

11 ENERGY CLASSIFICATION

11.1 TECHNICAL PARAMETERS FOR MIXED BOILERS (IN COMPLIANCE WITH REGULATION 811/2013)

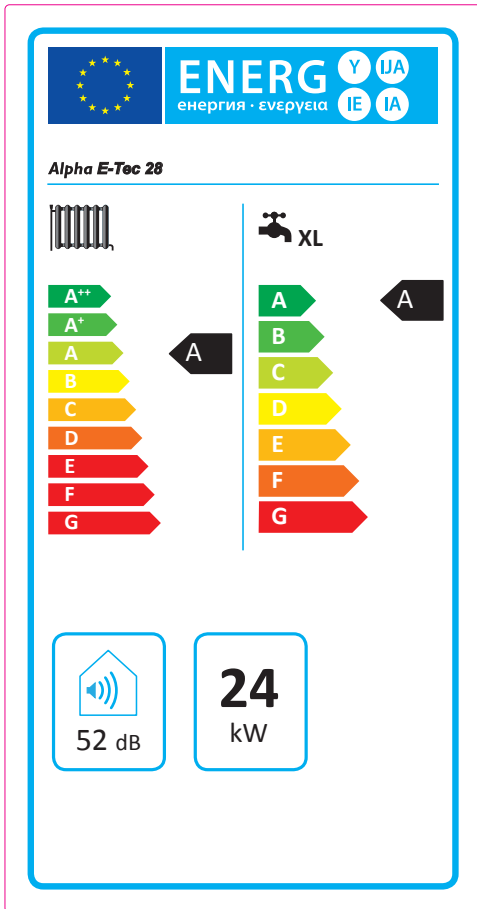
The values in the following tables refer to the maximum heating output.

Model(s):				E-Tec 28							
Condensing boiler:				YES							
Low-temperature boiler:				NO							
B1 boiler:				NO							
Cogeneration space heater:				NO			Equipped with a supplementary heater:	NO			
Combination heater:				YES							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output	P_n	24	kW	Seasonal space heating energy efficiency	η_s	93	%				
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	24.0	kW	At rated heat output and high temperature regime (*)	η_4	88.1	%				
At 30% of rated heat output and low temperature regime (**)	P_1	8.0	kW	At 30% of rated heat output and low temperature regime (**)	η_1	97.6	%				
Auxiliary electricity consumption				Other items							
At full load	$e_{l_{max}}$	0.010	kW	Standby heat loss	P_{stby}	0.057	kW				
At part load	$e_{l_{min}}$	0.005	kW	Ignition burner power consumption	P_{ign}	0.000	kW				
In standby mode	P_{SB}	0.002	kW	Emissions of nitrogen oxides	NO_x	35	mg / kWh				
For combination heaters:											
Declared load profile			XL	Water heating energy efficiency			η_{WH}	87	%		
Daily electricity consumption			Q_{elec}	0.122	kWh	Daily fuel consumption			Q_{fuel}	22.406	kWh
Contact details								Alpha Therm Ltd., Nepicar House, Wrotham Heath, Kent. TN15 7RS			
(*) High temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet.											
(**) Low temperature means for condensing boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature.											

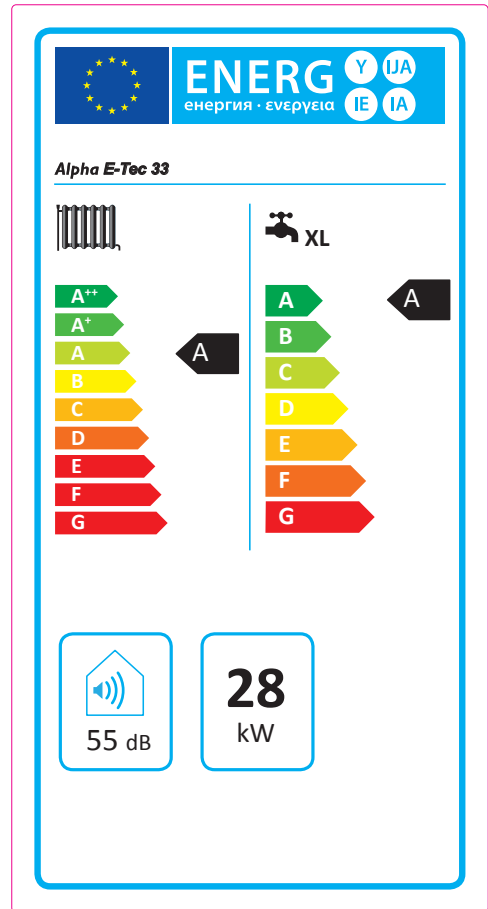
Model(s):				E-Tec 33							
Condensing boiler:				YES							
Low-temperature boiler:				NO							
B1 boiler:				NO							
Cogeneration space heater:				NO			Equipped with a supplementary heater:	NO			
Combination heater:				YES							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output	P_n	28	kW	Seasonal space heating energy efficiency	η_s	93	%				
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	28.0	kW	At rated heat output and high temperature regime (*)	η_4	87.9	%				
At 30% of rated heat output and low temperature regime (**)	P_1	9.3	kW	At 30% of rated heat output and low temperature regime (**)	η_1	97.6	%				
Auxiliary electricity consumption				Other items							
At full load	$e_{l_{max}}$	0.012	kW	Standby heat loss	P_{stby}	0.057	kW				
At part load	$e_{l_{min}}$	0.006	kW	Ignition burner power consumption	P_{ign}	0.000	kW				
In standby mode	P_{SB}	0.002	kW	Emissions of nitrogen oxides	NO_x	30	mg / kWh				
For combination heaters:											
Declared load profile			XL	Water heating energy efficiency			η_{WH}	87	%		
Daily electricity consumption			Q_{elec}	0.131	kWh	Daily fuel consumption			Q_{fuel}	22.362	kWh
Contact details								Alpha Therm Ltd., Nepicar House, Wrotham Heath, Kent. TN15 7RS			
(*) High temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet.											
(**) Low temperature means for condensing boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature.											

11.2 PRODUCT DATA SHEET (IN COMPLIANCE WITH REGULATION 811/2013)

E-Tec 28



E-Tec 33



Parameter	value
Yearly energy consumption for the heating function (QHE)	1.5 GJ
Yearly electricity consumption for the domestic hot water function (AEC)	27 kWh
Yearly fuel consumption for the domestic hot water function (AFC)	17 GJ
Seasonal room heating yield (η_s)	93 %
Domestic hot water production yield (η_{wh})	87 %

Parameter	value
Yearly energy consumption for the heating function (QHE)	1.5 GJ
Yearly electricity consumption for the domestic hot water function (AEC)	29 kWh
Yearly fuel consumption for the domestic hot water function (AFC)	17 GJ
Seasonal room heating yield (η_s)	93 %
Domestic hot water production yield (η_{wh})	87 %