



TRISTAR
Optima

THE BOILER THAT THINKS FOR ITSELF



The boiler that thinks...



The boiler that thinks...

...it's ahead of its time:

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...it's at home in your home:

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...it's seriously intelligent:

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...it's got the best technical spec:

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Optima

...it's ahead of its time



Improving efficiency

With limited natural resources at our disposal, the world is constantly looking for effective ways of reducing waste and improving the performance of household appliances.

Trianco has an unprecedented history of manufacturing oil, solid fuel and electric domestic central heating boilers that meet stringent industry standards. We are now applying our expertise to the production of gas fired boilers with the introduction of the TriStar Optima. Made to the same exacting standards as our other products, the new Optima is a high efficiency boiler, designated as 97.6% efficient in band 'A' of the government SEDBUK ratings.

High performance

The Optima is designed for top performance. In fact it's no secret that this is one of the most intelligent boilers around. Not only is the Optima a cutting edge design, it is also cleverly constructed.

A highly effective pre-mix gas burner ensures the most efficient operation, because the boiler will condense at the lowest temperature possible. And unlike boilers from many other manufacturers, it is fitted with a fully modulating pump which means the correct amount of water flows around the heating system to make the best use of generated heat - **the right power at maximum efficiency.**

Built-in reliability

The Optima produces very low NOx emissions, as well as being very quiet to run, with minimum noise levels. A kit is available for conversion to LPG and all models carry a two-year guarantee, with the benefit of a five-year guarantee for the heat exchanger.

Your comfort comes first

At Trianco we constantly strive to combine the best engineering technology with the most cost-effective construction techniques to create a state-of-the-art, affordable product. But we never overlook the main purpose of a central heating boiler - to provide the very best possible levels of comfort for you and your family in your home. This means that we have the seemingly impossible task of anticipating not only your daily needs and lifestyle, but the type of house you live in, and what the weather conditions are going to be at any given time - we, you and your boiler need to be better informed about your living environment.

This is where the advanced features of the Optima come into play. First is the Optimiser, an external temperature sensor to ensure that the boiler is always performing at its most economic level. And the pièce de résistance is the optional, but highly recommended, Boiler Management Unit which controls the overall running functionality of the boiler to achieve ultimate controlability, zoneability and greater fuel savings. The benefits of these significant advances are explained more fully over the page.

Optima

...it's at home in your home



We all live in different kinds and styles of homes, but whatever the domestic water and central heating requirements, the Optima will provide the ideal solution. It's available as a Combi or System model with outputs from 5.6 to 29.7kW (19,500 to 95,500 Btus), and both feature condensing technology for higher efficiency and lower emissions.

The System benefits

The essential difference with a condensing system boiler is that it feeds a hot water cylinder, but to ensure maximum economy, all hot water is pumped through the system to deliver it quickly and efficiently to the radiators and cylinder. A conventional system needs a separate feed and expansion cistern and separate circulating pump, but with the Optima System boiler, all this is built in for quicker and neater installation.

The Combi alternative

The Combi (or combination) boiler gives you piping hot water straight from the mains supply, with no need for a storage tank, which means that the process is more instantaneous for heavy consumption, and water is also delivered at mains pressure which is ideal for showering. The Combi is manufactured as a single unit with all the major components built in, making installation easier, and because you don't need a hot water cylinder or tank in the loft, there is no need for expensive and elaborate connecting pipework.

...it's seriously intelligent



Only an intelligent boiler can run as efficiently as the Optima. But to be intelligent, it needs brains, and these are included with the boiler in the form of the clever Optimiser device (below left) and an optional Boiler Management Unit (below right).

The Optimiser

The Optima boiler is supplied complete with an Optimiser unit which is a temperature sensor fitted to an outside wall, designed to work in conjunction with the boiler software, for monitoring the relationship between internal and external influences. It constantly assesses the rise and fall in outdoor temperatures and automatically makes adjustments to the boiler water temperature. When the outside temperature falls, the boiler output increases, and vice versa, which means that maximum comfort is guaranteed and heat loss is reduced to a minimum. The Optimiser will also differentiate between seasons automatically, switching from winter to summer operation once the outside temperature is higher than 20°C. This can be de-activated at the flick of a switch.



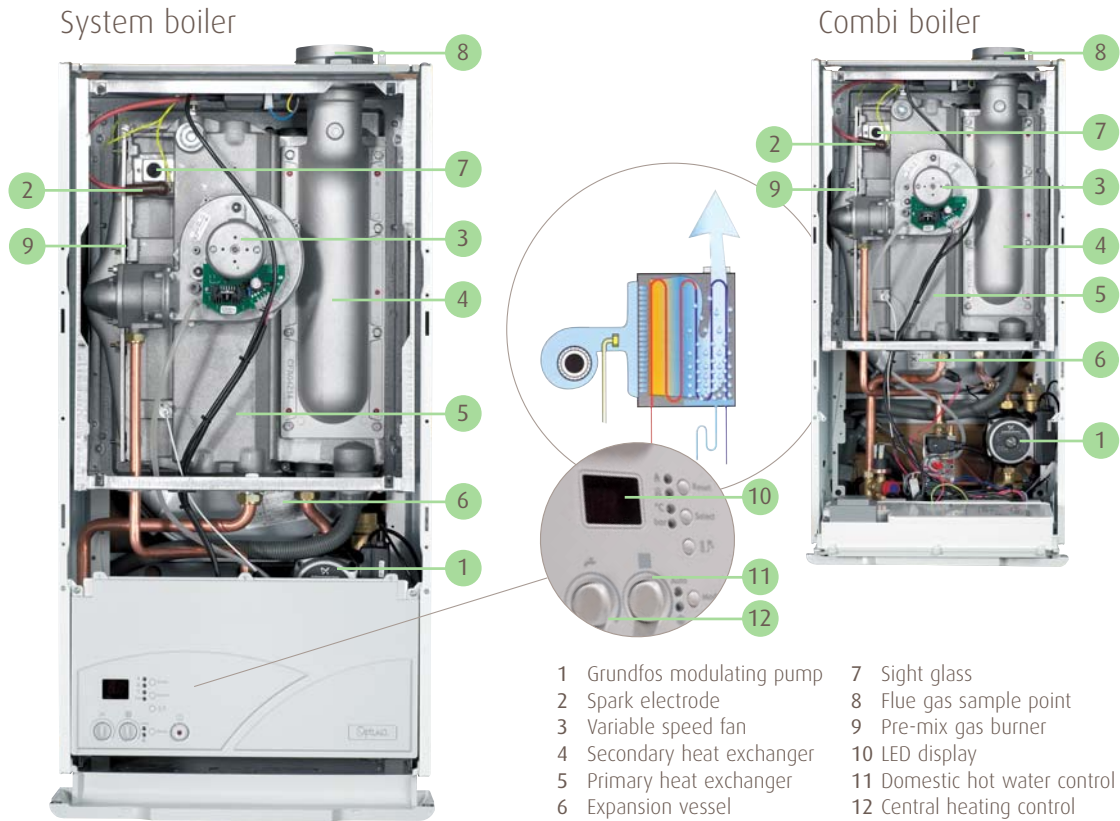
The Boiler Management Unit

Even greater flexibility can be achieved by adding a Boiler Management Unit (BMU) which, as its name suggests, is a programmable controller that optimises your boiler's performance in accordance with your lifestyle. As well as acting as a thermostat setting to maintain constant comfort levels, the BMU includes a frost protection setting and a number of other benefits. The integral timer can be set to provide a lower temperature while the house is unoccupied, and during holidays it can be timed to switch off when you leave, and bring the temperature back to your preference just before your return. We particularly recommend fitting a BMU because it also acts as a fault finder, making it easier for the engineer to identify any problems and service the appliance accurately.

Above all the BMU, in conjunction with the Optimiser, is designed not to waste a single unit of energy. For example, if you want your house to be warm by 7am and/or 6pm, you just set those times and the 'brains' will work out exactly when beforehand the boiler needs to switch on, taking account also of outside temperatures at the time. That means the Optima always operates at maximum efficiency, to generate greater savings for you. Now, that's what we call a really clever boiler!

The boiler that thinks...

...its spec is comprehensive



- 1 Grundfos modulating pump
- 2 Spark electrode
- 3 Variable speed fan
- 4 Secondary heat exchanger
- 5 Primary heat exchanger
- 6 Expansion vessel
- 7 Sight glass
- 8 Flue gas sample point
- 9 Pre-mix gas burner
- 10 LED display
- 11 Domestic hot water control
- 12 Central heating control

Technical specification

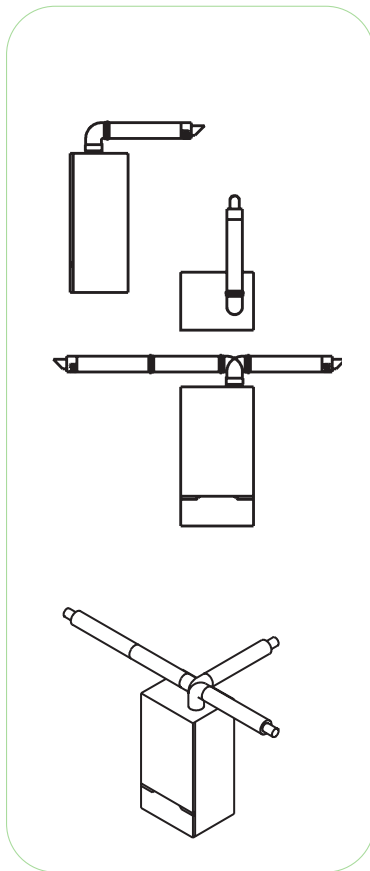
Operating gas	Natural gas		LPG	
	CB	SB	CB	SB
Optima model	CB	SB	CB	SB
Maximum heat output at (80°/60°C) kW	28	28	28	28
Minimum heat output at (80°/60°C) kW	5.6	5.6	7.3	7.3
Working efficiency max output at (80°/60°C)	97.6%	97.6%	97.6%	97.6%
Maximum heat output at (50°/30°C) kW	29.7	29.7	29.7	29.7
Minimum heat output at (50°/30°C) kW	6.1	6.1	8	8
Working efficiency max at (AVE T + 50°C)	107%	107%	107%	107%
Maximum heat range kW	28.7	28.7	28.7	28.7
Minimum heat range kW	5.7	5.7	5.7	5.7
Class of NOx emissions (EN 483)	5	5	5	5
Specific domestic water range ($\Delta T = 30^\circ C$)	13.4	-	13.4	-
Height	890mm	890mm	890mm	890mm
Depth	365mm	365mm	365mm	365mm
Width	465mm	465mm	465mm	465mm

400mm clearance from ceiling to top of boiler.
 CB = combination boiler
 SB = system boiler

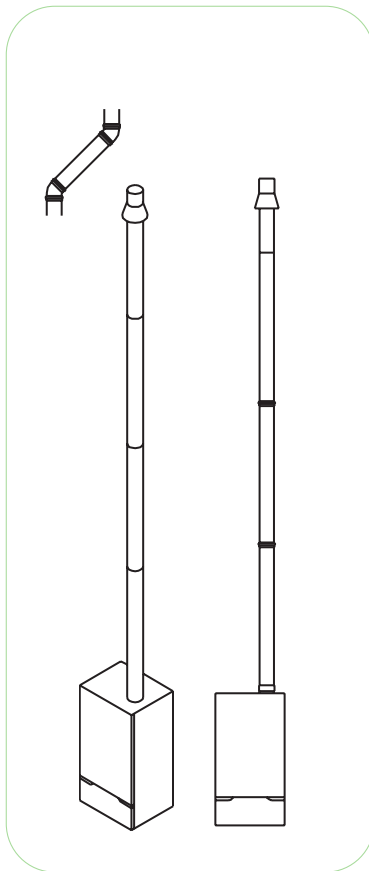
...and its flueing is versatile

Flues and flue accessories

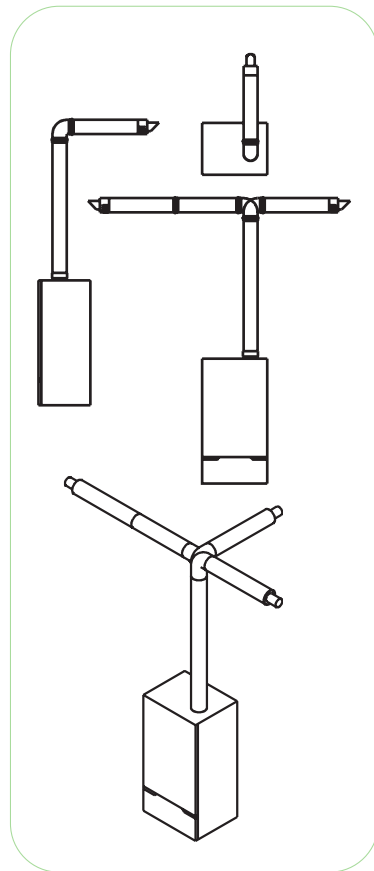
Product code	Flue kits and accessories
5010	Horizontal balanced flue kit
5012	Vertical balanced flue kit
5015	500mm extension pipe to be used with 5010 & 5012
5011	1000mm extension pipe to be used with 5010 & 5012
5014	45 degree bend to be used with 5010 & 5012
5013	90 degree bend to be used with 5010 & 5012



Horizontal balanced flue
Kit consists of 5010
horizontal balanced flue kit
plus appropriate extension pipe(s)



Vertical balanced flue
Kit consists of 5012
vertical balanced flue kit
plus appropriate extension pipe(s)



High level horizontal balanced flue
Kit consists of 5010 horizontal balanced
flue kit & 5011 high level adaptor kit
plus appropriate extension pipe(s)

Other heating products in the Trianco range



EuroStar oil fired boilers

EuroStar condensing boiler



EuroStar external wall-mounted boiler



EuroStar internal wall-mounted boiler



EuroStar system boiler



EuroStar kitchen boiler



EuroStar combi boiler



Aztec electric boiler 2kW-12kW



OIL BOILERS



ELECTRIC BOILERS



GAS BOILERS

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