

# Enviroair

The Next Generation of Ultra-Quiet  
Air Source Heat Pumps

SUPERIOR HEATING SOLUTIONS  
SINCE 1980





# Absorbing the heat from the outside air.

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.





**Enviroair** air source heat pumps provide an economical and environmentally friendly alternative to traditional heating and hot water systems.

## The Benefits

### For Homeowners

- ✓ Compact modular design
- ✓ Hot water Legionella Protection Program
- ✓ Easy-to-use state-of-the-art wireless controls with frost protection as standard
- ✓ Lower fuel bills
- ✓ Eligible for the Government Renewable Heat Incentive Scheme
- ✓ Reduced carbon emissions
- ✓ Self-contained heating and hot water solution
- ✓ Suitable for newbuild and renovation projects – can even be used with an existing boiler
- ✓ Up to 5 x more efficient than a traditional gas boiler
- ✓ Satisfies renewable energy planning requirements
- ✓ ErP rating of up to A+++
- ✓ Ultra-quiet operation
- ✓ 5-year warranty

### For Installers

- ✓ Monobloc air-to-water heat pump system
- ✓ Simple and fast installation with no refrigeration handling required
- ✓ Simple commissioning with wizard function
- ✓ Easy servicing and maintenance
- ✓ Inverter technology means heat output matches the heating load of the property
- ✓ MCS Approved
- ✓ Market leading SCOP of up to 5.00
- ✓ Weather compensation control
- ✓ World-renowned, highly-reliable high pressure scroll compressor
- ✓ Single phase outputs from 7.5kW to 16kW\*
- ✓ From 600mm compact height options
- ✓ Integrates with other renewable technologies such as solar thermal
- ✓ Screed drying function
- ✓ 5-year warranty
- ✓ Bivalent options available with Firebird Blue Flame boilers
- ✓ Monobloc and Split systems available

\* Three phase capacities of 11 kW to 17.5 kW are also available – please contact Firebird Products Ltd for further information.



## Adaptable

Can be retrofitted alongside an existing heating system or used as stand-alone.

## Compact & Space Saving

Single Monobloc unit is installed outside the property.

## Flexible Connection Options

Traditional radiators, under floor heating and domestic hot water up to 60°C.

## Renewable Energy

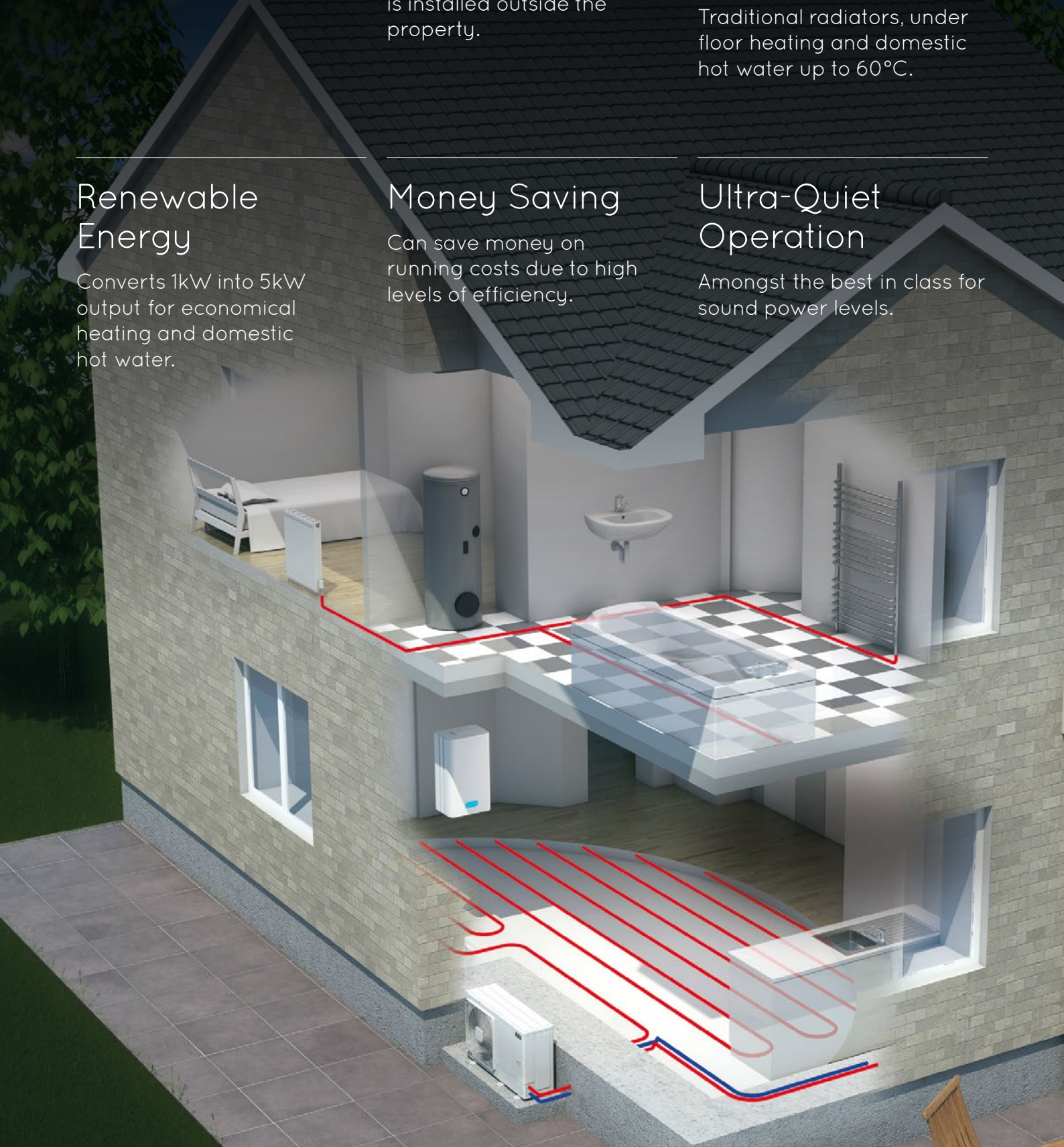
Converts 1kW into 5kW output for economical heating and domestic hot water.

## Money Saving

Can save money on running costs due to high levels of efficiency.

## Ultra-Quiet Operation

Amongst the best in class for sound power levels.



## How do Enviroair Air Source Heat Pumps Work?

Put simply, the Enviroair air source heat pump works by using a refrigeration process to transform low-grade energy from the outside air into high-grade energy.

This high grade energy (heat) is automatically transferred to water which is then ready to be used in a heating system, or for providing domestic hot water (up to 60°C). Even at temperatures as low as -20°C, the air source heat pump can supply significantly more energy than it uses. By taking advantage of thermodynamic processes, air source heat pumps provide more heat output than the energy input. Cheaper to install than ground source heat pumps, every 1kW of electricity used to power the Enviroair air source heat pumps is capable of providing up to 5kW of energy in a well-insulated home.

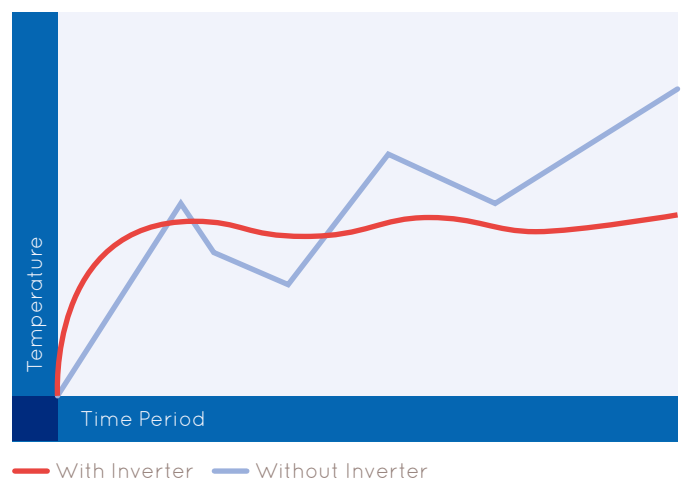
These high levels of efficiency can not only provide a significant reduction in heating bills for the homeowner, but can also save considerably on running costs when compared to other air source heat pumps. Available in single phase outputs from 7.5 kW to 16kW\*, the Enviroair range provides a compact and space saving solution as a single Monobloc unit is installed outside the property. Enviroair air source heat pumps are ideal for both newbuild and refurbishment projects as they are easy to install and offer total flexibility as they can be retrofitted alongside an existing heating system or used as stand-alone.

### Enviroair Connection Options:

- Radiators (50/55°C)
- Underfloor heating (also in combination with radiators)
- Water heaters

### Outstanding Energy Efficiency

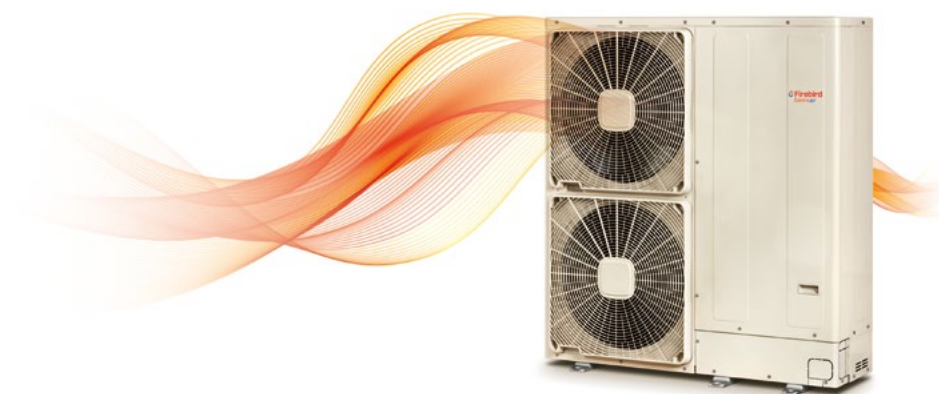
The outstanding energy efficiency of the Enviroair range of air source heat pumps is achieved by utilising cutting-edge DC Inverter Technology. This technology keeps temperature fluctuations to a minimum and ensures heat output matches the heating load of the property.



### Enviroair Hot Water Cylinders

The Enviroair air source heat pump range includes standard and pre-plumbed heat pump compatible hot water cylinders. Please contact Firebird Products Ltd for further information.





### State-of-the-art Wireless Controls

Room temperatures are controlled effortlessly and efficiently with an intuitive, wired programmable thermostat or by intelligent remote room sensors, which can be operated remotely via a smartphone app. The system controller automatically runs the entire heating system, including controlling any pre-existing boilers and has a built-in weather compensation control. Easy to operate; control functions such as hot water loading, auto heat, screed drying functions, a 'one-touch' holiday button and automatic switch off if a certain outside temperature is reached are also included.



### Ultra-Quiet Operation

Historically, a limitation with air source heat pumps has been the level of sound energy generated (sound power), especially where Building Regulations are required when installing an air source heat pump. In comparison, Enviroair air source heat pumps are ultra-quiet in operation, and considered to be amongst the best in their class for sound power levels (61-65 dB(A)).

### The Environment

Not only can Enviroair air source heat pumps reduce CO<sub>2</sub> emissions by up to 70% (when compared to more traditional heating systems), but they also utilise the environmentally friendly refrigerant R410A that causes no harm to the ozone layer. This complies with the European RoHS Directive which limits the use of environmentally harmful substances

### Renewable Heat Incentive

The domestic Renewable Heat Incentive (RHI) scheme was set up by the UK Government in 2014 to help meet planned CO<sub>2</sub> reduction targets by encouraging the uptake of renewable heat technologies. Following planned changes to this scheme, homeowners installing an air source heat pump will be eligible to receive increased tariffs of 10.02p/kWh (currently 7.5p/kWh), paid quarterly over a seven year period. To further encourage the uptake of renewable technologies a VAT rate of 0% for newbuild applications and 5% for retrofit also exists. These incentives make the installation of an air source heat pump a financially attractive option to either update an existing heating system, or to incorporate as part of a new build. For further information on the Renewable Heat Incentive please contact Firebird Products Ltd or visit [www.ofgem.gov.uk](http://www.ofgem.gov.uk).

# Technical Data

## Enviroair Heat Pump Sizing Guide

ERP Rating up to A+++

A heat pump that uses air as its heat source will perform better as the air temperature increases. The industry standard for quoting the output and efficiency of an air to water (ATW) heat pump is 7°C external temperature and a 35°C flow temperature. However, to meet MCS (Microgeneration Certification Scheme) criteria, the heat pump should be sized according to the lowest geographical temperature where the heat pump is to be installed.

The heat requirement for a property should be designed in accordance with MCS 3005 and include a room by room heat loss calculation. The calculated heat requirement should then be matched to the output of the heat pump (shown below). Please note that the information contained in these tables is for guidance purposes only. For exact quotations please contact the Firebird Technical Hub on **01752 691177** or **technicalhub@firebird.uk.com**.

### Water Flow Temperature 30-35°C

Enviroair Model*	Product Code	Outdoor Air Temperature 7°C		Outdoor Air Temperature -7°C	
		Capacity <sup>1</sup> (kW)	COP <sup>1</sup>	Capacity <sup>2</sup> (kW)	COP <sup>2</sup>
Enviroair 7.5kW	ASH075MOR	7.50	4.55	5.80	2.57
Enviroair 11kW	ASH011MOR	11.00	5.00	9.70	2.74
Enviroair 14kW	ASH014MOR	14.00	4.71	11.50	2.65
Enviroair 16kW	ASH016MOR	16.00	4.57	12.00	2.57

### Water Flow Temperature 40-45°C

Enviroair Model*	Product Code	Outdoor Air Temperature 7°C		Outdoor Air Temperature -7°C	
		Capacity <sup>1</sup> (kW)	COP <sup>1</sup>	Capacity <sup>2</sup> (kW)	COP <sup>2</sup>
Enviroair 7.5kW	ASH075MOR	7.50	3.50	6.00	2.25
Enviroair 11kW	ASH011MOR	11.00	3.80	10.00	2.45
Enviroair 14kW	ASH014MOR	14.00	3.61	11.00	2.25
Enviroair 16kW	ASH016MOR	16.00	3.40	11.50	2.15

\* Three phase capacities of 11 kW to 17.5 kW are also available – please contact Firebird Products Ltd for further information.



## Water Flow Temperature 47-55°C

Enviroair Model*	Product Code	Outdoor Air Temperature 7°C		Outdoor Air Temperature -7°C	
		Capacity <sup>1</sup> (kW)	COP <sup>1</sup>	Capacity <sup>2</sup> (kW)	COP <sup>2</sup>
Enviroair 7.5kW	ASH075MOR	7.50	2.70	5.00	1.72
Enviroair 11kW	ASH011MOR	11.00	3.00	8.70	1.78
Enviroair 14kW	ASH014MOR	14.00	2.80	9.70	1.85
Enviroair 16kW	ASH016MOR	16.00	2.50	10.50	1.75

\* Three phase capacities of 11 kW to 17.5 kW are also available – please contact Firebird Products Ltd for further information.

It is essential that the design of the heat emitter (whether for underfloor heating or radiators), is calculated correctly to ensure best performance for the Enviroair air source heat pump. For exact quotations please contact the Firebird Technical Hub on **01752 691177** or **technicalhub@firebird.uk.com**.

## Enviroair Heating Capacity

	Outdoor Unit Model	Enviroair 7kW	Enviroair 11kW	Enviroair 14kW	Enviroair 16kW
Nominal Capacity (max) Water 30/35°C, Ambient 7db/6wb°C	kW	7.50 (11.00)	11.00 (15.20)	14.00 (16.70)	16.00 (17.80)
	COP	4.55	5.00	4.71	4.57
Nominal Capacity (max) Water 40/45°C, Ambient 7db/6wb°C	kW	7.50 (10.00)	11.00 (14.10)	14.00 (15.70)	16.00 (17.30)
	COP	3.50	3.80	3.61	3.40
Nominal Capacity (max) Water 47/55°C, Ambient 7db/6wb°C	kW	7.50 (9.20)	11.00 (13.50)	14.00 (15.20)	16.00 (17.00)
	COP	2.70	3.00	2.80	2.50
Nominal Capacity (max) Water 30/35°C, Ambient 2db/1wb°C	kW	5.50 (8.90)	9.50 (12.80)	10.50 (13.90)	11.10 (15.00)
	COP	3.53	3.70	3.55	3.41
Nominal Capacity (max) Water 30/35°C, Ambient -7db/-8wb°C	kW	5.80 (6.70)	9.70 (10.60)	11.50 (12.00)	12.00 (13.00)
	COP	2.57	2.74	2.65	2.57
Nominal Capacity (max) Water 40/45°C, Ambient -7db/-8wb°C	kW	6.00 (6.40)	10.00 (10.00)	11.00 (11.60)	11.50 (12.50)
	COP	2.25	2.45	2.25	2.15
Nominal Capacity (max) Water 47/55°C, Ambient -7db/-8wb°C	kW	5.00 (5.50)	8.70 (9.70)	9.70 (11.20)	10.50 (12.00)
	COP	1.72	1.78	1.85	1.75
Water Flow Rate (min/max)	(m <sup>3</sup> /hr)	0.6/2.1	1.0/2.8	1.1/3.0	1.2/3.0
Minimum Water Volume (defrost)	(l)	28.0	38.0	46.0	55.0
Water Connections	(in)	1 1/4" female			
Expansion Vessel Size	(l)	6.0			
Water Temperature Range	(°C)	20-55	20-60		
Power Supply		230V/1Ph/50Hz	230V/1Ph/50Hz + 400V/3Ph/50Hz		
Circuit Breaker Size (with DHW tank heater)	A	32.0	50/32		
Circuit Breaker Size (without DHW tank heater)	A	20.0	32/20		
Maximum Operating Current (with DHW tank heater)	A	33.0	45.8/30.0		45.8/39.4
Maximum Operating Current (without DHW tank heater)	A	18.0	30.8		
Sound Power Level @7/35*	dB(A)	61.0	63.0	64.0	65.0
Dimensions (H x W x D) Including Connections	(mm)	800 x 1252 x 370	1380 x 1252 x 370		
Gross Weight	(kg)	115.0	135.0	140.0	144.0

\* Sound power level in accordance to the standard EN 12102 at conditions specified in EN 14511 performance test.

---

# 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

All Firebird products are produced to the highest quality standards and are put through rigorous testing procedures by external standards agencies. Every product is designed to meet a specific requirement and has been manufactured using premium quality materials to precise standards and tolerances.



---

## Warranty

Enviroair air source heat pumps are covered by a five-year manufacturer's warranty as standard. For further information, please contact Firebird Products Ltd.





# Firebird Product Range

Oil Fired Boilers



Air Source  
Heat Pumps



Solar Thermal



Biomass Boilers



**Firebird Products Ltd**

Phoenix House  
Eastern Wood Road  
Langage Industrial Estate  
Plympton  
Plymouth PL7 5ET



T: 01752 691177  
F: 01752 691131  
E: [sales@firebird.uk.com](mailto:sales@firebird.uk.com)

**[www.firebird.uk.com](http://www.firebird.uk.com)**

This brochure was correct at the time of going to print. However, Firebird's policy is one of continuous development. The right is reserved to change specifications, colour, and prices of the models and items illustrated and described in the publication at any time. Whilst every care has been exercised in the production of this brochure, Firebird cannot accept any liability for errors or omissions. For current details always consult Firebird Products Ltd.