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	el_{max}	0.010	kW	Standby heat loss	P_{stby}	0.057	kW
At part load	el_{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						

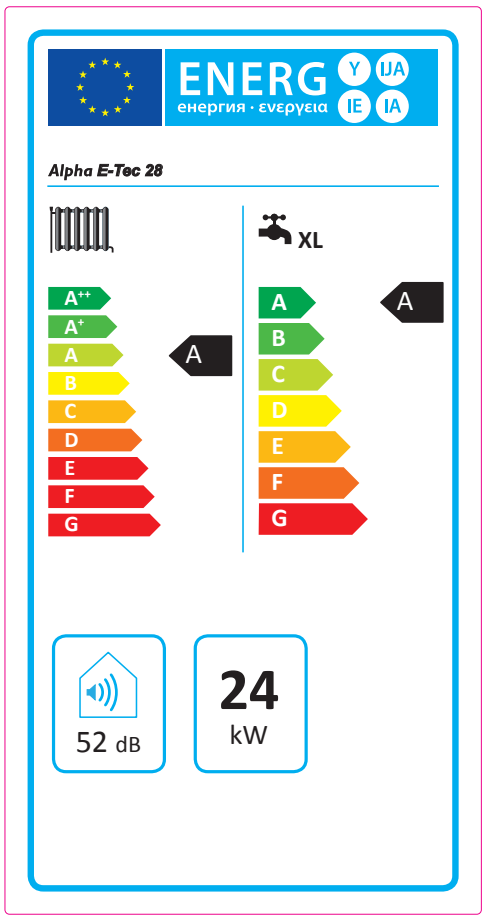
(*) High temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet.
(**) Low temperature means for condensing boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature.

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	el_{max}	0.012	kW	Standby heat loss	P_{stby}	0.057	kW
At part load	el_{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.

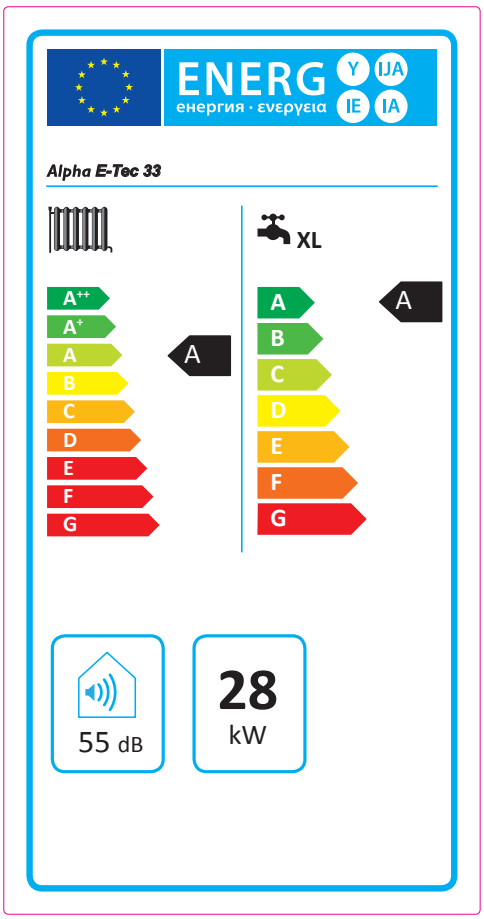
11.2 PRODUCT DATA SHEET (IN COMPLIANCE WITH REGULATION 811/2013)

E-Tec 28



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 (ηs)	93 %
Domestic hot water production yield (ηwh)	87 %

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)	29 kWh
Yearly fuel consumption for the domestic hot water function (AFC)	17 GJ
Seasonal room heating yield (ηs)	93 %
Domestic hot water production yield (ηwh)	87 %