

# RIVA

*c o m p a c t*

*small in size, big on performance*



# BIASI

*Combi Boilers, Italian Style.*

## Why choose a Biasi Combi Boiler?

*automatic boiler bypass*

*anti-scale control system*

*frost protection system*

*electronic ignition system*

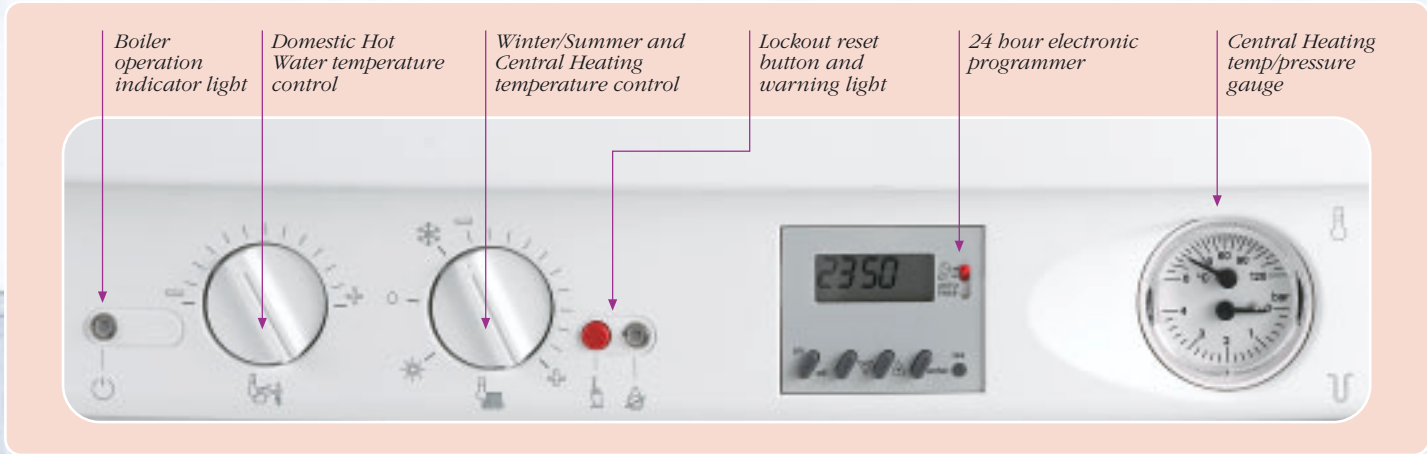
*ultra-compact dimensions*

*24 hour electronic programmer*

*no compartment ventilation required*

- Ultra-compact design
- Elegant Italian styling
- Beautiful, gloss white casing
- Designed to be wall mounted thus saving valuable space
- Hot water supplied at mains pressure
- Wide choice of flueing options including vertical and multi-directional room-sealed balanced flues that expel flue gases to the outside via integral fan units
- New, advanced 24 hour Electronic Programmer
- All Biasi combi boilers are manufactured to comply with all EU Safety Standards
- Choice of 2 outputs from 24.3 kW (82,906 Btu's) to 28.4 kW (96,895 Btu's)

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.



## Simple controls save you even more ...

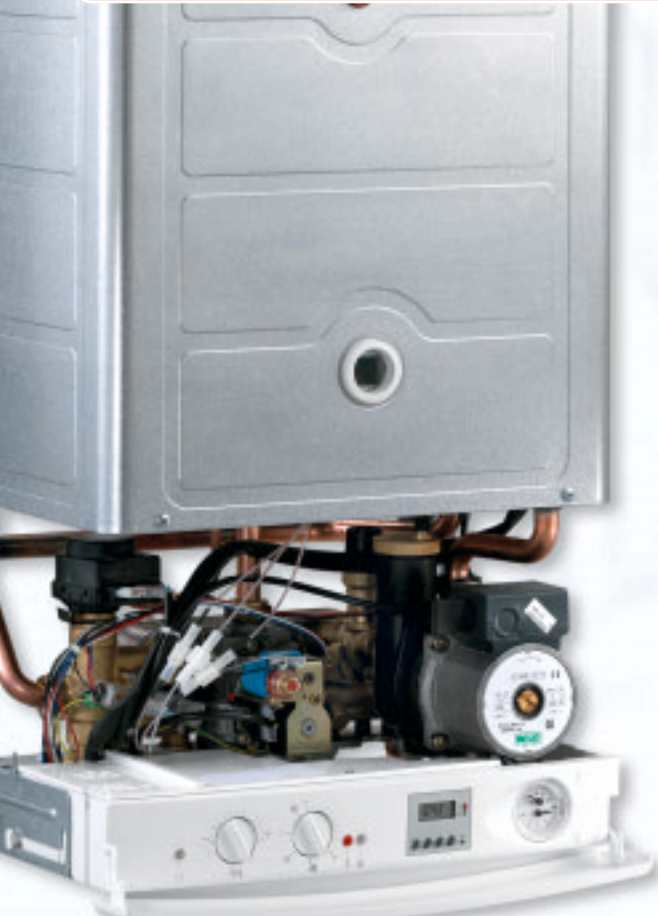
All Riva Compact combi boilers have electronic ignition, without a pilot flame - saving on gas bills. They also come with a fitted 24 hour electronic programmer as standard so you can control your heating and hot water needs precisely according to the demands of your household.

## So easy to install and maintain ...

- No tank or cylinder
- Minimal pipework
- Substantial savings on materials
- Quick & easy installation
- Easy access to all main components
- Servicing time and bills greatly reduced

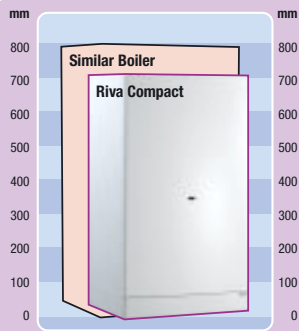
*Concealed Pipework Jig & Pre Pipe Fixing Jig available as additional accessories*

Pipework to the boiler can be completed prior to the boiler installation with the aid of a pre pipe fixing jig. It is also possible to hide the pipework behind the boiler through the use of a concealed pipework jig. Both jigs are available as additional accessories.



*small in size*





*The overall dimensions of the Riva Compact boiler are significantly less than those of similar boilers.*

*See back of leaflet for exact dimensions.*

## *Safe as houses ...*

**Biasi Riva Compact 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 Compact combi boilers, regulation is the key minimising the formation of limescale. Temperatures within the critical zone main circuit are kept below 75°C, so restricting scale formation. 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.

### **Frost Protection System**

All Biasi Riva Compact boilers have an integral frost protection system to prevent frost damage to the boiler occurring when it is located in areas susceptible to very cold weather conditions, for example a garage installation.

### **Boiler Operation Recognition System**

Should the boiler not be used for longer than 24 hours, it then performs a controlled exercise routine, ensuring the motorised components within the boiler do not become inoperable due to lack of use.

### **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. The central heating output can be adjusted during commissioning to match your heating requirements, the temperature fluctuation is always maintained within 1°C.

### **Engineer Diagnostic Information System**

For ongoing maintenance service and repair, the boiler is equipped with a self-diagnostic system which can be readily accessed by the servicing engineer.

## *A natural choice for LPG Kits ...*

You don't have to have a natural gas supply to enjoy the advantages of a Riva Compact combi. One of the real benefits is that conversion kits are available for liquid petroleum gas users.

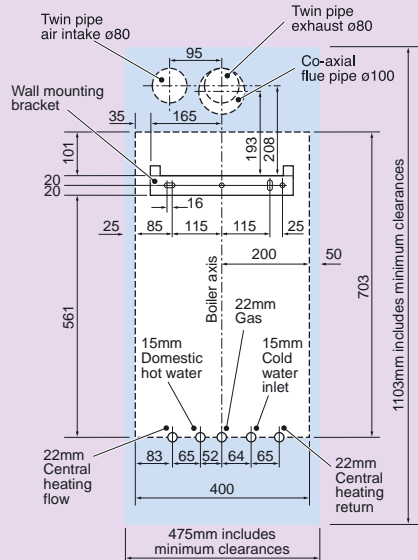
**Service & Support:** Biasi UK aims to provide quality Technical Service & Support. Our Technical Helpline **01902 304400** is available Monday to Saturday for specific telephone advice. In the unlikely event that a service visit is required, our nation-wide network of Service Agents will endeavour to attend within 24hrs (normal working days), or at a mutually agreed time.



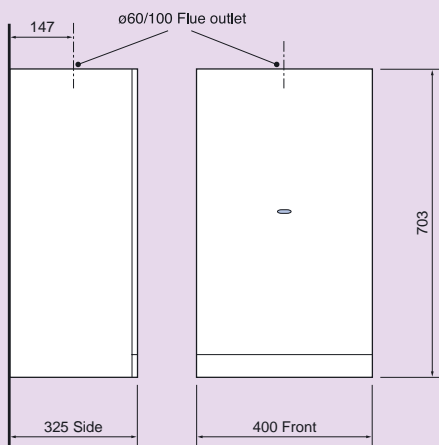
**Combi Boilers, Italian Style.**

*, big on performance*

## Fixing holes and connection pipes positions



**Notes:**  
 Additional concealed pipework and pre pipe fixing kit accessories are available:  
 • Additional Concealed Pipework jig.  
 • Additional Pre Pipe fixing jig.



TECHNICAL DATA		M90E.24S	M90E.28S
<b>CENTRAL HEATING</b>			
Heat Output	kW	24.3	28.4
	Btu's	82,906	96,895
Heat Input	kW	26.6	31.1
	Btu's	90,754	106,107
Minimum Heat Output	kW	9.1	10.8
	Btu's	31,047	36,874
Temperature Setting Range	°C	38/85	38/85
Expansion Vessel Capacity	litres	6	6
Maximum Working Pressure	bar	3.0	3.0
System Cold Fill Pressure	bar	1.3	1.3
Normal Operating Pressure Range	bar	1.3 to 2.7	1.3 to 2.7
Available Pump Pressure (at 1000 litres/hr)	bar m.w.c.	0.3	0.3
		3.0	3.0

<b>DOMESTIC HOT WATER</b>			
Heat Output	kW	24.3	28.4
	Btu's	82,906	96,895
Heat Input	kW	26.6	31.1
	Btu's	90,754	106,107
Temperature Setting Range Normal Working	°C	35/55	35/55
Pressure Range	bar	0.3 to 5.0	0.3 to 5.0
Minimum Working Pressure	bar	0.3	0.3
Maximum Pressure	bar	10.0	10.0
Minimum Flow Rate	l/min	2.5	2.5
Flow Rate (30° rise)	l/min	11.1	13.3
Flow Rate (35° rise)	l/min	9.5	11.5

OTHER DATA			
Voltage/Frequency	V/Hz	230/50	230/50
Power	W	150	170
Height	mm	703	703
Width	mm	400	400
Depth	mm	325	325
Weight	kg	37	39
C.H. Inlet & Outlet Connections	mm"	22/ 3/4	22/ 3/4
Gas Inlet Connection	mm"	22/ 3/4	22/ 3/4
D.H.W. Inlet & Outlet Connections	mm"	15/ 1/2	15/ 1/2
Standard Flue Pipe ø (Nominal Length 750mm)	mm	60/100	60/100
Maximum Horizontal Length of Flue Pipe	m	3.0	3.0
Minimum Horizontal Length of Flue Pipe	m	0.5	0.5

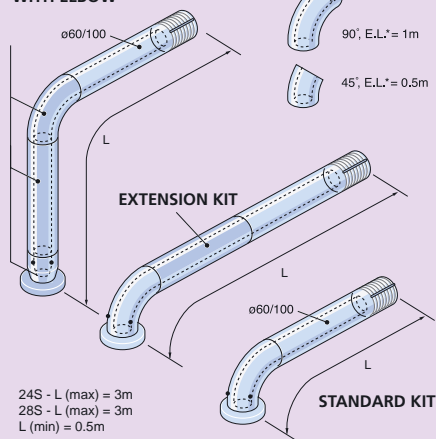
See Boiler Accessories Brochure for Specific Flue Component Details.

EFFICIENCY		
SEDBUK Rating	D	D
Building Regulations - Part L compliant		

CLEARANCE REQUIREMENTS		
Top and Bottom		200mm
Left Hand Side		25mm
Right Hand Side		50mm
Minimum Front Clearance requirement in Operation		50mm
Minimum Front Clearance requirement for Servicing and Maintenance		600mm

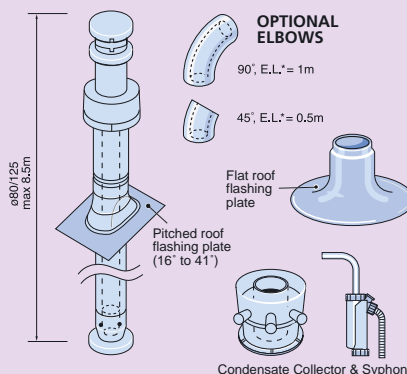
## Horizontal flue kits

### VERTICAL KIT WITH ELBOW



### OPTIONAL ELBOWS

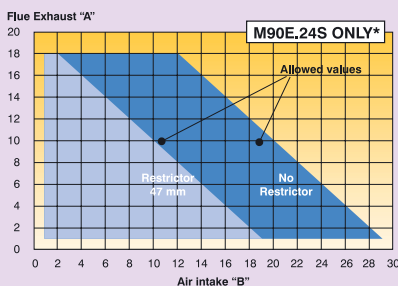
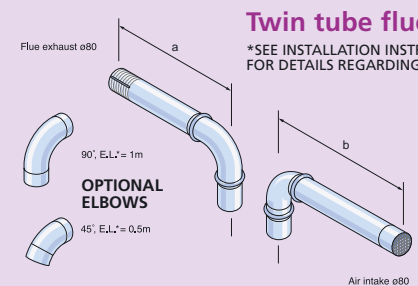
## Vertical flue kits



**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.

## Twin tube flue kits

\*SEE INSTALLATION INSTRUCTIONS FOR DETAILS REGARDING M90E.28S



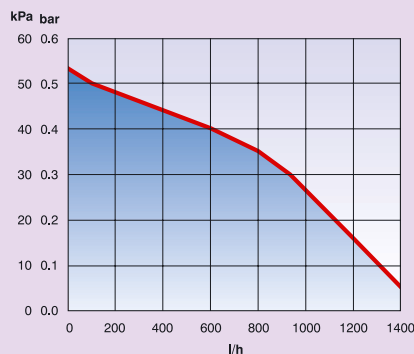
Combi Boilers, Italian Style.

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

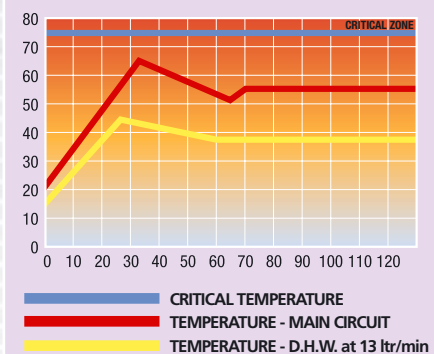
Tel: (Sales) **01902 304304**  
 Fax: (Sales) **01902 304321**  
 Web: [www.biasi.co.uk](http://www.biasi.co.uk)



## AVAILABLE PUMP PRESSURE



## TEMP. WITH ANTI-SCALE SYSTEM (Δt = 25 °C)



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.