

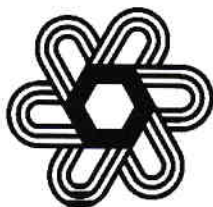
**"ITEM - Consult" Ltd. Sofia 1220,
bul. Istoriq Slavqnobulgarska. № 8**

**ECODESIGN REQUIREMENTS FOR SOLID FUEL BOILERS ACCORDING TO
COMMISSION REGULATION (EU) 2015/1189 IMPLEMENTING DIRECTIVE
2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

№DI-341/18.10.2019

Trade mark:	„Mareli Systems” Ltd
Model:	SBN 12
Stoking mode:	Automatic
Condensing boiler:	No
Solid fuel cogeneration boiler:	Combination boiler:

Fuel	Preferred fuel (only one)	Other suitable fuel(s)	η_s (%)	Seasonal space heating emissions			
				PM	OGC	CO	NO _x
				Mg/m ³ at 10% 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	85,08	12,77	6,21	105.08	98.58
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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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	12,50	kW	At rated heat output	η_n	93,86	%
At (30%/50%) of rated heat output if it's applicable	P_p	3,46	kW	At (30%/50%) of rated output if applicable	η_p	95,85	%
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption			
At rated heat output	$\eta_{el,n}$	N.A.	%	At rated heat output	$e_{l,max}$	0,015	kW
				At (30%/50%) of rated output if applicable	$e_{l,min}$	0,009	kW
				Of incorporated secondary emission abatement equipment, if applicable		N.A.	kW
				In standby mode	P_{SB}	0,003	kW

CONCLUSION:

Solid fuel boiler with pellet burner „SBN 12” MEET THE REQUIREMENTS OF Annex II „Ecodesign Requirements” of REGULATION (EU) 2015/1189.

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