

ANNEX 3

Technical documentation for heat pumps and electric boilers

Supplier:		Varmeteknikk AS					
Address:		Postboks 6, Alnabru, N-0614 OSLO					
Applied standards:		Transitional methods for calculation and measurement according to EU Commission communication (2014/C 207/02) OJ 3.7.2014.					
Identification of person empowered:		Reidar Muri, Varmeteknikk AS					
Signature of person empowered:							
Calculations:							
Precautions:		User instructions regarding checks of water supply, possible leakages, pressure and voltage. Also requirements for electrical installations.					
Technical parameters for energy labelling:							
Model(s):		MB 2060, MB 4060					
Condensing boiler:		No					
Low temperature boiler:		No					
B11 boiler:		No					
Cogeneration space heater:		No	If yes, supplementary heater:			N/A	
Combination heater:		No					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	60	kW	Seasonal space heating energy efficiency	η_s	36,8	%
For boiler space heaters and boiler combination heaters: Useful heat output				For boiler space heaters and boiler combination heaters: Useful efficiency			
At rated heat output and high-temperature regime	P ₄	59,64	kW	At rated heat output and high-temperature regime	η_4	39,8	%
At 30% of rated output and low-temperature regime	P ₁		kW	At 30% of rated output and low-temperature regime	η_1		%
Auxiliary electricity consumption				Other items			
At full load	elmax		kW	Standby heat loss	P _{stby}	0	kW

At part load	elmin		kW	Ignition burner power consumption	P _{ign}		kW
In standby mode	P _{SB}	0,00537	kW	Annual energy consumption	Q _{HE}		kWh or GJ
				Sound power level, indoors	L _{WA}	52,6	dB
Technical parameters and product information for ecodesign:							
Model(s):		MB 2060, MB 4060					
Condensing boiler:		No					
Low temperature boiler:		No					
B11 boiler:		No					
Cogeneration space heater:		No	If yes, supplementary heater:				N/A
Combination heater:		No					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	60	kW	Seasonal space heating energy efficiency	η _s	36,8	%
For boiler space heaters and boiler combination heaters: Useful heat output				For boiler space heaters and boiler combination heaters: Useful efficiency			
At rated heat output and high-temperature regime	P ₄	59,64	kW	At rated heat output and high-temperature regime	η ₄	39,8	%
At 30% of rated output and low-temperature regime	P ₁		kW	At 30% of rated output and low-temperature regime	η ₁		%
For cogeneration space heaters: Useful heat output				For cogeneration space heaters: Useful efficiency			
At rated heat output of cogeneration space heater with supplementary heater disabled	P _{CHP100+Sup0}		kW	At rated heat output of cogeneration space heater with supplementary heater disabled	η _{CHP100+Sup0}		%
Auxiliary electricity consumption				Other items			
At full load	elmax		kW	Standby heat loss	P _{stby}	0	kW
At part load	elmin		kW	Ignition burner power consumption	P _{ign}		kW
In standby mode	P _{SB}	0,00537	kW	Emissions of nitrogen oxides	NO _x		mg/kWh