

# MCZ GROUP

## TECHNICAL DOCUMENTATION FOR LOCAL SPACE HEATERS ACCORDING TO COMMISSION REGULATION (EU) 2015/1186

Manufacturer	MCZ GROUP SpA
Trademark	MCZ
Model Identifier	VIVO 90 HYDRO 24 M1
Indirect heating functionality	si
Direct heat output (space heat output)	5,7 kW
Indirect heat output (water heat output)	19,0 kW
CPR harmonised standard	EN 14785:2006
General description of the local space heater	Mechanically fed inset fitted with a boiler burning wood pellets
Notified Body	IMQ (N.B. 0051) Via Quintiliano 43, 20138 Milano, IT

Fuel	Preferred fuel (only one)	Other suitable fuel(s)	$\eta_s$ [%]	EEl [%]
Log wood, moisture content $\leq 25$ %	no	no		
Compressed wood with moisture content $< 12$ %	yes	no	89,5	131
Other woody biomass	no	no		
Non-woody biomass	no	no		
Anthracite and dry steam coal	no	no		
Hard coke	no	no		
Low temperature coke	no	no		
Bituminous coal	no	no		
Lignite briquettes	no	no		
Peat briquettes	no	no		
Blended fossil fuel briquettes	no	no		
Other fossil fuel	no	no		
Blended biomass and fossil fuel briquettes	no	no		
Other blend of biomass and solid fuel	no	no		

### Calculations according to the council commission regulation (EU) 2015/1186 and 2015/1185

#### Characteristics when operating with the preferred fuel

$$EEI = (\eta_{s,on} \cdot BLF) - 10\% + F(2) + F(3) - F(4) - F(5)$$

$$BLF = 1,45$$

$$\eta_{s,on} = \eta_{th,nom} \quad \eta_s = \eta_{s,on} - 10\% + F(2) + F(3) - F(4) - F(5)$$

Observe the specific precautions for installation, assembly and maintenance indicated in the manual accompanying the product

Energy Efficiency Class **A++** up to 2022

### Characteristics when operating with the preferred fuel

Heat output			
Item	Symbol	Value	Unit
Nominal heat output	P <sub>nom</sub>	<b>24,7</b>	kW
Minimum heat output (indicative)	P <sub>min</sub>	<b>5,8</b>	kW

Auxiliary electricity consumption			
Item	Symbol	Value	Unit
At nominal heat output	e <sub>lmax</sub>	<b>0,144</b>	kW
At minimum heat output	e <sub>lmin</sub>	<b>0,060</b>	kW
In standby mode	e <sub>lsub</sub>	<b>0,004</b>	kW

$$F(4) = CC \cdot \frac{0,2 \cdot e_{lmax} + 0,8 \cdot e_{lmin} + 1,3 \cdot e_{lsub}}{P_{nom}} \cdot 100[\%]$$

$$F(4) = \quad \mathbf{0,8 \%} \quad CC = 2,5$$

Permanent pilot flame power requirement			
Item	Symbol	Value	Unit
Pilot flame power requirement (if applicable)	P <sub>pilot</sub>	<b>N.A.</b>	kW

$$F(5) = 0,5 \cdot \frac{P_{pilot}}{P_{nom}} \cdot 100[\%]$$

$$F(5) = \quad \mathbf{0,0 \%}$$

Useful efficiency (NCV as received)			
Item	Symbol	Value	Unit
Useful efficiency at nominal heat output	η <sub>th,nom</sub>	<b>93,3</b>	%
Useful efficiency at minimum heat output (indicative)	η <sub>th,min</sub>	<b>95,9</b>	%

Type of heat output/room temperature control (select one)	
single stage heat output, no room temperature control	NO
two or more manual stages, no room temperature control	NO
with mechanic thermostat room temperature control	NO
with electronic room temperature control	NO
with electronic room temperature control plus day timer	NO
with electronic room temperature control plus week timer	YES

$$F(2) = \quad \mathbf{7,0 \%} \quad \text{up to 2022}$$

Other control options (multiple selections possible)	
room temperature control, with presence detection	NO
room temperature control, with open window detection	NO
with distance control option	NO

$$F(3) = \quad \mathbf{0,0 \%} \quad \text{up to 2022}$$

### Contact details

Name and address of the manufacturer  
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