

# Linea One

High efficiency combi boiler

RANGE 38HE

SEDBUK 'A' RATED

10:1 MODULATION RATIO

NEW RIELLO ALUMINIUM  
HEAT EXCHANGER

5 YEAR WARRANTY



## Linea One

Highest technology with the simplest of design.  
Product development you can depend on.

### Linea One combination boiler

### The advanced heating and hot water solution

A

'A' rated

The Linea One is our top of the range appliance and has been designed to provide the complete heating and hot water solution for domestic applications. Rated 'A' for efficiency the Linea One combi boiler is over 90% efficient and is one of the most energy efficient appliances on the market. By utilising the weather compensation technology, supplied as standard with the Linea One, the SAP efficiency can be increased by a further 3%, *making the Linea One up to 93% efficient!*\*\*.

5

year warranty

#### Highest efficiency

By incorporating the most advanced technology available the Linea One has a class leading modulation ratio of 10:1. This modulation range means that the Linea One can operate as low as 3.8kW and up to 38kW and can therefore satisfy the heating and hot water requirements for domestic properties of different sizes, from one bedroom flats to larger detached homes whilst maintaining its efficiency. It also has a modulating pump that reduces electrical consumption by up to 50%, helping to reduce fuel bills and also minimise any temperature fluctuations to provide a continuous flow of hot water, ensuring total end user comfort.

RIELLO HEAT EXCHANGER

#### 5 year parts and labour warranty

The Linea One is backed by an exclusive 5 year warranty (subject to registration and annual servicing), highlighting the quality of build of the appliance.

BUILT IN FILLING LOOP

#### Easy installation and maintenance

A pre fixing jig and built in filling loop are supplied as standard with the Linea One, ensuring the simplest of installation. The standard Vokèra pipework layout also enables trouble-free replacements of older Vokèra models.

PRE FIXING JIG

All main components are easy to access and the unique LCD display aids you during installation, commissioning and servicing.

MODULATION RATIO 10:1

#### Complete control

The intelligent functions of the Linea One enable both the domestic hot water and central heating temperatures to be controlled via the LCD display. The Linea One offers the widest choice of operating functions within Vokèra's boiler portfolio, delivering exceptional home owner comfort while maximising energy savings. The Linea One comes with the weather compensation control supplied as standard and is also compatible with the OpenTherm programmable room thermostat.

WEATHER COMPENSATION CONTROL SUPPLIED

#### Environmentally friendly

Vokèra are committed to the manufacture of the most environmentally friendly products and continue to invest in limiting emissions, such as CO<sub>2</sub> and NO<sub>x</sub>. The Linea One boasts both impressive energy efficiency ratings and has the best class for NO<sub>x</sub> emissions.

PIPE COVER

The Linea One is an industry leader and one of the most energy efficient combination boilers currently available, with up to 93% of the fuel used being converted into heat emissions are kept to a minimum.

NO<sub>x</sub> Class 5  
at only 29mg/kWh

To achieve maximum credits with a condensing boiler under the Code For Sustainable Homes, the NO<sub>x</sub> must be below 40mg/kWh. Significant research and development have enabled the Linea One to declare a NO<sub>x</sub> emissions of just 29mg/kWh.

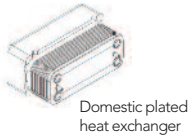
## Highest technology

The Linea One has been designed to create an intelligent and reliable heating and hot water solution. The features within the boiler not only allow the end user to easily operate and control their heating and hot water supply but the high specification components also allow for simple installation, commissioning and servicing.

### New Hydraulic Features

#### Modulating pump

The addition of a modulating pump has a dramatic effect on the electrical consumption and can lead to a 50% reduction. The pump utilises PWM technology and has 4-distinct operating modes that can be selected to suit the intended system. The boiler PCB controls the pump and automatically selects the best operating curve from the 19 available to ensure continuous high performance.



Domestic plated heat exchanger

#### DHW flow meter and large domestic heat exchanger

The Linea One contains a flow meter allowing the boiler to match the output to the flow rate and ensures a stable temperature while also increasing fuel efficiency. The large domestic plated heat exchanger increases the rate of heat transfer.

### Cyclonic separator

The Cyclonic Separator provides a significant improvement in the effectiveness of the 'air separator' and can also capture particulates from the system water. Its distinct advantages include:

- Reduced pressure loss through the hydraulic circuit of the boiler
- Quicker discharge of air during commissioning
- Possibility to now remove and clean the inside of the separator, removing any particulates that may have been trapped
- Quick-release clips – no tools are required so the time spent on routine maintenance is reduced
- The collection of the particulates aids efficiency and helps to reduce build up in the system

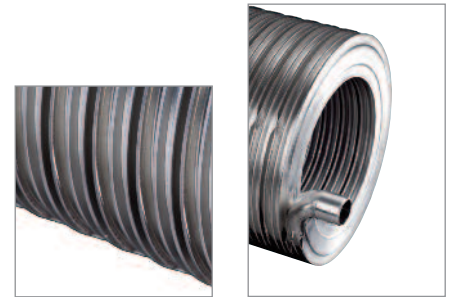
### New Combustion Features

#### Radial heat exchanger

The Linea One utilises the unique and highly successful radial heat exchanger from Riello. This upgraded heat exchanger is now lighter, with fewer emissions and has an increased 'pitch' which reduces the possibility of condense residue becoming attached to the coils, thereby lengthening the periods between heat exchanger cleaning.

#### Range Rated

The Linea One is range rated so it can be used at various different outputs, without affecting its stated efficiency.



### New Electronic Features

#### Enhanced Autostop

Vokèra's unique Autostop feature is an automatic disabling function. Previously with only 2 modes of operation, the functionality of Autostop has been specifically enhanced for the Linea One and now has 4 modes of operation.

- **Service Indicator Function** – after a pre-determined period, the display will periodically flash the 'Service Reminder' icon to alert the end-user that the boiler requires routine maintenance or servicing
- **Full Shut Down** – after a pre-determined period – the boiler will revert to its 'standby' mode, and will not provide any heating or hot water, unless/until the internal frost function is enabled
- **Hot Water Only** – after a pre-determined period, the boiler will only operate to provide hot water
- **Minimum Output** – after a pre-determined period, the boiler will only operate at minimum output, thereby affecting the performance

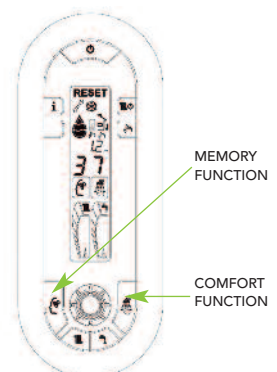
*The Autostop function is particularly useful for Social Housing Providers, enabling them to fulfil their legal obligation to carry out the annual gas safety check*

#### Intelligent Pre Heat Memory and Comfort functions

Linea One incorporates an intelligent 'DHW memory' function that adapts the appliance pre-heat function to match the end-user's usage pattern. The usage pattern is monitored over a 1-week period, thereafter the pre-heat function of the boiler is adapted to suit the end-user's lifestyle. Not only does the intelligent pre-heat adapt to maximise user comfort, it also reduces fuel consumption by eliminating wasteful operation of the standard pre-heat function.

The 'Comfort' function enables the end-user to impose a fixed outlet temperature for DHW within the range 35°C to 45°C (factory default is 40°C). This is especially useful if there are young children or elderly relatives in the home.

Both these functions can be enabled or disabled, simply by pressing the relevant button on the control panel.





## Linea One

5 year parts and labour warranty.  
Rock solid support you can depend on.

### At a glance

Awaiting confirmation of Energy Saving Trust Recommended certification mark.

5 year parts and labour warranty<sup>(1)</sup>.

Weather compensation control, supplied as standard, can increase SAP efficiency by a further 3%<sup>(2)</sup>.

DHW memory function memorises the DHW usage pattern over past 7 days and uses the stored data to plan the pre heat function for the duration of the following week. The standard pre heat function is therefore only enabled when necessary, maximising energy savings.

Fully modulating pump can be controlled using several modes of operation and can reduce electrical consumption by up to 50%.

Low NOx – Class-5 performance with only 29mg/kWh.

The easy to use appliance interface and controls permits the end user to view, change and adjust the operating modes of the boiler.

Versatile flue options with concentric flue lengths up to 12m and twin flue lengths up to 30m.

Use the Vokèra push fit telescopic flue for a quick and simple installation.

Designed for easy installation. A pre-fixing jig and built-in filling loop allows the system to be connected and tested without the boiler needing to be in place.

Extremely high modulation ratio of 10:1 maximises efficiency and comfort for end user.

Built-in frost protection, protects the appliance from damage during periods of cold weather.

Simple commissioning, only minimal adjustments are required after installation and automatic modulation eliminates the need to range rate the boiler.

Self-start programming protects the pump and motorised valve from sticking during long periods of inactivity.

New unique radial aluminium heat exchanger from Riello provides excellent thermal transfer and anti-corrosion properties. The new design reduces possibility of condense residue build up, prolonging the need to clean the component.

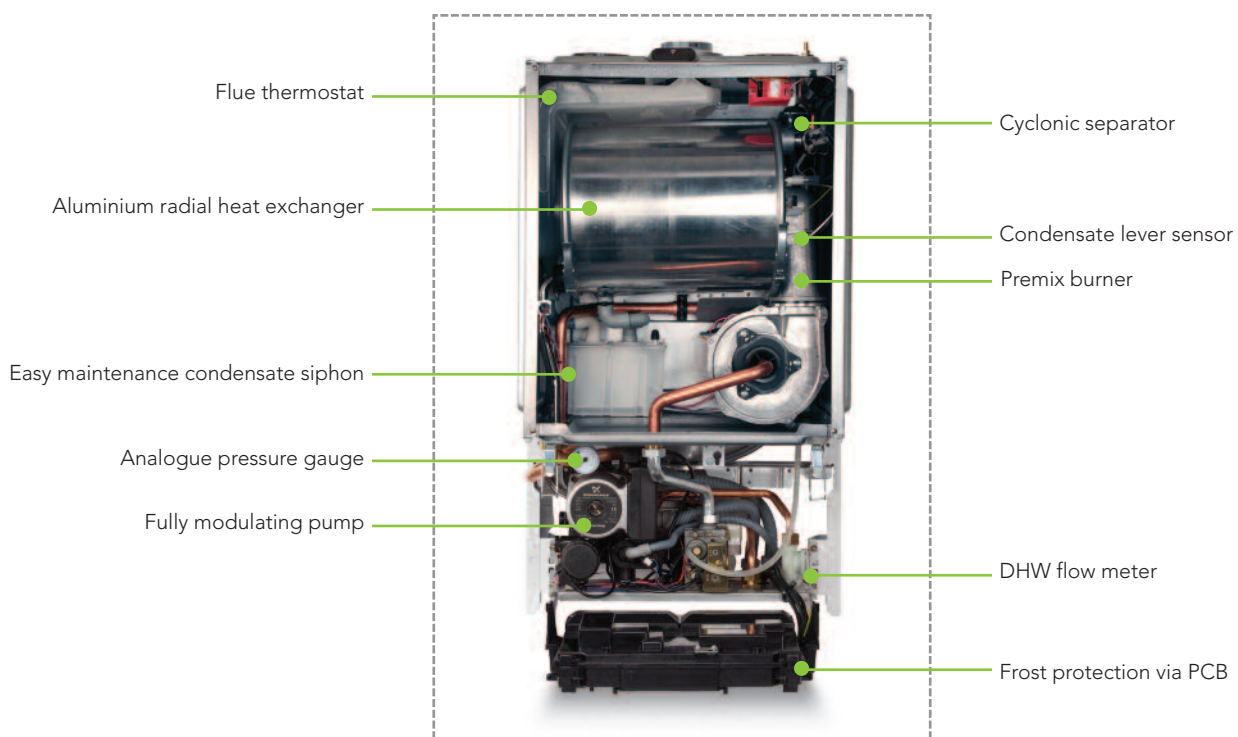
Enhanced Autostop disabling function with 4 optional modes of operation, including: service reminder, reducing the output of the boiler, supply DHW only and moving the boiler into standby mode (no heat or DHW)<sup>(3)</sup>.

Can be converted to LPG with LPG Kit.

Incorporates Vokèra's recently introduced Cyclonic Separator, providing a significant improvement in the effectiveness of the 'air separator' and can also capture particulates from the system water.

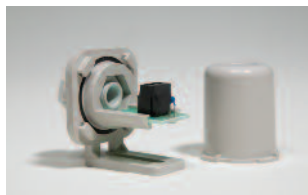
<sup>(1)</sup> Subject to registration and annual service <sup>(2)</sup> As proposed in SAP 2009

<sup>(3)</sup> Autostop activation device required. Contact Vokèra technical for assistance.



## Intelligent Energy Saving Controls

A **weather compensation control** manages the central heating temperature but independently regulates the boiler in line with external weather conditions so require no regular operation by the homeowner.



The Linea One is supplied as standard with the weather compensation control. The outside weather compensation control regulates the boiler in-line with outside weather conditions increasing energy efficiency and ensuring end user comfort.

The **OpenTherm programmable room thermostat** can have different set temperatures for different times of the day, offering greater flexibility and a simple solution to boiler control. Vokèra's OpenTherm programmable room thermostat incorporates the most advanced technology that modulates the boiler in line with the current and desired set room temperature to provide a consistent temperature and maximises any potential energy savings.



This control uses OpenTherm protocol technology to modulate the Vokèra boiler outlet temperature in order to maintain a specified room temperature, maximising boiler efficiency and comfort levels. Functions include 'Holiday Function', 'Optimisation Function' and 'Info Function'. Advanced technology makes the OpenTherm the most energy efficient control available and can save up to 10% of a home's energy consumption, reducing fuel usage as well as reducing CO<sub>2</sub> emissions.

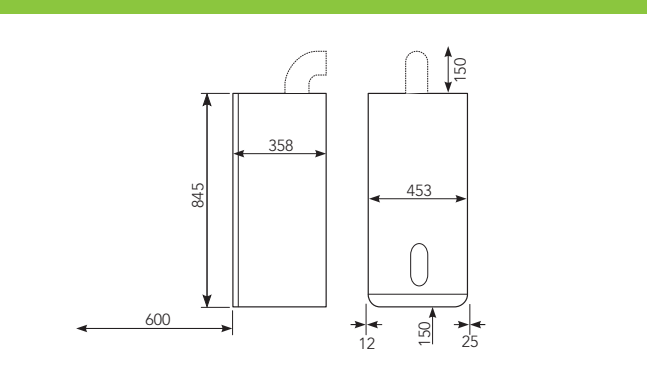
**Code: 611**

## Technical Specifications

SPECIFICATIONS	Linea One 38HE
Product order code	20023491
<b>Central Heating</b>	
Heat input (kw)	30
Maximum heat output @ 60/80 °C (kw)	29.3
Maximum heat output @ 30/50 °C (kw)	32
Minimum heat output @ 60/80 °C (kw)	3.8
Minimum heat output @ 30/50 °C (kw)	3.8
<b>Domestic Hot Water</b>	
Maximum heat input (kw)	38
Minimum heat input (kw)	3.8
Flow Rate - 35°C rise (l/min)	15.6
Minimum flow rate (l/min)	2.0
<b>Weight</b>	
Dry weight (kg)	44
<b>Connections</b>	
Flow & return	22mm
Gas	15mm
DHW hot & cold	15mm
Safety valve	15mm
Condense	21mm
<b>Electrical</b>	
Voltage (V/Hz)	230/50
<b>Flue Details (concentric)</b>	
Maximum horizontal flue length (60/100mm)	3.85m
Maximum vertical flue length (60/100mm)	4.85m
Maximum horizontal flue length (80/125mm)	10m
Maximum vertical flue length (80/125mm)	12m
<b>Flue Details (twin pipes)</b>	
Maximum horizontal flue length (80mm/80mm)	30m/30m
Maximum vertical flue length (80mm/80mm)	30m/30m
<b>Efficiency</b>	
SEDBUK* (%)	90.1 (A)
NOx class	5

\*SEDBUK 2005

## DIMENSIONS AND CLEARANCES (MM)



## ENERGY SAVING CONTROLS AND OPTIONS

Description	Code
OpenTherm RF control	611
Wiring Kit for use with OpenTherm control	1221179
NEW Telescopic flue terminal	29450121
Plume management kit*	522
Plume management kit extension*	29450131

\*Contact Vokèra Technical Helpline for assistance



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