

Envirogreen™ & Envirolite™ Oil-Fired Boiler Ranges

Featuring cutting-edge low NO_x burner technology
for Firebird by **elco**

SUPERIOR HEATING SOLUTIONS
SINCE 1980

New
Low NO_x Boiler
Range

Taking Boiler Technology to the Next Level

Firebird Products Ltd are market-leading manufacturers of heating products with a proven track record built on the global supply of heating systems. Established in Ireland in 1980, the Firebird name has become synonymous with performance, quality and innovative design.

At the forefront of technology, Firebird are committed to providing cost-effective, energy-efficient heating solutions that not only meet, but easily exceed today's stringent legislative requirements. Historically an oil-fired boiler manufacturer; the addition of renewable heating options, which include air source heat pumps, biomass boilers and solar thermal systems enable Firebird to offer a total heating solutions package.



Go Green... Without Costing the Earth



Following a three year research and development programme, we are proud to launch the new Envirogreen™ Low NO_x range of boilers. Designed specifically to meet the stringent environmental requirements of the second phase of the Ecodesign directive, the new range delivers advanced boiler technology without any associated price premium.

What are NO_x Emissions?

Nitrogen Oxide emissions – or NO_x emissions as they are more commonly known, is the general term that relates to the release of Nitrogen dioxide (NO₂) and the chemically related colourless gas nitrogen monoxide (NO). These gases are released into the atmosphere when fossil fuels are burned at high temperatures. When in high concentrations, these potentially harmful byproducts of the combustion process are known to contribute to global pollution.

The Ecodesign Directive

The Ecodesign Directive is a European initiative which governs the design and performance of energy using products, to reduce the amount of energy consumed and the subsequent impact on the environment. New requirements on flue gas emissions state that from September 2018, harmful nitrogen oxide emissions from domestic oil boilers must not exceed 120mg/kWh.

The Envirogreen™ Story

At Firebird we are no strangers to innovation having developed the most efficient domestic oil-fired boiler in Europe. Whilst meeting all the environmental criteria, the downside to this particular type of technology is the cost, resulting in a premium priced boiler.

We therefore set ourselves a challenge to design a boiler that exceeded the NO_x reduction requirements, offered the same outstanding level of performance, but most importantly remained an affordable option for our customers.

Following an extensive research and development programme in conjunction with European burner experts elco, the Envirogreen™ range was borne. Featuring cutting-edge burner technology this new range ticks every box.

- ✓ **Meets NO_x reduction requirements**
- ✓ **Performance data listed on the Product Characteristics Database (PCDB)**
- ✓ **Easy to install and service**
- ✓ **Cost-effective**

Why Choose Envirogreen™?



Homeowner

- ✓ **Makes Financial Sense**
Increased operating efficiency saves fuel and reduces bills
- ✓ **Ultra-Reliable**
No error prone complex parts
- ✓ **10 Year Warranty***
*subject to terms & conditions



Installer

- ✓ **Trouble-Free Plug & Play Burner**
Key components easily identified by dedicated connectors
- ✓ **Fast & Easy to Install**
Main component parts undone with a single Allen Key
- ✓ **Easy to Service & Maintain**
Components clearly positioned and accessible
- ✓ **Makes Financial Sense**
No associated price premium
- ✓ **Simple Diagnostic System**
Optimised Wiring System
- ✓ **Standard Firebird Digital Control Box**
Reliable and simple to use with handy reset button
- ✓ **Excellent Cold Start Performance**
- ✓ **Powerful Ignition System**
With separate powerful transformer
- ✓ **Low Smoke, Clean Burn Reduces Carbon Build-up**
Both on burner combustion head and boiler
- ✓ **Excellent Combustion Robustness**
CO₂ level factory-set at an optimum 12.5% ensures highest levels of efficiency
- ✓ **100% 'Burn Test Fired' to 12.5% CO₂ Levels**

Installation is as easy as 1, 2, 3

1x

Allen Key

**2x**

Burner Settings

**3x**

Satisfied Customers



Environment

- ✓ **Outstanding Ventilation Performance**
Ensures complete combustion
- ✓ **Post Purge as Standard**
- ✓ **Latest Danfos Pump Technology**
Up to 100m suction capacity
- ✓ **Single-Forge Combustion Head**
- ✓ **Latest Condensate Trap Technology**
With 316L stainless steel
- ✓ **Adjustable Feet on all Boilerhouse Models**
- ✓ **Performance Data PCDB listed**
- ✓ **Low NO_x Compliant**
Exceeds current requirements of the second phase of the Ecodesign Directive
- ✓ **Superior Flue Gas Recirculation**
Significantly reduces NO_x emissions
- ✓ **Extremely Low Carbon Monoxide (CO) Emissions**
- ✓ **Low Electrical Consumption**



Internal & External Regular Boilers

Envirogreen™ Product Range

Envirogreen™ Kitchen



ERP Rating



Envirogreen™ Heatpac



ERP Rating



Envirogreen™ Model

	Product Code	Heating Output Max.	Weight kg	ERP Rating	Dimensions (mm)		
				Heating	H	W	D
Envirogreen™ Kitchen 12-18	EGE018KIT	12-18kW	115	A	847	345	610
Envirogreen™ Kitchen C20	EGE020KIT	20kW	125	A	847	442	610
Envirogreen™ Kitchen C26	EGE026KIT	26kW	128	A	847	442	610
Envirogreen™ Kitchen C35	EGE035KIT	35kW	131	A	847	442	610

Envirogreen™ Model

	Product Code	Heating Output Max.	Weight kg	ERP Rating	Dimensions (mm)		
				Heating	H	W	D
Envirogreen™ Heatpac 12-18kW	EGE018HPK	12-18kW	134	A	945	620	625
Envirogreen™ Heatpac C20	EGE020HPK	20kW	154	A	945	720	625
Envirogreen™ Heatpac C26	EGE026HPK	26kW	154	A	945	720	625
Envirogreen™ Heatpac C35	EGE035HPK	35kW	158	A	945	720	625

External & Boilerhouse Regular Boilers

Envirogreen™ Product Range

Envirogreen™ Slimline Heatpac



ERP Rating



Envirogreen™ Popular



ERP Rating



Envirogreen™ Model	Product Code	Heating Output Max.	Weight kg	ERP Rating	Dimensions (mm)		
				Heating	H	W	D
Envirogreen™ Slimline Heatpac C20	EGE020SLM	20kW	147	A	920	465	760
Envirogreen™ Slimline Heatpac C26	EGE026SLM	26kW	150	A	920	465	760
Envirogreen™ Slimline Heatpac C35	EGE035SLM	35kW	153	A	920	465	760

Envirogreen™ Model	Product Code	Heating Output Max.	Weight kg (including burner)	ERP Rating	Dimensions (mm)			Burner Depth
				Heating	H	W	D	
Envirogreen™ Popular 12-18kW	EGE018POP	12-18kW	99	A	684	344	381	202
Envirogreen™ Popular C20	EGE020POP	20kW	107	A	684	441	381	202
Envirogreen™ Popular C26	EGE026POP	26kW	112	A	684	441	381	202
Envirogreen™ Popular C35	EGE035POP	35kW	115	A	684	441	381	202

Internal & External Regular Boilers

Envirolite™ Product Range

Envirolite™ Utility



ERP Rating



Envirolite™ Silverpac



ERP Rating



Envirolite™ Model

	Product Code	Heating Output Max.	Weight kg	ERP Rating	Dimensions (mm)		
				Heating	H	W	D
Envirolite™ Utility CR20	EGE020UTL	18-20kW	125	A	845	442	610
Envirolite™ Utility CR26	EGE026UTL	20-26kW	128	A	845	442	610
Envirolite™ Utility CR35	EGE035UTL	26-35kW	131	A	845	442	610

Envirolite™ Model

	Product Code	Heating Output Max.	Weight kg	ERP Rating	Dimensions (mm)		
				Heating	H	W	D
Envirolite™ Silverpac CR20	EGE020SGV	18-20kW	131	A	945	720	625
Envirolite™ Silverpac CR26	EGE026SGV	20-26kW	154	A	945	720	625
Envirolite™ Silverpac CR35	EGE035SGV	26-35kW	158	A	945	720	625

External & Boilerhouse Regular Boilers

Envirolite™ Product Range

Envirolite™ Slimline Heatpac



ERP Rating



Envirolite™ Boilerhouse



ERP Rating



Envirolite™ Model	Product Code	Heating Output Max.	Weight kg	ERP Rating	Dimensions (mm)		
				Heating	H	W	D
Envirolite™ Slimline Silverpac CR20	EGE020HSL	18-20kW	147	A	920	465	760
Envirolite™ Slimline Silverpac CR26	EGE020HSL	20-26kW	150	A	920	465	760

Envirolite™ Model	Product Code	Heating Output Max.	Weight kg	ERP Rating	Dimensions (mm)		
				Heating	H	W	D
Envirolite™ Slimline Heatpac C20	EGE020SBH	20kW	147	A	920	465	760
Envirolite™ Slimline Heatpac C26	EGE026SBH	26kW	150	A	920	465	760
Envirolite™ Slimline Heatpac C35	EGE035SBH	35kW	153	A	920	465	760

Technical Specification

Envirogreen™ & Envirolite™ Product Ranges

Envirogreen & Envirolite Regular Boilers

Heat Output	kW	12-18	12-20+20-26	26-35	
Connections					
Heating Flow		1" BSP	1" BSP	1" BSP	
Heating Return		1" BSP	1" BSP	1" BSP	
Mains Cold Feed (Copper)		-	-	-	
Hot Water Delivery (Copper)		-	-	-	
Drain Off Valve		½" BSP	½" BSP	½" BSP	
Safety Pressure Valve Outlet (Copper)		-	-	-	
Condensate Trap		-	-	-	
Water Content					
Boiler (Litres)		24	24	24	
Flue (Internal Boilers)					
Balanced Flue Assembly (mm)		125 (5")	125 (5")	125 (5")	
Max. Low Level Flue Length (metres)		1.5	1.5	1.5	
Max. High Level Flue Length (metres)		6	6	6	
Max. Vertical Level Flue Length (metres)		6	6	6	
Integral flues on Heatpac Models		-	-	-	
Mains Water Supply Pressure		Min. 1 bar – Max. 10 bar (for user comfort, we recommend pressure at tap to be between 2 and 5 bar). Limescale excess: When over 150/200 ppm, fit appropriate scale reducer.			
Water Side Resistance					
	Flow Rate to give a Nominal Output at 10k Differential		20kW	26kW	35kW
	Flow Rate Measured (Kg h-1)		1642	2135	2874
	Waterside Resistance (mbar)		0.18	0.18	0.18
	Flow Rate to give a Nominal Output at 20k Differential		20kW	26kW	35kW
	Flow Rate Measured (Kg h-1)		870	1131	1523
	Waterside Resistance (mbar)		0.19	0.19	0.19
Pressure Jet Oil Boilers		Firebird Low NO _x Series by elco			
Fuel	C2 Kerosene				
Electrical Supply	230V AC 50Hz 5A				
Frost Thermostats		Boiler safety limit, frost and over-run thermostats fitted on all Heatpac Models			
Frost stat fitted to all external models					
Boiler Central Heating Control	60°C – 80°C				
Boiler Safety Limit	110°C				
Over-run – Fixed	87°C (Heatpac, Slimline Heatpac & Kitchen only)				

Firebird Support

Customer Service

Firebird pride themselves on offering the highest levels of customer service possible. The level of service provided is monitored on a regular basis to ensure customers' requirements are always met.



Technical Support

Based at Firebird's UK headquarters, the **Technical Hub** provides customers with a comprehensive technical support package which is designed to make the specification and installation process as simple as possible. For technical support please contact the Firebird Technical Hub on **01752 691177** or **technicalhub@firebird.uk.com**.



Quality

Firebird oil-fired boilers are manufactured in accordance with the highest quality standards including **ISO 9001:2008**. All products undergo rigorous testing procedures by external standards agencies to ensure optimum performance and efficiency. Every product is designed to meet a specific requirement and has been manufactured using premium quality materials to precise standards and tolerances.



Warranty

Firebird oil-fired boilers are covered by a 2-year manufacturers warranty as standard, with extended warranties of up to 10 years available on some ranges. For further information, please contact Firebird Products Ltd. To register your warranty please visit **www.firebird.uk.com**.



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