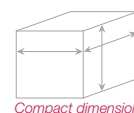


ACTIVA



Wall hung condensing boilers





Activa

Activa HIGH EFFICIENCY BOILER RANGE

The Activa range is the latest generation of advanced high efficiency gas boilers from BIASI.

Amongst one of the most compact boilers available today Activa provides the higher A Rated efficiency to give you lower fuel bills. Three Combination Boiler models are available at 25, 30 and 35 kW and three System Boilers at 18, 25 and 30 kW.

Also available in the range are open vent boilers, available in 12, 15, 20 and 25 kW.

All models are equipt with cutting edge quad processor technology- meaning, if the boiler develops a fault, it thinks of a way to work without shutting down completely.

"A" RATED FOR EFFICIENCY

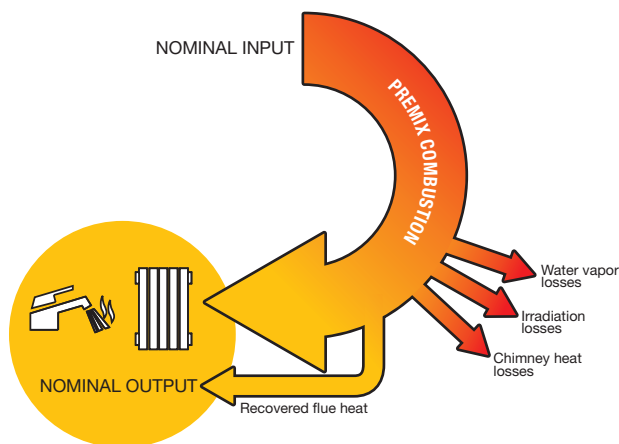
Changes to the UK Building Regulations in April 2005 made it compulsory that all new and replacement boilers installed have to be high efficiency condensing boilers.

Activa achieves the higher 'A' rating (over 90%) on the SEDBUK scheme which is the efficiency rating scheme for all boilers available in the UK.

In addition the advanced pre-mix combustion technology of Activa ensures it conforms to the strictest standards for reducing polluting NOx and CO2 emissions giving further consideration to the environment.

THE CONDENSING PROCESS

The high efficiency (HE) Activa condensing boiler captures much more of the heat produced by the burned gas before it is discharged through the flue system into the atmosphere. With a condensing boiler these flue gases are at a much lower temperature than those from a standard boiler as more of their energy is used to heat the water. During this process condensation produces water which is captured and then drained automatically from the boiler via a pipe to a suitable drain point.



Advantages for the user

ActivA is the NEW high efficiency A rated boiler from BIASI, designed to provide you with:



Significant savings on fuel bills.



Lowest levels of polluting (NOx).



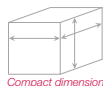
A range of optional controls for improved comfort and increased efficiency.



SEDBUK rated 'A' for efficiency with superb performance and reliability.



High level of comfort and generous hot water flow up to 14 litres x minute (at 35 deg rise).



Installation flexibility, even in cupboards, due to the compact dimensions.



Warranty of FIVE YEARS covering parts and labour.

DIGITAL CONTROL PANEL

The advanced control interface is simple to use and allows the user adjustment of central heating (CH) and hot water (DHW) temperatures.

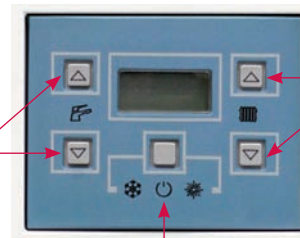
The clear display functions in 3 different modes

1 – INFORMATION showing current operating temperatures. Also the outside temperature when used with the optional compensation control.

2 – PROGRAMMING User adjustment of water temperature parameters (CH & DHW)

3 – ENGINEERS MODE For installer and technical support to make necessary setting adjustments and carry out function tests.

A flame icon also signifies when the burner is ignited and self-diagnostic codes provide fault or servicing information.



CH temperature selector

DHW temperature selector

Function selector reset button

CONTROLLER RANGE OPTIONS

A range of optional controls for improved comfort and increased efficiency. SEDBUK rated 'A' for efficiency with superb performance and reliability. Many siting possibilities, even in cupboards, due to the compact dimensions.



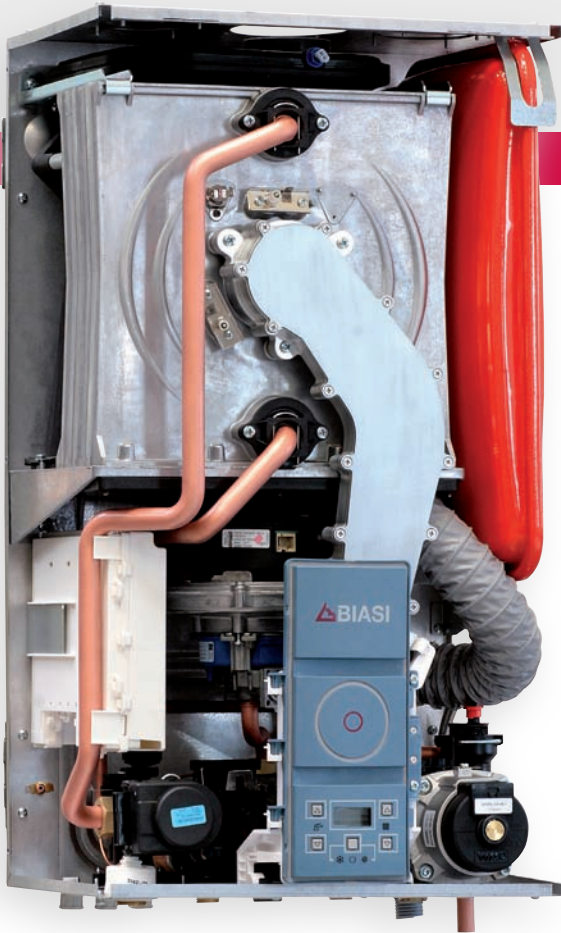
Biasistat complete boiler management control. A hard-wired remote that not only represents the boilers main interface anywhere in the property but also brings a whole host of functions and additional energy saving options to the house owner.



Outside Temperature Sensor when connected to the ActivA boiler will automatically regulate the water temperature of the heating system in response to weather and changes in outside temperature. As well as providing further fuel savings it ensures optimum comfort levels.



Plug-in mechanical clock option. A simple pre-wired connection and mounting in the boiler fascia.



Activa

TECHNICAL OPERATING FEATURES

The Activa boiler contains a host of advanced technical features including a specially developed microprocessor control ensuring efficient and reliable operation.

- Full pre-mix burner with modulation control in both heating and water modes , constantly matching output to demand.
- Electronic flame ignition with adjustable re-ignition sequence to prevent lock outs.
- Anti-seize function automatically activating motorised components (pump, diverter, fan) during periods of in-operation to prevent seizing.
- Frost protection feature sensing low temperatures to prevent freezing.
- Fault display alert in case of operation problems.
- New 'Hydroblock' section featuring motorised diverter valve, flow /pressure sensor, magnetic water flow switch. Ensuring safety and reliability.
- Automatic built in by-pass to protect boiler during low flow rates (eg all radiator valves closed)
- Electronic controls to IP44 and radio disturbance protection.

NEW MULTIPASS CONDENSING HEAT EXCHANGER

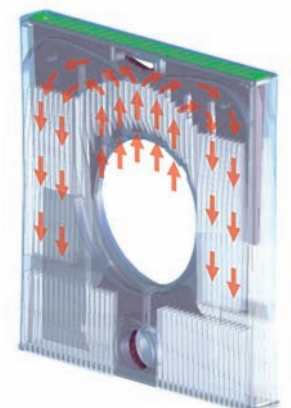
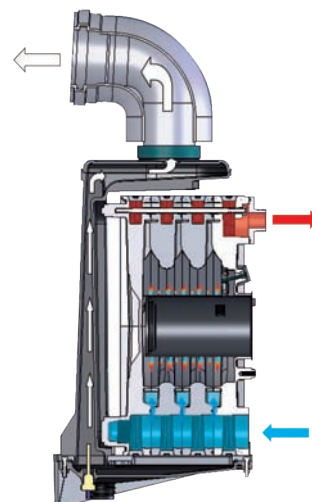
Specially developed for the Activa range the new 'multipass' condensing heat exchanger is constructed from several sections, depending on boiler output, of die cast pressure moulded aluminium.

This high quality aluminium-silica alloy is chosen for its excellent heat transfer properties and resistance to corrosion. The Activa heat exchanger carries a FIVE YEAR warranty against failure during normal operation.

The flue gas is forced in a unidirectional path through numerous finned channels, firstly upwards for maximum heat exchange and then forced downwards to extract further usable heat. Condensation forms in this bottom section due to the lower temperature of the flue gas and is collected and drained through the siphon.

Central heating water flows through the heat exchanger in a counter direction for maximum efficiency. The many water channels provide a very low water resistance compared with other heat exchangers and a constant velocity can be maintained to ensure further efficiency.

Internal view of the main heat exchanger.



Flue path in the single section

Technical features

TECHNICAL INSTALLATION FEATURES

All isolation valves are supplied with pre-formed copper tails for easy connection. The filling loop is also provided for simple assembly to the valves saving further time.

The pre-fixing kit allows for the system to be connected and tested prior to the boiler being fitted. **Included in the box.**

A 'stand -off' bracket means pipework can be routed upwards behind the boiler when required. **This is an optional extra.**

Combi models are provided pre-wired with 1.5 m of cable to minimise electrical work. Plug-in time controls can be mounted easily in the boiler fascia.

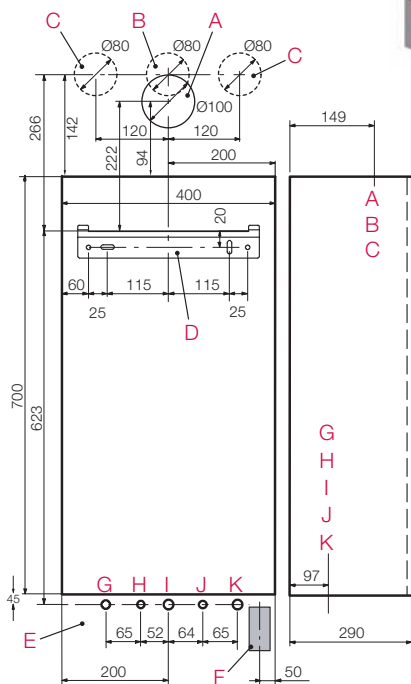
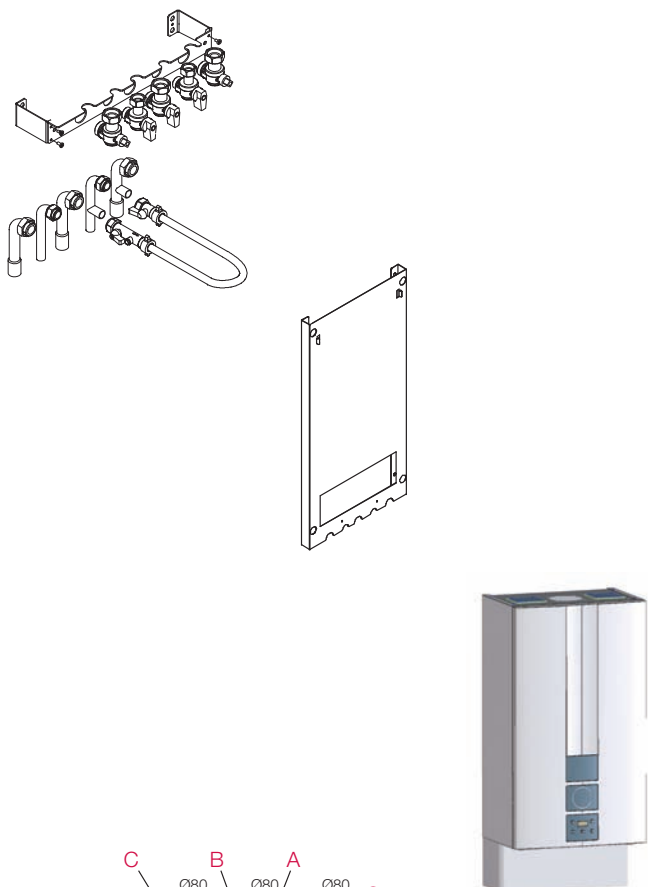
All valves and pipework can be neatly concealed behind a white pipe cover which is available. **This is an optional extra.**

FIXING HOLES & CONNECTION PIPES POSITION

- A. Flue outlet / air intake pipe (co-axial \varnothing 100/60 mm)
- B. Flue outlet pipe \varnothing 80 mm (twin kit)
- C. Air intake pipe \varnothing 80 mm (twin kit)
- D. Bracket
- E. Electric connections area
- F. Condensate drain connection area
- G. C.H. flow
- H. D.H.W. outlet
- I. Gas
- J. D.C.W. inlet
- K. C.H. return

A siphon is fitted within the boiler to collect condensate liquid from the condensing heat exchanger.

ACTIVA		18Kw S	25Kw S&C	30Kw S&C	30Kw C
Weight Combi	kg		35	38	38
Weight System	kg	33.5	36.5	36.5	
		12Kw OV	15Kw OV	20Kw OV	25Kw OV
Weight Open Vent	kg	27	27	27	27
C/H flow and return	mm	22	22	22	22
Gas inlet connections	mm	22	22	22	22
DHW inlet & outlet connections	mm	15	15	15	15
Condensate drain (plastic)	mm	25	25	25	25



Combination System Dimensions
 Height 700mm x Width 400mm x Depth 290mm
 Activa OV Dimensions
 Height 590mm x Width 400mm x Depth 290mm

Activa

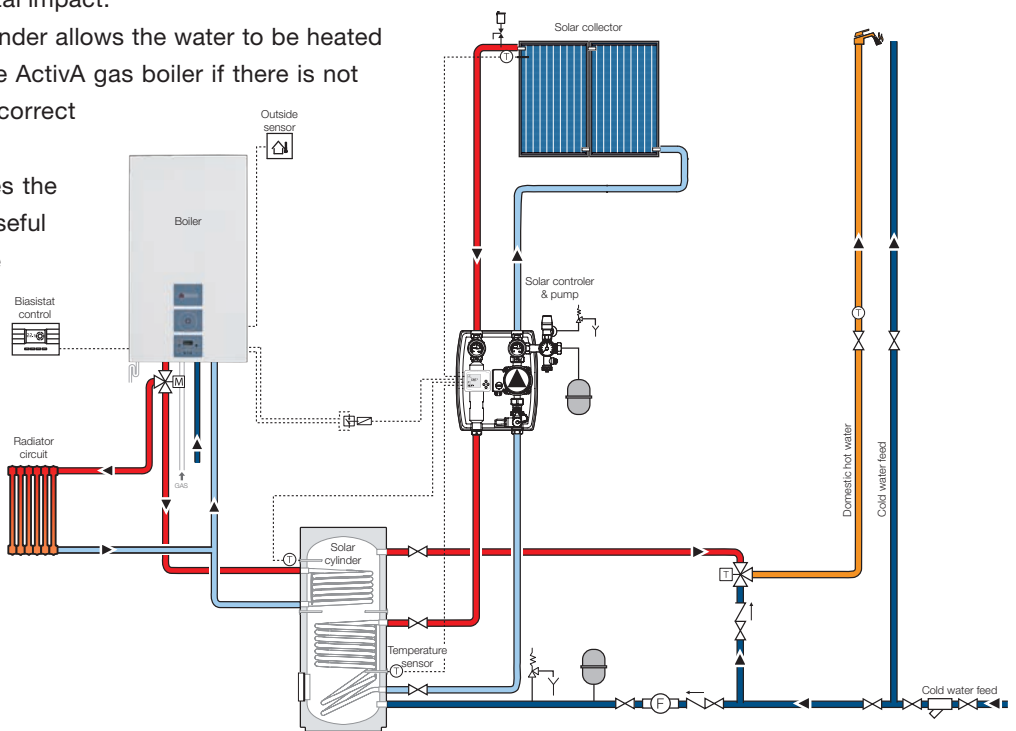
SOLAR SYSTEM

The Activa system boiler can be combined with a solar hot water system to provide a highly efficient and environment friendly system.

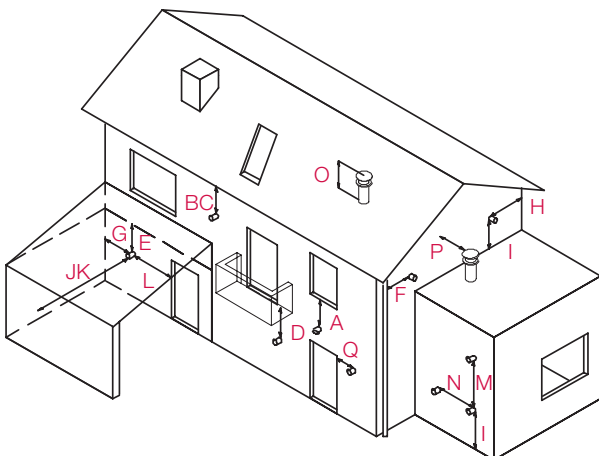
The pre-mix technology used in Biasi condensing boilers reduces polluting emissions and fuel consumption. When combined with a solar hot water system further significant savings on fuel costs can be made as well as decreasing the environmental impact.

A double coil inside the hot water cylinder allows the water to be heated using the available solar energy or the Activa gas boiler if there is not enough sun, always ensuring the correct comfort level.

An integrated solar controller activates the solar system pump when it detects a useful temperature difference between the solar collector and the domestic water in the cylinder.



FLUE CLEARANCE REQUIREMENTS



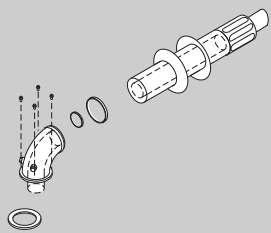
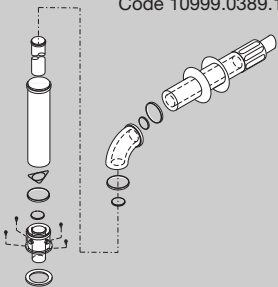
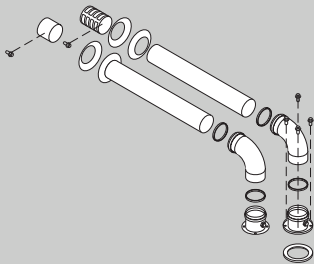
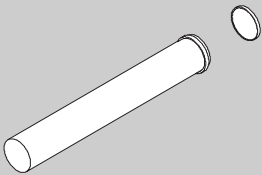


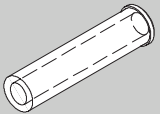
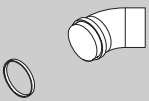
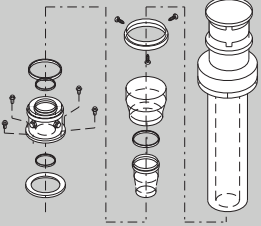
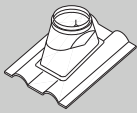

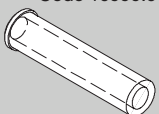
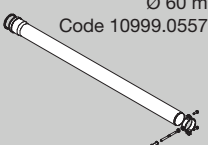
*Wherever practicable to do so, the flue should be extended beyond the perimeter of the balcony.

**Consideration should be given to adding protection against condensate to the adjacent structure.

CLEARANCE REQUIREMENTS		mm
A	Directly below a window or other opening	300
B	Below gutters, soil pipes or drain pipes	75
C	Below eaves	200
D	Below balconies*	600
E	Below car port roof	NO
F	From vertical drain pipes and soil pipes	150
G	From internal corners**	450
H	From external corners	300
I	Above ground or balcony level	300
J	From a surface facing a terminal	600
K	From a terminal facing a terminal	1200
L	From an opening in the car port (e.g. door, window) into dwelling	NO
M	Vertically from a terminal in the same wall	1500
N	Horizontally from a terminal in the same wall	300
O	Above the roof pitch with roof slope less than or equal to 30°	350
O	Above the roof pitch with roof slope more than 30°	600
P	From wall face	600
Q	From, above or to side of an opening	300

Flueing options

FLUEING OPTIONS AND ACCESSORIES

CO-AXIAL KIT		TWIN KIT	
Horizontal coaxial flue kit Ø 60 / 100 mm Code 10999.0387.1		Coaxial flue kit with vertical extension Code 10999.0389.1	
Twin kit Ø 80 mm Code 10999.0393.1		Extension Ø 80 mm Code 10999.0394.1	
Coaxial 90° elbow Ø 60 / 100 mm Code 10999.0390.1	Coaxial 45° elbow Ø 60 / 100 mm Code 10999.0391.1	Extension Ø 60 / 100 mm Code 10999.0388.1	90° elbow FM Ø 80 mm Code 10999.0395.1
			45° elbow FM Ø 80 mm Code 10999.0396.1
	Max flue length 35 C = 6 m / 25 C - 30 C = 10.0 m*		Total combined length possible 35 C = max 25 m / 25 C - 30 C = max 40 m
Min flue length 0.5 m*	90° 1.0 m E.L.		min 0.5 m
45° 0.5 m E.L.	90° 1.65 m E.L.		45° 0.90 m E.L.
Coaxial roof kit Ø 80 / 125 mm Code 10999.0392.1	ROOF KIT 	Coaxial 90° elbow Ø 80 / 125 mm Code 10999.0408.1	PLUMING KIT Pluming kit Code 10999.0556.0
Pitched roof flashing plate for roof kit Ø 80 / 125 mm Code 10999.0252.1		Coaxial 45° elbow Ø 80 / 125 mm Code 10999.0409.1	90° elbow FM Ø 60 mm Code 10999.0558.0
Flat roof flashing plate for roof kit Ø 80 / 125 mm Code 10999.0280.1		Extension Ø 80 / 125 mm Code 10999.0407.1	45° elbow FM Ø 60 mm Code 10999.0559.0
	Extension Ø 60 mm Code 10999.0557.0		Max vertical flue length 35 C = 6 m / 25 C - 30 C = 10.0 m*
Max pluming kit length 35 C = 9 m / 25 C - 30 C = 15.0 m*	90° 1.0 m E.L.	90° 0.85 m E.L. (Ø 60 mm)	45° 0.65 m E.L. (Ø 60 mm)
90° 1.00 m E.L. (Ø 60/100 mm)	45° 0.50 m E.L. (Ø 60/100 mm)	90° 1.00 m E.L. (Ø 60/100 mm)	45° 0.50 m E.L. (Ø 60/100 mm)

* Refer to specific boiler installation instructions for conformation of the flue arrangements

E.L. = Equivalent flue length

TECHNICAL DATA

ACTIVA		25 C	30 C	35 C	18 S	25 S	30 S	12 OV	15 OV	20 OV	25 OV
CENTRAL HEATING											
Heat input	kW	20.0	25.0	30.0	18.0	25.0	30.0	12.0	15.0	20.0	25.0
Maximum heat output at 60/80°C	kW	19.5	24.5	29.2	17.6	24.5	29.2	11.8	14.7	19.5	24.5
Maximum heat output at 30/50°C	kW	20.7	25.6	30.7	18.5	25.6	30.7	12.4	15.5	20.7	25.6
Seasonal efficiency rating - SEDBUK	%	90.2 (A)	90.2 (A)	90.2 (A)	90.3 (A)	90.2 (A)	90.2 (A)	90.1 (A)	90.0 (A)	90.3 (A)	90.3 (A)
Minimum / Maximum heating temperature	° C	25 / 85	25 / 85	25 / 85	25 / 85	25 / 85	25 / 85	25 / 85	25 / 85	25 / 85	25 / 85
Minimum / Maximum heating pressure	bar	0.35 / 2.5	0.35 / 2.5	0.35 / 2.5	0.35 / 2.5	0.35 / 2.5	0.35 / 2.5	na	na	na	na
OTHER DATA											
Low NOx class 5 emissions		√	√	√	√	√	√	√	√	√	√
NOx emissions	mg/kW	35	44	47	35	44	47	29	34	34	44
Electric protection	IP	X4D	X4D	X4D	X4D	X4D	X4D	X4D	X4D	X4D	X4D
LPG conversion kit available		10999.0823.0	10999.0825.0	10999.0824.0	10999.0823.0	10999.0825.0	10999.0824.0	10999.0823.0	10999.0823.0	10999.0823.0	10999.0825.0
Nominal voltage / Power consumption	V / W	230 / 140	230 / 140	230 / 140	230 / 140	230 / 140	230 / 140	230 / 140	230 / 140	230 / 140	230 / 140
Anti pluming flue kit available		√	√	√	√	√	√	√	√	√	√
7 day time control		Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Self diagnostic display visualized		√	√	√	√	√	√	√	√	√	√
Full flame modulation +- 1 deg C		√	√	√	√	√	√	√	√	√	√
*Built-in frost protection		√	√	√	√	√	√	*√	*√	*√	*√
Pipe space frame option for rear piping		Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
*Anti-seize component protection		√	√	√	√	√	√	√	√	√	√
Anti-cycling control		√	√	√	√	√	√	√	√	√	√
Ventilation free compartment installation		√	√	√	√	√	√	√	√	√	√
Multi directional flueing options		√	√	√	√	√	√	√	√	√	√
Pre-piping kit available		√	√	√	√	√	√	na	na	na	na
Power consumption on std by	W	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85

*If a permanent live power supply is provided



This catalogue replaces the previous one.

In consistently improving its products, BIASI S.p.A. reserves the right to modify the data set out in this catalogue at any time and without any prior notification.

Biasi boilers are manufactured in one of Europe's most advanced facilities and over many years have earned a deserved reputation for quality and reliability.

Each boiler and its components is individually tested to exacting performance standards before leaving the factory.

Biasi UK provides nationwide customer service for fast and efficient response to after sales requests. Several extended warranty and servicing options are available. Genuine replacement parts are readily available from a network of country wide stockists.

