

11 ENERGY CLASSIFICATION

11.1 TECHNICAL PARAMETERS FOR MIXED BOILERS (IN COMPLIANCE WITH REGULATION 813/2013)

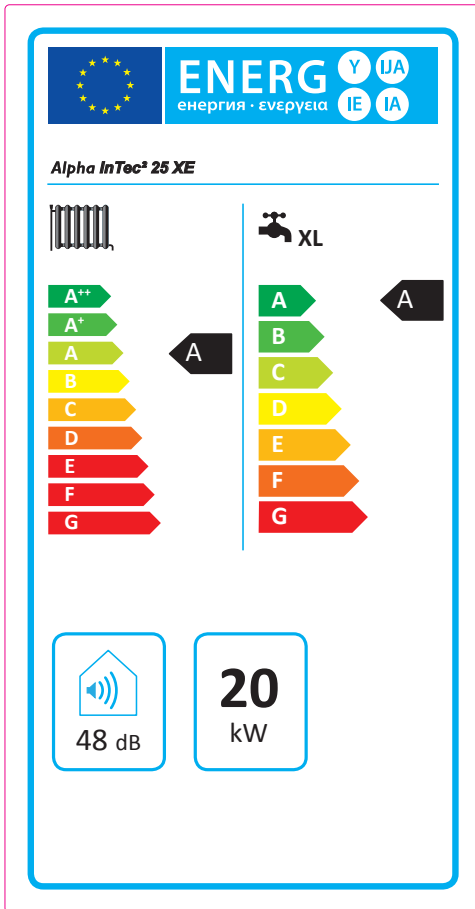
The values in the following tables refer to the maximum heating output.

Model(s):				InTec ² 25XE							
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	20	kW	Seasonal space heating energy efficiency	η_s	92	%				
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	20.0	kW	At rated heat output and high temperature regime (*)	η_4	87.7	%				
At 30% of rated heat output and low temperature regime (**)	P_1	6.6	kW	At 30% of rated heat output and low temperature regime (**)	η_1	97.3	%				
Auxiliary electricity consumption				Other items							
At full load	$e_{l_{max}}$	0.032	kW	Standby heat loss	P_{stby}	0.051	kW				
At part load	$e_{l_{min}}$	0.014	kW	Ignition burner power consumption	P_{ign}	0.000	kW				
In standby mode	P_{SB}	0.005	kW	Emissions of nitrogen oxides	NO_x	17	mg / kWh				
For combination heaters:											
Declared load profile			XL		Water heating energy efficiency			η_{WH}	86	%	
Daily electricity consumption			Q_{elec}	0.223	kWh	Daily fuel consumption			Q_{fuel}	22.373	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.											

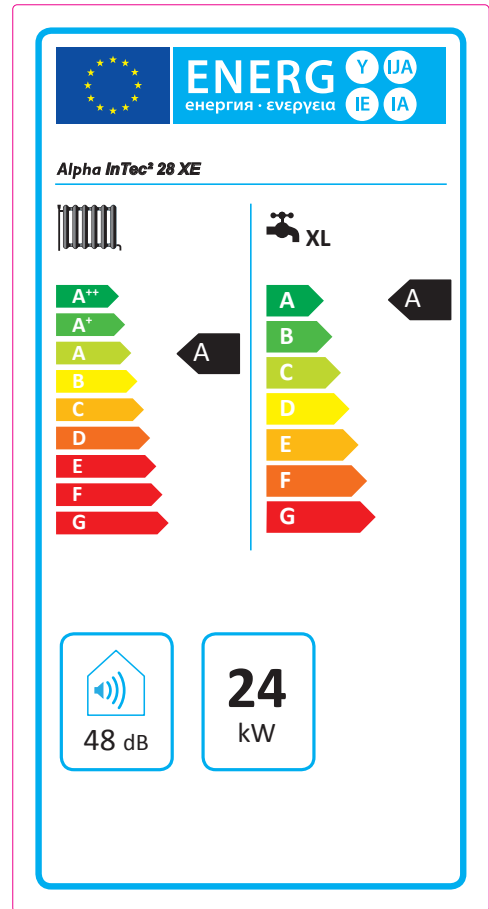
Model(s):				InTec ² 28XE							
Condensing boiler:				YES							
Low-temperature boiler:				NO							
B1 boiler:				NO							
Cogeneration space heater:				NO			Equipped with a supplementary heater:	NO			
Combination heater:				YES							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output	P_n	24	kW	Seasonal space heating energy efficiency	η_s	92	%				
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	87.7	%				
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	97.4	%				
Auxiliary electricity consumption				Other items							
At full load	$e_{l_{max}}$	0.037	kW	Standby heat loss	P_{stby}	0.051	kW				
At part load	$e_{l_{min}}$	0.015	kW	Ignition burner power consumption	P_{ign}	0.000	kW				
In standby mode	P_{SB}	0.005	kW	Emissions of nitrogen oxides	NO_x	18	mg / kWh				
For combination heaters:											
Declared load profile			XL		Water heating energy efficiency			η_{WH}	86	%	
Daily electricity consumption			Q_{elec}	0.212	kWh	Daily fuel consumption			Q_{fuel}	22.544	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)

InTec² 25XE



InTec² 28XE



Parameter	value
Yearly energy consumption for the heating function (QHE)	62.6 GJ
Yearly electricity consumption for the domestic hot water function (AEC)	49 kWh
Yearly fuel consumption for the domestic hot water function (AFC)	17 GJ
Seasonal room heating yield (η_s)	92 %
Domestic hot water production yield (η_{wh})	86 %

Parameter	value
Yearly energy consumption for the heating function (QHE)	74.9 GJ
Yearly electricity consumption for the domestic hot water function (AEC)	46 kWh
Yearly fuel consumption for the domestic hot water function (AFC)	17 GJ
Seasonal room heating yield (η_s)	92 %
Domestic hot water production yield (η_{wh})	86 %