



**"ITEM Consult" Ltd. Sofia 1220,
8 Istoria Slavianobulgarska Blvd**

EEI ASSURANCE

№DI-407/24.11.2022

Регламент/Regulation (EU) 2015/1186

Product: Heating and cooking appliance (stove) of biofuel (wood)
Manufacturer: ISIMETAL ISI CIHAZLARI MAKINA SAN. ve TIC. A.Ş
Model: TK 203 - 7,5 kW
Requested by: ISIMETAL ISI CIHAZLARI MAKINA SAN. ve TIC. A.Ş
Trade names: TK202, TK204, STK205, STK400, TK502, YTK210, TK203BY, TK203T, TK301, TK306
Stoking principle: manual loading
Test Fuel: Solid fuel – hard beech, Test report for the fuel №15380/12.12.2019
Test procedure: EN 12815:2006
Test report no: CPR 239 A/19.02.2021

Fixed values:

F (5)	Correction factor accounting for a negative contribution to the energy efficiency index by energy consumption of a permanent pilot flame	0 [%]
CC	Conversion coefficient for electricity consumption	2,5 [-]
BLF	Biomass label factor	1,45 [-]

Test results:

$\eta_{k \text{ nominal}}$	Efficiency at nominal heat output	75,23 [%]
$\eta_{k \text{ minimum}}$	Efficiency at minimum heat output	0,00 [%]
M	Test fuel, moisture	14,71 [%]
GCV_{mf}	Test fuel, gross calorific value, moisture free	20,20 [MJ/kg]
H_{iw}	Test fuel, net heating value, with moisture	15,31 [MJ/kg]
H_{iwf}	Test fuel, net heating value, moisture free	17,95 [MJ/kg]
el_{max}	Electricity consumption at nominal heat output	0 [kW]
el_{min}	Electricity consumption at minimum heat output	0 [kW]
P_{SB}	Electricity consumption in standby mode	0 [kW]
P_n	Nominal heat output	7,85 [kW]
P_p	Minimum heat output	0,00 [kW]

Calculations

η_n	Efficiency at nominal output	75,23 [%]
η_p	Efficiency at reduced output	0,00 [%]
$\eta_{el,n}$	Electrical efficiency of solid fuel cogeneration boiler	0,00 [%]
η_{son}	Seasonal space heating energy efficiency in active mode	75,23 [%]
η_s	Seasonal space heating energy efficiency	65,23 [%]
F(2)	Correction factor accounting positive contribution to the EEI of controls of indoor heating comfort, which values cannot be summed	0,0000 n/a
F(3)	Correction factor accounting positive contribution to EEI of the controls for indoor heating comfort	0,0000 n/a
F(4)	Correction factor accounting for a negative contribution to the EEI by auxiliary electricity consumption	0,0000 n/a

Calculation of the Energy Efficiency index:

Energy Efficiency: 99,08
Energy Efficiency class: A
Energy Efficiency index (EEI): $88 \leq EEI < 107$

Изготвил:

М. Василева

Manager: 
/M. Sc. L. Vasilev /





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Sofia 1220, 8, Istoria Slavianobulgarska Blvd., Bulgaria

CERTIFICATION, TESTING, SUPERVISION OF DEVICES WITH INCREASED RISK

ECODESIGN REQUIREMENTS FOR SOLID FUEL LOCAL SPACE HEATERS ACCORDING TO COMMISSION REGULATION (EU) 2015/1185 IMPLEMENTING DIRECTIVE 2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

№DI-408/24.11.2022

Trade mark:	ISIMETAL ISI CIHAZLARI MAKINA SAN. ve TIC. A.Ş
Appliance:	Solid fuel /wood / heating and cooking stove
Model:	TK 203 – 7.5 kW
Trade names:	TK202, TK204, STK205, STK400, TK502, YTK210, TK203BY, TK203T, TK301, TK306
Stoking mode:	Manual
Indirect heating functionality:	No
Direct heat output:	7.85 kW
Indirect heat output:	<i>not applicable</i>

Fuel	Preferred fuel (only one)	Other suitable fuel (s)	η_s (%)	Emissions at nominal heat output				Emissions at reduced heat output			
				PM	OGC	CO	NO _x	PM	OGC	CO	NO _x
				mg/m ³ at 13% O ₂							
Log wood, moisture content ≤25%	yes	no	65	32	53	1476	172	-	-	-	-
Chipped wood, moisture content 15-35%	no	no									
Chipped wood, moisture content >35%	no	no									
Compressed wood in the form of pellets or briquettes	no	no									
Sawdust, moisture content ≤50%	no	no									
Non-woody biomass	no	no									
Bituminous coal	no	no									
Brown coal (including briquettes)	no	no									
Coke	no	no									
Anthracite	no	no									
Blended fossil fuel briquettes	no	no									
Other fossil fuel	no	no									



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Blended biomass (30-70%) fossil fuel briquettes	no	no									
Other blend of biomass and fossil fuel	no	no								*	

Characteristics when operating with the preferred fuel only:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Useful heat output				Useful efficiency			
At rated heat output	P_n	7.85	kW	At rated heat output	η_n	75.23	%
At (30%/50%) of rated heat output if it's applicable	P_p	-	kW	At (30%/50%) of rated output if applicable	η_p	-	%
Auxiliary electricity consumption				Type of heat output/room temperature control			
At rated heat output	el_{max}	-	kW	Single stage heat output, no room temperature control	Yes/no	Yes	
				Two or more manual stages, no room temperature control	Yes/no	No	
				With mechanic thermostat room temperature control	Yes/no	No	
At (30%/50%) of rated output if applicable	el_{min}	-	kW	With electronic room temperature control	Yes/no	No	
In standby mode	P_{SB}	-	kW	With electronic room temperature control plus day timer	Yes/no	No	
Permanent pilot flame power requirement				With electronic room temperature control plus week timer	Yes/no	No	
Pilot flame power /if applicable/	P_{pilot}	N.A.	kW	Other control options			
				Room temperature control with presence detection	Yes/no	No	
				Room temperature control with open window detection	Yes/no	No	
				With distance control option	Yes/no	No	

CONCLUSION:

Solid fuel/wood/ heating and cooking stove “TK 203 – 7.5 kW” MEET THE REQUIREMENTS OF Annex II „Ecodesign Requirements” of REGULATION (EU) 2015/1185.

Contact details	Name and address of the manufacturer or its authorised representative
Address: Yunusemre Mah. Kirkpinar Cad. Ordukaya Sok. No 2-4, YILDIRIM - BURSA/ Türkiye	ISIMETAL ISI CIHAZLARI MAKINA SAN. ve TIC. A.Ş

Prepared by:.....

M. Vasileva

Manager:.....

/M. Sc. L. Vasilev