

# Fumeco

Condensing Heat Recovery Units  
With or without fan for gas fired appliances



Working towards  
a cleaner future

**POTTERTON**  
COMMERCIAL  
heating specialists

# Fumeco

Like most in the heating industry Potterton Commercial fully supports energy saving initiatives, but it would be wrong to suggest that condensing boilers are always the best option. Well engineered heat recovery solutions can achieve similar condensing efficiency when combined with traditional heating systems, not only reducing energy consumption, costs and emission levels, but also providing a more cost effective alternative to installing a plant room full of condensing boilers.



Suitable for boiler outputs of 320kW to 2800 kW, the Fumeco converts a standard gas boiler into a high performance fully condensing unit. Constructed and manufactured in high quality stainless steel, the Fumeco heat exchanger is designed to recover up to 80% of the heat normally lost in the flue gases, guaranteeing instant cost savings.

What's more the Fumeco is recognised by the Enhanced Capital Allowances scheme, which means end users will see greater cost saving benefits. 100% first year capital allowances can be claimed on any new Fumeco heat recovery unit installed.

This slim, easy to install unit is available in two versions, with integral fan V type or unfanned S type. The unfanned version is ideal for applications where there is already a fan in the flue or where the boiler/burner unit is capable of sufficient over pressure to overcome the resistance of the Fumeco.

Where multiple boilers are installed the Fumeco V type will be installed in parallel with the flue system rather than in series.

The system can easily be installed thanks to a versatile flue collectors, which can be swivelled through 360° for easy alignment on existing flue systems.

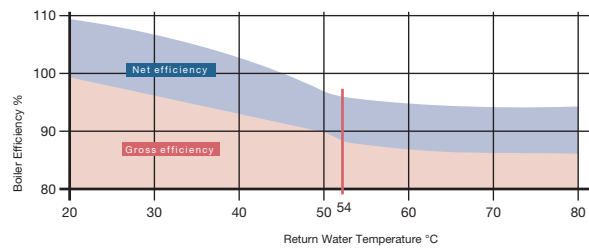
- **Heat recovery solutions**  
Recovers up to 80% of heat lost in flue gases
- **High efficiency performance**  
Converts a standard gas boiler into a high performance fully condensing unit
- **Environmentally friendly**  
Reduces energy consumption, costs and emission levels
- **Tax efficient**  
Recognised by the Enhanced Capital Allowances Scheme

## Sizing the Fumeco

The proportion of energy recovered by the Fumeco depends on the water temperature entering the unit. The nominal dew point of the flue gasses when firing on natural gas is about 54°C. Therefore to start condensing, the water entering the unit will need to be below 54°C. As the water temperature reduces the more energy is recovered. (Fig 1 right)

If the whole system runs at low temperature or variable temperature, then size the unit to suit the maximum boiler output and connect it to the main boiler return.

Fig 1 Condensing Efficiency at varying water temperatures



Where there is a mixture of high temperature and variable temperature circuits it is possible to size the Fumeco units to suit the load on variable temperature circuits.

## System requirements

### Flue system

The flue system downstream of the Fumeco must meet normal condensing boiler criteria:

- corrosion resistant smoothwall
- water and gas tight
- free draining
- vertical discharge
- adequate drained

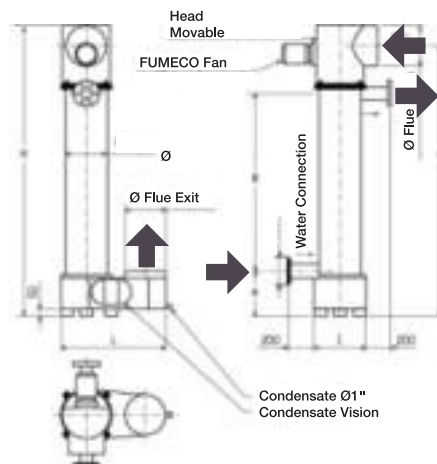
Flue connections to the Fumeco should have a removable section to allow maintenance of the flueways.

### Electrical connections

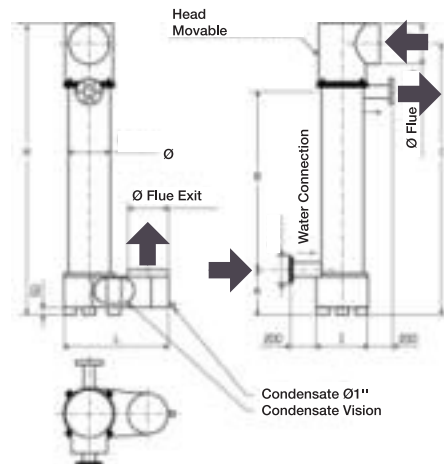
All motors supplied with the Fumeco are suitable for a 3-phase 400v electrical supply. The unit should be fitted with a local suitably sized fused isolator. The motor should be interlocked to the boilers to ensure that both units run together.

## Technical data

### Fanned V type



### Unfanned S type



Fumeco Type V or S	Max Boiler Output	H mm	L mm	I mm	Ø mm	Ø of flue entry/exit mm	Water Connection Size PN10mm	A mm	B mm	C mm	Weight Kg	Fanned Motor kW	Unfanned Pressure Drop
25.15/73	314 kW	2179	707	500	350	200/250	80	356	1390	2076	200	1.1	40
30.15/111	477 kW	2229	759	500	400	200/250	80	356	1390	2101	210	1.1	40
35.15/157	675 kW	2279	850	530	450	300/350	100	368	1365	2125	280	1.1	40
40.15/191	820 kW	2329	1059	580	500	300/350	100	368	1365	2151	340	1.1	40
45.15/273	1173 kW	2370	1059	630	550	400/450	125	378	1346	2167	400	2.2	40
50.15/330	1418 kW	2421	1159	680	600	400/450	125	381	1340	2192	470	2.2	40
55.15/411	1766 kW	2614	1259	790	650	500/550	125	428	1346	2360	570	3	40
60.15/475	2041 kW	2269	1359	790	700	500/550	150	445	1311	2390	650	3	40
65.15/523	2247 kW	2669	1409	830	750	550/600	150	445	1311	2390	705	3	40
70.15/651	2800 kW	2770	1468	880	800	550/600	200	521	1260	2467	835	3	40

## Commercial sales technical & service enquiries

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web: [www.pottertoncommercial.co.uk](http://www.pottertoncommercial.co.uk)

## Spares

Potterton Commercial spares are available nationwide through the interpart network of approved stockists. Alternatively please contact:-

### Interpart

Brooks House  
Coventry Road  
Warwick CV34 4LL  
Tel: 0844 871 1540

## Applications & Installations

Our experienced technical support team are available to offer advice on any aspect of heating system design and boiler installation.

Please contact: 0845 070 1057

## Commercial service offices

Our service organisation covers the whole of the UK to look after your needs for all Potterton Commercial products.

Our service office offers a wide range of specialised services including:

- Burner commissioning for all fuels
- Boiler service contracts
- Breakdown and repair services
- Burner and boiler replacement
- Oil/gas conversions
- Water treatment and descaling
- Packaged units

All descriptions and illustrations contained within this leaflet have been carefully prepared, but we reserve the right to make changes and improvements in our products which may affect the accuracy of the information in this leaflet.

## The Enhanced Capital Allowance Scheme

All businesses, regardless of size, are able to claim enhanced capital allowances, except where the assets are leased.

If the product purchased is listed on the Energy Technology Product List end users can claim enhanced capital allowances on the cost of the product, along with any costs that are directly associated with the provision of the product

The scheme enables businesses to claim 100% first year capital allowances on investments in energy saving equipment. Businesses are now able to write off the whole cost of their investment against their taxable profits of the period during which they make the investment.

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