



TECHNICAL PARAMETERS FOR BOILER SPACE HEATERS & BOILER COMBINATION HEATERS
AS PER REGULATION 813/2013 (TABLE 1 - ANNEX II) (TABLE 7 - ANNEX V)

Model(s)	Envirogreen Combi Xceed & Combipac Xceed 20, 26 & 35 kW Models		
Condensing Boiler	Yes		
Low Temperature (¹) Boiler	No		
B11 Boiler	No		
Cogeneration Space Heater	No		
Combination Heater	Yes		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated Heat Output	$\dot{Q}_{rated}$	20	kW	Seasonal Space Heating Energy Efficiency	η_s	92.53	%
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 (¹)	$\dot{P}_d$	20	kW	At rated heat output and high temperature regime (¹)	η_d	92.72	%
At 30 % of rated heat output and low temperature regime (²)	$\dot{P}_l$	6.0	kW	At 30 % of rated heat output and low temperature regime (²)	η_l	99.12	%

Auxiliary Electricity Consumption				Other Items			
At Full Load	e_{lmax}	0.178	kW	Standby Heat Loss	P_{sby}	0.073	kW
At Part Load	e_{lmin}	0.062	kW	Ignition Burner Power Consumption	P_{ign}	0	kW
In Standby Mode	P_{sb}	0	kW	Annual Energy Consumption	Q_{HE}	62.2	kWh or GJ
				Sound Level Power Level, Indoors	L_{WA}	65	dB
				Emissions of Nitrogen Oxides	No_x	57	mg /kWh

For Combination Heaters				Water Heating Energy Efficiency			
Declared Load Profile XL				η_{WH}	75.24	%	
Daily Electricity Consumption	Q_{elec}	0.3844	kWh	Daily Fuel Consumption	Q_{fuel}	24.39	kWh
Annual Electricity Consumption	AEC	106.18	kWh	Annual Fuel Consumption	AFC	19.53	GJ
Contact Details	Firebird Heating Solutions, Ballymakeera, Co. Cork P12 HK51, Ireland						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated Heat Output	$\dot{Q}_{rated}$	26	kW	Seasonal Space Heating Energy Efficiency	η_s	92.57	%
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 (¹)	$\dot{P}_d$	26	kW	At rated heat output and high temperature regime (¹)	η_d	95.59	%
At 30 % of rated heat output and low temperature regime (²)	$\dot{P}_l$	7.8	kW	At 30 % of rated heat output and low temperature regime (²)	η_l	98.13	%

Auxiliary Electricity Consumption				Other Items			
At Full Load	e_{lmax}	0.184	kW	Standby Heat Loss	P_{sby}	0.073	kW
At Part Load	e_{lmin}	0.046	kW	Ignition Burner Power Consumption	P_{ign}	0	kW
In Standby Mode	P_{sb}	0	kW	Annual Energy Consumption	Q_{HE}	80.9	kWh or GJ
				Sound Level Power Level, Indoors	L_{WA}	65	dB
				Emissions of Nitrogen Oxides	No_x	74	mg /kWh

For Combination Heaters				Water Heating Energy Efficiency			
Declared Load Profile XL				η_{WH}	75.33	%	
Daily Electricity Consumption	Q_{elec}	0.3135	kWh	Daily Fuel Consumption	Q_{fuel}	24.53	kWh
Annual Electricity Consumption	AEC	92.49	kWh	Annual Fuel Consumption	AFC	19.59	GJ
Contact Details	Firebird Heating Solutions, Ballymakeera, Co. Cork P12 HK51, Ireland						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated Heat Output	$\dot{Q}_{rated}$	35	kW	Seasonal Space Heating Energy Efficiency	η_s	92.56	%
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 (¹)	$\dot{P}_d$	35	kW	At rated heat output and high temperature regime (¹)	η_d	91.96	%
At 30 % of rated heat output and low temperature regime (²)	$\dot{P}_l$	10.5	kW	At 30 % of rated heat output and low temperature regime (²)	η_l	97.8	%

Auxiliary Electricity Consumption				Other Items			
At Full Load	e_{lmax}	0.165	kW	Standby Heat Loss	P_{sby}	0.073	kW
At Part Load	e_{lmin}	0.055	kW	Ignition Burner Power Consumption	P_{ign}	0	kW
In Standby Mode	P_{sb}	0	kW	Annual Energy Consumption	Q_{HE}	108.9	kWh or GJ
				Sound Level Power Level, Indoors	L_{WA}	65	dB
				Emissions of Nitrogen Oxides	No_x	61	mg /kWh

For Combination Heaters				Water Heating Energy Efficiency			
Declared Load Profile XL				η_{WH}	70.03	%	
Daily Electricity Consumption	Q_{elec}	0.2728	kWh	Daily Fuel Consumption	Q_{fuel}	26.55	kWh
Annual Electricity Consumption	AEC	81.77	kWh	Annual Fuel Consumption	AFC	21.14	GJ
Contact Details	Firebird Heating Solutions, Ballymakeera, Co. Cork P12 HK51, Ireland						