



CE DECLARATION OF CONFORMITY

The undersigned Georgi Asenov Chimev as manager of Mareli Systems Ltd., address: Lyulin, bl.821, ap.1, Sofia, 1336,Bulgaria phone: +359 74 850 821. .

Declare, in sole responsibility, that the product Pellet stove MB COMPACT 12,15,18,24,30, representative of the type ONYX HYDRO 12,15,18,24,30 and designed for operation of solid fuel (pellets) are produced in factory of Mareli Systems Ltd, address: Industrial area, Simitli city 2730, Bulgaria. The products are produced in conditions of implemented and maintained by the manufacturer system for production control in accordance with:

1. BDS EN 14785: 2006 Heating devices, working with wood pellets for home use. Requirements and test methods.
2. SD CEN/TS 15883:2009 Household devices for solid fuel. Testing methods for emissions.
3. Directive 97/23/EC, introduced by "Regulation of essential requirements and conformity assessment of pressure equipments.
4. Directive 2014/35/EC
5. BDS EN 60335-1; BDS EN 60335-2-102;
6. BDS EN 55014-1; BDS EN 61000-3-2; BDS EN 61000-3-3; BDS EN 55014-2.

The declaration is issued on the basis of Protocol for initial testing:

- Number CPR 191/191 NA
- Number CPR 192/192 NA
- Number CPR 195/195 NA
- Number CPR 200/200 NA
- Number CPR 250/250 NA
- Number 2-18-829
- Number 2a-18-829
- Number 2EMC-18-829

ISSUED FROM:

ITEM Conuslt Ltd.

Address: Bulgaria, Sofia 1220, 8 "Istoria Slavianobulgarska" Blvd.

CTEC Ltd.

Address: Bulgaria, Stara Zagora 6000, 2 "Industrialna" str.

Specific requirements related to the use of the product:

In case of improper use or change of the product, this declaration is not valid.

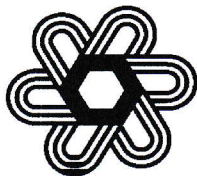
As the manufacturer we declare under our sole responsibility that the equipment follows the provisions of the Directives stated above.

PLACE: SIMITLI

DATE: 30.05.2024

SIGNATURE: _____





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

EEI ASSURANCE

№DI-363/05.07.2024

Регламент/Regulation (EU) 2015/1186

Product: Biofuel heating appliance / pellets /
Manufacturer: „Mareli Systems” Ltd
Model: „ONYX HIDRO 12 AUTO”
Reseller: „Марели системс” ЕООД/ „Mareli systems” Ltd
Address: Sofia, Lyulin, bl. 821, ap. 1

Stoking principle: automatic
Test Fuel: Wood pellets (C1)
Test procedure: EN 14785:2006
Test report no: CPR 191/21.10.2019

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:

$\eta_{nominal}$ Calculated efficiency at rated heat output 93.20 [%]
 $\eta_{minimum}$ Calculated efficiency at minimum heat output 94.28 [%]
M Test fuel, moisture 4.39 [%]
GCV_{mf} Test fuel, gross calorific value, moisture free 20.30 [MJ/kg]
NCV Test fuel, net heating value, with moisture 18.17 [MJ/kg]
NCV_{iwf} Test fuel, net heating value, moisture free 19.00 [MJ/kg]
e_{l,max} Electric power requirement at nominal heat output' 0.06 [kW]
e_{l,min} Electric power requirement at minimum heat output' 0.01 [kW]
e_{l,SB} Electric power requirement in standby mode' 0.001 [kW]
P_{nom} Nominal heat output 12.26 [kW]
P_{min} Minimum heat output 3.98 [kW]

Calculations

$\eta_{th,nom}$ Useful efficiency, at either nominal heat output 93.20 [%]
 $\eta_{th,min}$ Efficiency at reduced output 94.28 [%]
 $\eta_{el,n}$ Electrical efficiency of solid fuel cogeneration boiler 0.00 [%]
 η_{son} Seasonal space heating energy efficiency in active mode 93.20 [%]
 η_s Seasonal space heating energy efficiency 90.77 [%]

F(2) Correction factor accounting positive contribution to the EEI of controls of indoor heating comfort, which values cannot be summed /with electronic room temperature control plus week timer / 7.0 [%]

F(3) Correction factor accounting positive contribution to EEI of the controls for indoor heating comfort /with distance control option / 1.0 [%]

F(4) Correction factor accounting for a negative contribution to the EEI by auxiliary electricity consumption 0.4343 [%]

Calculation of the Energy Efficiency index:

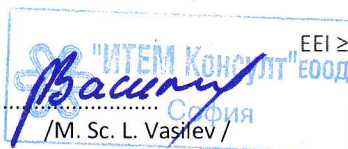
Energy Efficiency: 132.71
Energy Efficiency class: A++
Energy Efficiency index, (EEI) EEI \geq 130

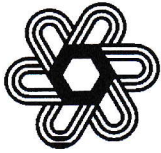
Prepared by:

/M. Vasileva/

Manager:

/M. Sc. L. Vasilev/





„ITEM Consult” Ltd

Sofia 1220, 8, Istoria Slavianobulgarska Blvd., Bulgaria

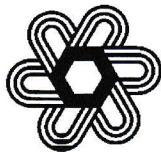
CERTIFICATION, TESTING, SUPERVISION OF DEVICES WITH INCREASED RISK

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-364/05.07.2024

Manufacturer:	„Mareli Systems” Ltd
Appliance:	Biofuel heating appliance / pellets /
Model:	„ONYX HIDRO 12 AUTO”
Stoking mode:	Automatic
Indirect heating functionality:	Yes
Nominal heat output:	12.26 kW
Minimum heat output:	3.98 kW

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 $\leq 25\%$	no	no											
Chipped wood, moisture content 15-35%	no	no											
Chipped wood, moisture content $> 35\%$	no	no											
Compressed wood in the form of pellets or briquettes	yes	no	91	14	10	129	134	14	11	181	117		
Sawdust, moisture content $\leq 50\%$	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											
Blended biomass (30-70%) fossil fuel briquettes	no	no											
Other blend of biomass and fossil fuel	no	no											



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CERTIFICATION, TESTING, SUPERVISION OF DEVICES WITH INCREASED RISK

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	12.26	kW	At rated heat output	η_n	93.20	%
At (30%/50%) of rated heat output if it's applicable	P_p	3.98	kW	At (30%/50%) of rated output if applicable	η_p	94.28	%
Auxiliary electricity consumption				Type of heat output/room temperature control			
At rated heat output	e_{lmax}	0.06	kW	Single stage heat output, no room temperature control	Yes/no	No	
				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	e_{lmin}	0.01	kW	With electronic room temperature control	Yes/no	No	
In standby mode	P_{SB}	0.001	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	Yes	
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	Yes	

CONCLUSION:

Water jacket pellet stove „ONYX HIDRO 12 AUTO” 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: Lyulin, bl. 821, ap. 1 City / Sofia Country: Bulgaria	„Mareli Sistems” Ltd Address: Lyulin, bl. 821, ap. 1 City / Sofia Country: Bulgaria

Prepared by: 
/M. Vasileva/

Manager: 
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