Equipment Laboratory

*M.Sc., Eng. Bartosz Węcki*



**THE DEPUTY MANAGING DIRECTOR**

*M.Sc., Eng. Maciej Jodkowski*

Katowice, 04.06.2025

**Prof. F. Staub Research and Attestation Plant "ZETOM" in Katowice sp. z o.o.**

ul. Ks. Bpa H. Bednorza 17, 40-384 Katowice, tel.: 0048 32 256 92 57, tel/fax: 0048 32 2569 305, e-mail: biuro@zetom.eu