

# RIVA

*a perfect*

COMBINATION  
*of* EFFICIENCY,  
ECONOMY,  
SAFETY AND  
SECURITY.



FULL ELECTRONIC IGNITION

FITTED CLOCK AS STANDARD

AUTOMATIC BY-PASS FITTED

ANTI-SCALE SYSTEM

CONTINUOUS MODULATION

HIGH DOMESTIC HOT WATER FLOW RATE

LPG KITS AVAILABLE

NO COMPARTMENT  
VENTILATION  
REQUIRED



## BIASI

*Combi Boilers, Italian Style.*



# EFFICIENT CENTRAL HEATING INSTANT HOT WATER AT

## HOW DOES A COMBI BOILER WORK EXACTLY?

Unlike a conventional domestic central heating and hot water system, a combi (short for combination) boiler heats water taken directly from the cold mains - but only as you use it.

There's no hot water cylinder in the airing cupboard. No tanks in the loft. And, consequently, none of the connecting pipework which all too often can freeze up, burst and cause floods. Combi boilers, especially those made by Biasi, are very compact and designed to be wall mounted so saving you space and reducing hot water costs into the bargain.

And because a combi supplies hot water at mains pressure, you can enjoy an invigorating powerful shower without having to install a pump!

As for bathing, you don't have to wait ages for a cylinder to heat up either. In fact, you'll be pleasantly surprised at how quickly a Biasi boiler delivers tubfuls of hot water.

## A MODEL TO SUIT EVERY NEED

The Biasi 'Riva' range of combi boilers offers you a choice of outputs from 80,000 Btu/h to 96,000 Btu/h, so there's a model to meet every requirement.

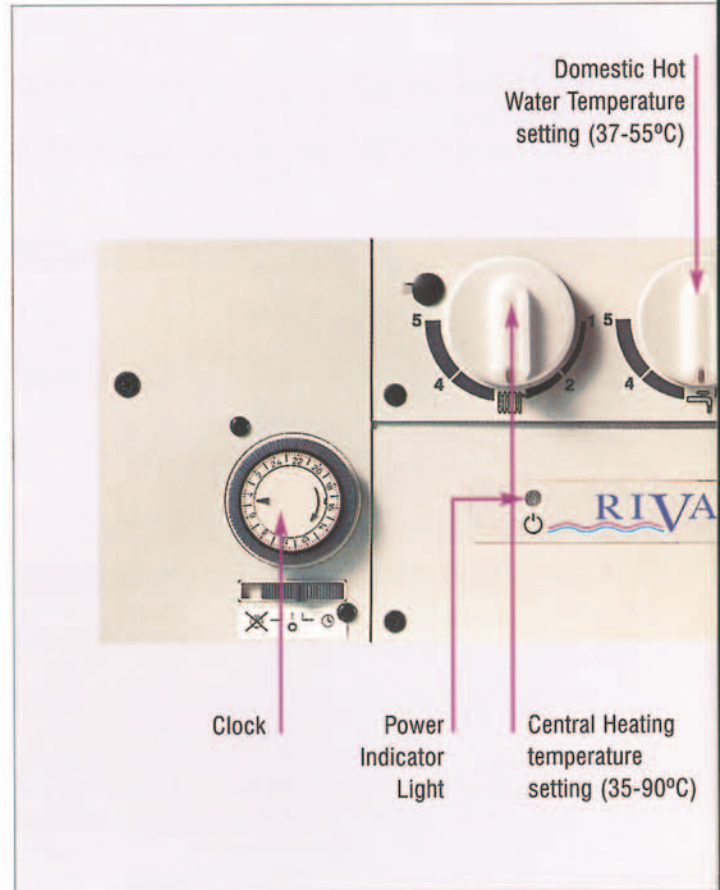
Their supremely high efficiency ratings come from having sealed combustion chambers - a feature developed and perfected over many years by Biasi engineers.

## SAVING YOU SPACE ALL OVER THE PLACE

No hot water cylinder means more room in the airing cupboard. No cold water storage tanks give you more space in the loft.

And the compact design of a 'Riva' combi lets you install it anywhere - in the kitchen, in the utility room...even in the garage! What's more, the elegant Italian styling and beautiful gloss white casing will compliment any décor scheme. It doesn't end there. 'Riva' combis have been designed with flexibility of siting uppermost and now there is no need to provide compartment ventilation when installed in these locations.

A wide choice of flue options are available, these options include vertical and multi-directional room-sealed balanced flues that expel flue gases to the outside via integral fan units.



## SIMPLE CONTROLS SAVE YOU EVEN MORE

All 'Riva' combis have electronic ignition, without a pilot flame, which saves on gas bills of course.

They also come with a fitted time clock as standard so you can control your heating and hot water needs precisely according to the demands of your household.

## SAFE AS HOUSES

'Riva' combi boilers come with all the safety features and devices as standard, unlike many other makes where they are optional 'extras'.

### Anti-Scale System

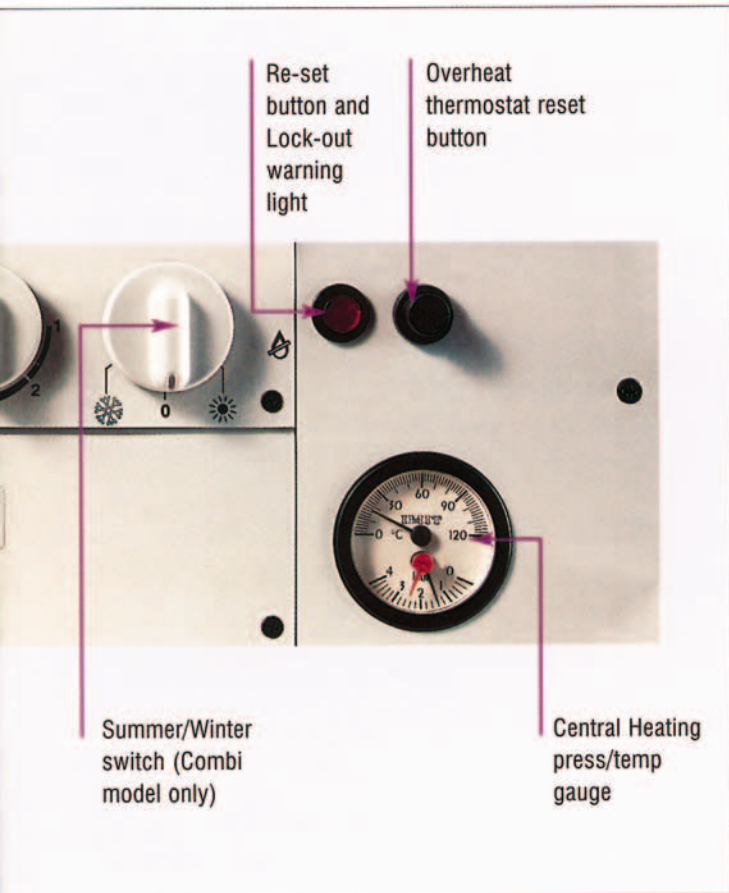
The build-up of limescale in any system can cause problems. With 'Riva' combi boilers (except the 24 SR model) temperature regulation is the key to prevention of limescale.

Temperatures within the critical zone main circuit are kept below 75°C, so restricting scale formation.



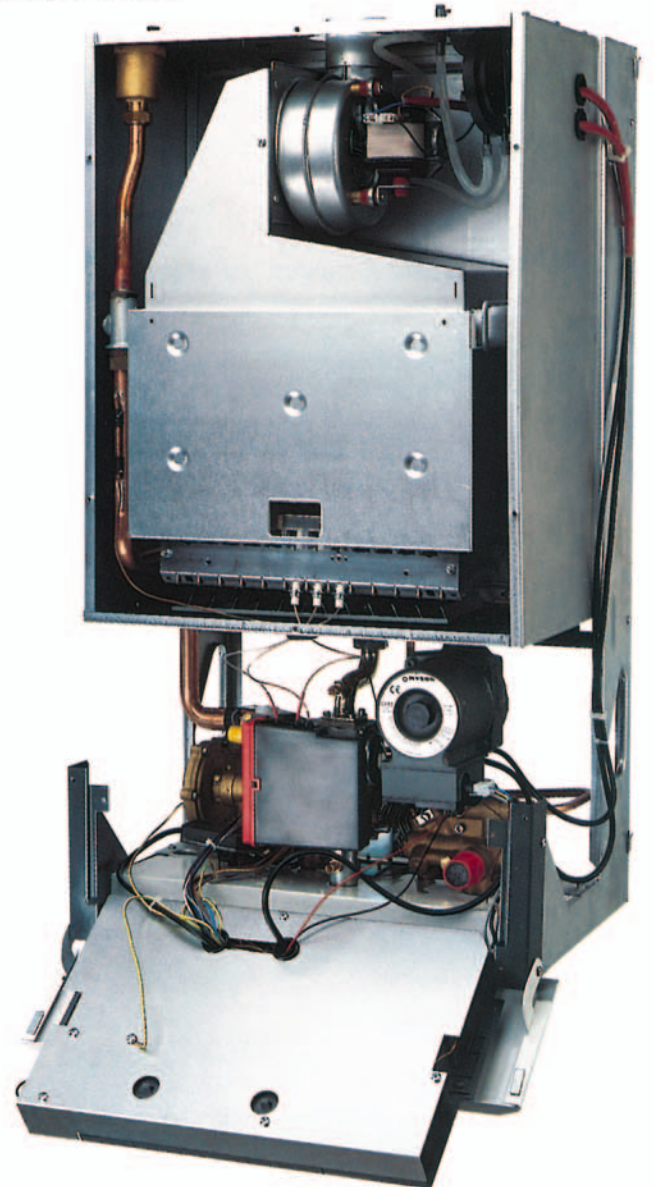
**Domestic H**  
The INOX steel  
exchanger is easy  
delivers hot wa

# CENTRAL HEATING AND THE FLICK OF A SWITCH!



## SO EASY TO INSTALL AND MAINTAIN

With no tank, no cylinder and a lot less pipework to connect them, 'Riva' combi boilers offer you substantial savings on materials as well as installation time and costs. And because they have been designed for easy access to all the main components, servicing time and bills are greatly reduced as well.



And even if it should accumulate, the INOX steel domestic hot water plate exchanger is easy to clean in minutes by your service engineer.

### *Safety Flow Switch*

This is a device, positioned on the main circuit, which monitors the flow and protects the main heat exchanger from thermal shock should the system lack water.

### *Radio Disturbance Immunity*

The electronic p.c.b. is equipped with devices that protect the operation of the boiler from radio frequencies which can be harmful.

### *Temperature Fluctuation ( $\pm 1^{\circ}\text{C}$ )*

A gas valve modulates continuously when operating in both heating and hot water cycles (not on 24 SR model). Because the central heating output can be adjusted during commissioning to match your heating requirements, the temperature fluctuation is always maintained within  $1^{\circ}\text{C}$ .



Hot Water  
D.H.W. plate  
to clean and  
water quickly

## LPG KITS MAKE 'RIVA' COMBIS A NATURAL CHOICE

You don't have to have a natural gas supply to enjoy the advantages of a 'Riva' combi.

One of the real benefits of them is that conversion kits are available for liquid petroleum gas users.



Our policy is one of continued improvement in both design and performance of our products. Biasi therefore reserves the right to alter or amend any details contained in this brochure and any associated literature without prior notification.

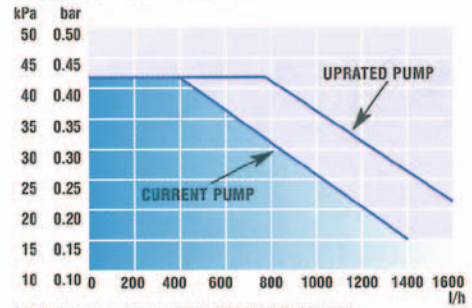
# TECHNICAL CHARACTERISTICS

TECHNICAL DATA		24	24	28
		SR	S	S
<b>CENTRAL HEATING</b>				
Heat Output	kW	24	24	28
	Btu/h	81,883	81,883	95,530
Heat Input	kW	26.6	26.6	31.1
	Btu/h	90,754	90,754	106,107
Minimum Heat Output	kW	9.3	9.3	11
	Btu/h	31,730	31,730	37,530
Efficiency 100% load	%	90	90	90
Efficiency 30% load	%	87	87	87
Temperature Setting Range	°C	35/90	35/90	35/90
Expansion Vessel Capacity	l.	8	8	8
Maximum Working Pressure	bar	3	3	3
Pressure Head	bar	0.35	0.35	0.35
	m. w.c.	3.5	3.5	3.5

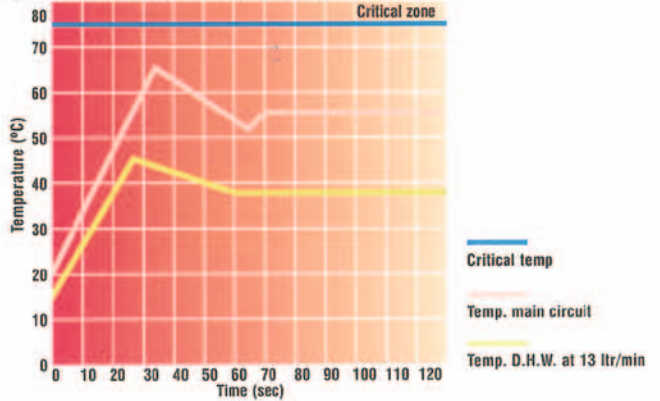
<b>DOMESTIC HOT WATER</b>				
Heat Output	kW	24	28	
	Btu/h	81,883	95,530	
Heat Input	kW	26.6	31.1	
	Btu/h	90,750	106,100	
Temperature Setting Range	°C	37/55	37/55	
Working Pressure max.	bar	10	10	
	min. bar	0.3	0.3	
Flow Rate ( $\Delta t=25^\circ\text{K}$ )	l/min	13.7	16	
Flow Rate ( $\Delta t=35^\circ\text{K}$ )	l/min	9.5	11.4	

<b>OTHER DATA</b>				
Voltage/Frequency	V/Hz	230/50	230/50	230/50
Power	W	150	150	170
Height	mm	800	800	800
Width	mm	450	450	450
Depth	mm	350	350	350
Weight	kg	41	45	48
Inlet/Outlet connections	" / mm	3/4 / 22mm	3/4 / 22mm	3/4 / 22mm
Gas Inlet connection	" / mm	3/4 / 22mm	3/4 / 22mm	3/4 / 22mm
D.H.W. Inlet/Outlet connection	" / mm	1/2 / 15mm	1/2 / 15mm	1/2 / 15mm
Ø flue pipe	" / mm	60/100	60/100	60/100
Maximum horizontal length of flue pipe	m	2.65	2.65	2.65
Clearance requirements: Top and bottom 200mm. Either side 30mm.				

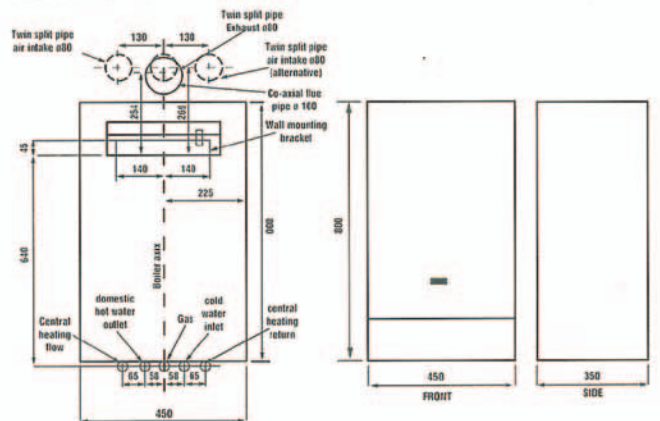
GRAPH 1 - NET PRESSURE HEAD



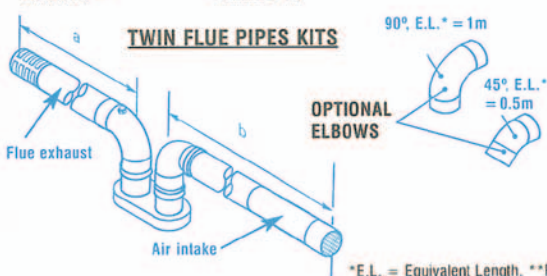
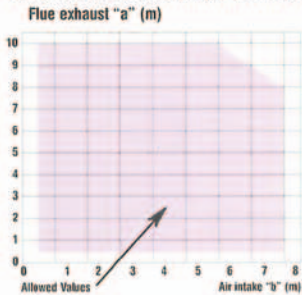
GRAPH 2 - TEMPERATURES WITH ANTI SCALE SYSTEM ( $\Delta t=25^\circ$ )



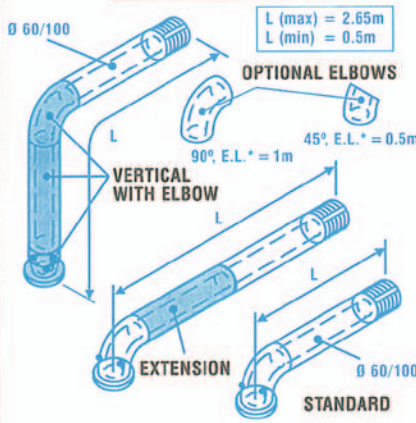
FIXING HOLES AND CONNECTION PIPES POSITIONS



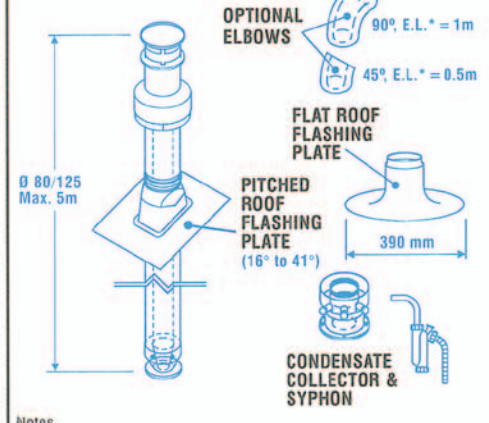
'ALLOWABLE LENGTHS FOR TWIN-SPLIT FLUE PIPE'



HORIZONTAL FLUE KITS



VERTICAL FLUE KITS



Notes

- Maximum 4 bends permitted (45° or 90°) per flue installation.
- When the flue equivalent length\*\* exceeds 3m a Condensate Collector and Syphon are required.

\*E.L. = Equivalent Length. \*\*Flue equivalent length = the total length of any Straight sections of the installed flue system plus the total equivalent length of any elbows fitted.

**CUSTOMER SERVICE HELPLINE**  
For Technical, Service & Spares  
**Tel: 01902 304400**  
**Fax: 01902 307160**



Combi Boilers, Italian Style.



Biasi UK Ltd, Units 31/33 Planetary Road Industrial Estate, Neachells Lane, Willenhall, Wolverhampton, WV13 3XB.

Tel: (Sales) 01902 304304. Fax: 01902 304324.

www.biasi.co.uk

B.0002.B.0202