

"ITEM Consult"Ltd

Sofia 1220, 8, Istoria Slavianobulgarska Blvd., Bulgaria

CERTIFICATION, TESTING, SUPERVISION OF DEVICES WITH INCREASED RISK

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-134/02.05.2023

Trade mark:	Mareli Systems Ltd			
Model:	LCG 22			
Stoking mode:	Pyrolysis solid fuel boiler with manual loading			
Condensing boiler:	No			
Solid fuel cogeneration boiler:	Combination boiler:			

Fuel	Preferred fuel (only one)	Other suitabl e fuel(s)	η _s (%)	Seasonal space heating emissions			
				PM	OGC	CO	NOx
				mg/m³ at 10% O ₂			
Log wood, moisture content ≤25%	yes	no	83	12	11	144	176
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					r
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					
Blended biomass (30-70%) fossil fuel briquettes	no	no			+	1	
Other blend of biomass and fossil fuel	no	no				hi Li	



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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	22.67	kW	At rated heat output	η_n	84.49	%
At (50%) of rated heat output if it's applicable	Pp	10.79	kW	At (50%) of rated otput if applicable	ηρ	87.37	%
For solid fuel cogeneration	n boilers: Elec	ctrical eff	iciency	Auxiliary electricity	consumpti	ion	
At rated heat output $\eta_{el,n}$	$\eta_{\rm el,n}$	N.A.	%	At rated heat output	el _{max}	0.075	kW
				At (50%) of rated otput if applicable	el _{min}	0.026	kW
	=			Of incorporated secondary emission abatement equipment, if applicable		N.A.	kW
				In standby mode	P _{SB}	0.002	kW

CONCLUSION:

Pyrolysis solid fuel boiler with manual loading "LCG 22" MEET THE REQUIREMENTS OF Annex II "Ecodesign Requirements" of REGULATION (EU) 2015/1189

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