

POWER-fin[®] II

GAS-FIRED HIGH EFFICIENCY BOILERS



Lochinvar Corporation has been designing, manufacturing and distributing water heating products in USA since 1919 and has built an enviable reputation for reliable, efficient and cost effective water heaters and boilers.



In the UK the company is based in Banbury, ideally located to support its established products with a service which is second to none with Area Sales Managers and a head office staff covering Technical support, Service Technicians, Accounts and General Administration.

Water heating equipment was first sold in the UK under the Lochinvar name in 1976. The "Knight" and "Charger" ranges of direct gas fired Storage Water Heater were among the first of their type to be sold in this country and their popularity has continued to grow due to their suitability for the concept of System Separation and Decentralisation.

Following on from the success of the Knight and Charger range, Lochinvar introduced Copper-Fin® water heaters and Boilers in 1981. This range offers even better operating efficiencies and additionally have low NO_x emissions and offer a wide variety of flueing options. The latest additions to the Copper-Fin® series are Intelli-Fin™, a gas fired condensing boiler or water heater with a gross thermal efficiency of 97% and POWER-fin®II, a range of high efficiency boilers or water heaters that are the perfect companion to Intelli-Fin™ on multi unit installations

All Lochinvar water heaters and boilers have a range of ancillary equipment designed for the specific needs of the UK market, are CE marked and WRAS (Water Research Advisory Service) listed.



WHY POWER-fin®II?



The POWER-fin®II range of gas fired high efficiency boilers is the latest addition to Lochinvar's highly successful Copper-Fin® series. Copper is one of the most efficient materials to use as a heat exchanger and at the heart of Lochinvar boilers and water heaters lies a copper heat exchanger with a substantial difference - extruded copper fin tubes that offer 9 times the heat absorption of plain tubes. This means a rapid response to heat demand, a major factor in the higher net thermal efficiencies provided.

POWER-fin®II is a range of large output boilers which are highly efficient (up to 93.3% net thermal efficiency), flexible, extremely quiet in operation and 'intelligent' thanks to its integrated control system.

10 YEAR HEAT EXCHANGER WARRANTY

VARIABLE FREQUENCY DRIVE

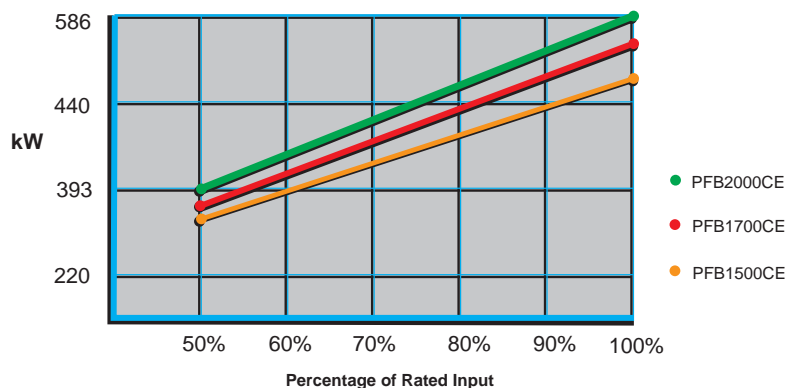
POWER-fin®II boilers feature Variable Frequency Drive, which increases thermal efficiencies by supplying precisely the correct amount of gas and air to the burner, minimising 'cycling' and limiting excessive heat. This results in complete combustion thereby increasing kW output, whilst at the same time it also adjusts output to meet demand.

The Variable Frequency Drive allows POWER-fin®II to modulate down to 50% of output responding instantly to any change in system requirements.

HIGH THERMAL EFFICIENCIES – LOW NO_x EMISSIONS

POWER-fin®II operates with net thermal efficiencies of up to 93.3%. And by adjusting gas and air to be proportionately equal maintains this high rating along the entire efficiency curve.

With Ultra Low NO_x Emissions of 31 mg/kWhr POWER-fin®II is environmentally friendly too, meeting the most stringent requirements (class 5) of EN483.



3 MODELS

OUTPUTS OF 382, 434 AND 510kW



COMPACT SIZE

POWER-fin®II is compact. So compact in fact that all models have a foot print of just 0.52m². This makes POWER-fin®II boilers ideal for both retrofit and new installations.

ALCROMESH BURNER WITH 5-YEAR WARRANTY

The aluminium/chromium alloy burner disperses the flame through 360° improving heat transfer. Quiet operation is assured and its durability results in a 5-year warranty.

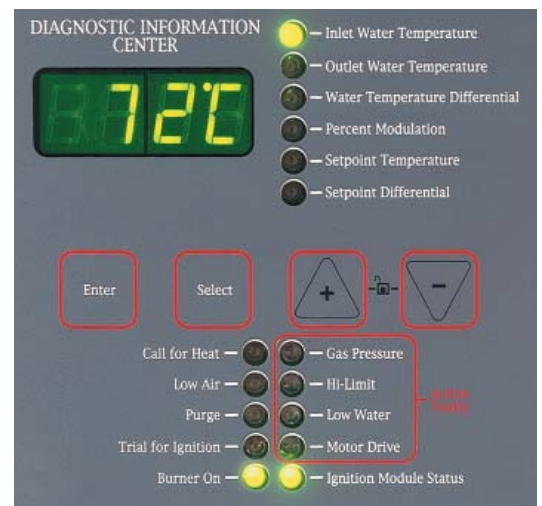


OPERATING FLEXIBILITY

POWER-fin®II advanced burner technology allows operation over a broad range of inlet gas pressures with a minimum as low as 10 mbar (most competitive products need 18 to 20 mbar). This prevents nuisance 'lockout' problems on applications with varying gas pressures as POWER-fin®II can operate in low pressure supply conditions.

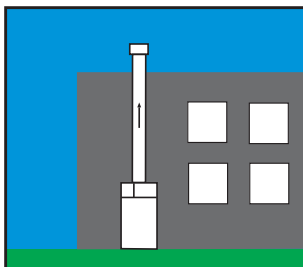
DIGITAL CONTROL

Each function of the boiler is automatically monitored and controlled by a digital control system, accurate to +/- 0.5°C. A digital display indicates temperature while LED indicators prove operation and status. This monitoring system not only warns against failure, it can actually help pinpoint the source of any problems, leading to faster diagnosis and minimal down-time.



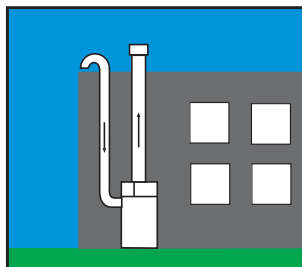
FLUEING OPTIONS

POWER-fin®II boilers offer a choice of three flueing options and have extremely small flue diameters. The PFB2000CE (586kW) model, for example, has a flue diameter of just 250mm. This makes for real savings in installation costs.



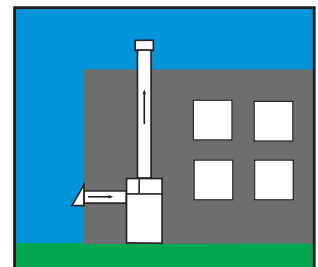
Conventional

Flues vertically using IGE/UP/10 approved flue material.



Vertical Balanced Flue

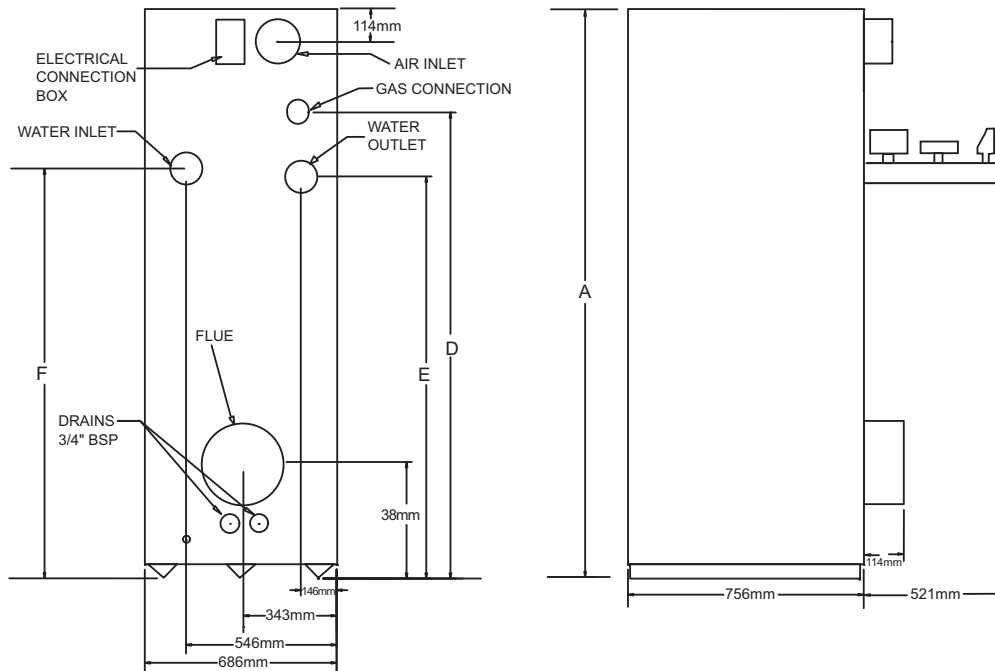
Flues vertically using IGE/UP/10 approved flue material. Directly draws combustion air with runs of 15 metres from the roof top.



Balanced Flue with Horizontal Air Intake

Flues vertically using IGE/UP/10 approved flue material. Directly draws combustion air from a side wall with a horizontal run of up to 15 metres.

POWER-fin® II BOILER DIMENSIONS & SPECIFICATIONS



| Model Number | Input kW | Output kW | A | D | E | F | Air Inlet Size mm | Flue Size mm | Weight kg |
|--------------|----------|-----------|------|------|------|------|-------------------|--------------|-----------|
| PFB1500CE | 440 | 382 | 1695 | 1327 | 1067 | 1130 | 150 | 200 | 360 |
| PFB1700CE | 498 | 434 | 1810 | 1442 | 1181 | 1245 | 175 | 200 | 380 |
| PFB2000CE | 586 | 510 | 1981 | 1613 | 1353 | 1416 | 200 | 250 | 405 |

All gas connections are 1/2" BSP. All water connections are 2/2" BSP.

Standard Features

- ▼ 93.3% net Thermal Efficiency
- ▼ 50 - 100% Infinitely Proportional Firing Rate
- ▼ Digital Display with Alarm & Status LED's
- ▼ Variable Frequency Drive
- ▼ Digital Temperature Control. Accurate to 0.5°C
- ▼ Tamper Resistant Temperature Controls
- ▼ Alcomesh Burner with 5-Year Limited Warranty
- ▼ Ultra Low NO_x Emissions
- ▼ Low Gas Pressure Operation
- ▼ Selectable Supply/Return Temperature Controls
- ▼ 10.5 bar Working Pressure
- ▼ Gasketless Heat Exchanger Design
- ▼ Enamel-Lined Water Headers
- ▼ Zero Clearance to Combustible Materials
- ▼ Adjustable High Limit with Manual Reset
- ▼ Flow Switch
- ▼ Small Footprint
- ▼ Whisper Quiet Operation
- ▼ Volt-Free Contacts on any Failure
- ▼ Frost Protection
- ▼ Construction Air Filter
- ▼ Pressure Relief Valve
- ▼ 10 Year Warranty on Heat Exchanger

Optional Equipment

- ▼ Horizontal Air Intake Cap
- ▼ External Temperature Compensation



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