



THE EVOLUTION OF THE SPECIES

RINNOVA ADAPTIVE FAST

VIKING

RINNOVA ADAPTIVE TANK

RINNOVA ADAPTIVE TANK 150

RINNOVA ADAPTIVE TANK 200

RINNOVA ADAPTIVE WALL

RinNova Adaptive Fast

HIGH-EFFICIENCY
CONDENSING BOILERS
with micro-storage tank



THE EVOLUTION IN DOMESTIC HOT WATER COMFORT



Integrated
micro-storage tank



Immediate sanitary
hot water



The evolution of the species in the service of comfort

THE EVOLUTION OF THE SPECIES RinNova Adaptive

The new solutions for comfort

01 RinNova Adaptive FAST

Wall-mounted condensing combination boiler with heat exchanger/micro-storage tank

02 Viking

Wall-mounted condensing boiler for outdoor installation

03 RinNova Adaptive TANK

Wall-mounted condensing combination boiler with **60-litre** internal storage tank

04 RinNova Adaptive TANK 150

Floor-standing condensing combination boiler with **150-litre** external storage tank

05 RinNova Adaptive TANK 200

Floor-standing condensing combination boiler with **200-litre** internal storage tank

06 RinNova Adaptive WALL

Condensing boiler for recessed/niche installation

The evolution of the species is the complete new range of Biasi heat generators, with Gas Adaptive technology (which allows them to adapt to different types of gas), able to cover all requirements and guarantee the highest level of efficiency.

RinNova Adaptive FAST

RinNova Adaptive FAST is the new wall-mounted condensing combination boiler with micro-storage tank. The FAST function means it always has a reserve of **hot water ready for use**.

The four-litre storage tank is integrated in the boiler body. The electronic regulation manages a preheat temperature for the sanitary domestic hot water on the basis of the set temperature, with the possibility to regulate the storage tank water preparation temperature.



**INNOVATIVE
DESIGN**

**INTEGRATED MICRO-
STORAGE TANK**



NEW FEATURES:



Gas Adaptive Technology

lower consumption, greater efficiency, lower emissions

The innovative Adaptive Gas technology, which all models in the Rinnova range are equipped with, allows the boilers to adapt automatically to different types and qualities of gas. As well as detecting the flame, the electrode also detects the characteristics of the gas and automatically adapts the combustion parameters to maintain maximum

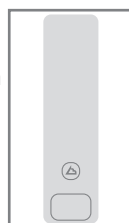
efficiency, with a consequent reduction in consumption and emissions compared to traditional control systems. The Gas Adaptive system makes the boiler ready for operation with any type of gas without any modifications.



Option for class A+ energy rating with iControl system

maximum energy efficiency

All models in the Rinnova Adaptive range are also available in the comprehensive "iControl" option, the climate control unit which modulates the water temperature according to the room and external temperature; thanks to the Wi-Fi system and the Biasi Connect App, this makes it possible to manage the heating system remotely with a smartphone, guaranteeing the user the maximum level of environmental comfort, optimising consumption, and raising the energy class of the boiler to A+.



iControl system



For a more sustainable environment

less plastic for a circular economy

An important element that has guided the entire design phase of the new Rinnova Adaptive boiler is a strong focus on the circular economy. This is why we have used components with a higher recycling rate, eliminating the use of plastic as much as possible. The plastic assembly,

for example, has been replaced with a brass assembly, which is fully recyclable. What's more, the front panel is no longer in plastic, but rather pressed steel.



Plastic ~~Brass~~ hydraulic unit



New extended warranty









Discover the new warranty extension **program 3 / 3 years extra**

The evolution of the species in the service of comfort



RinNova Adaptive FAST

Wall-mounted condensing combination boiler with heat exchanger/micro-storage tank

-  MODULATION 1:9
-  25 kW - 30 kW
-  HEATING FLUID
-  SANITARY DHW
-  12.8 - 14.7 L/min
Domestic hot water production
-  NATURAL GAS / LPG
Single model, suitable for both natural gas and LPG
-  GAS ADAPTIVE
-  ENERGY CLASS
with iControl system



CLASS NOx 6



WI-FI READY



PLASTIC FREE



APP BIASI CONNECT

110%

SUPER BONUS

65%

ECO BONUS

50%

CONSTRUCTION WORK

50%

BONUS CASA

RinNova Adaptive FAST

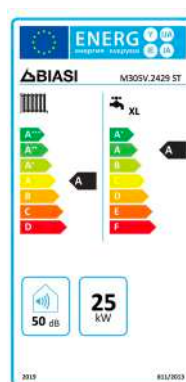
RinNova Adaptive FAST is the new range of BIASI wall-mounted condensing combination boilers with heat exchanger/micro-storage tank.

Immediate comfort

Thanks to its modern lines, it is easily installable in domestic environments and features a high level of comfort in terms of sanitary hot water production. The exclusive **sanitary DHW heat exchanger** with four-litre micro-storage tank ensures immediate supply of hot water, even with small draw-offs, and high temperature stability.

The **innovative electronic system** which manages the combustion is able to adapt independently to different gas types, guaranteeing safe, efficient combustion at all times.

Available in **25 kW and 30 kW** combi models, with dimensions of **800 x 400 x 385 mm**.

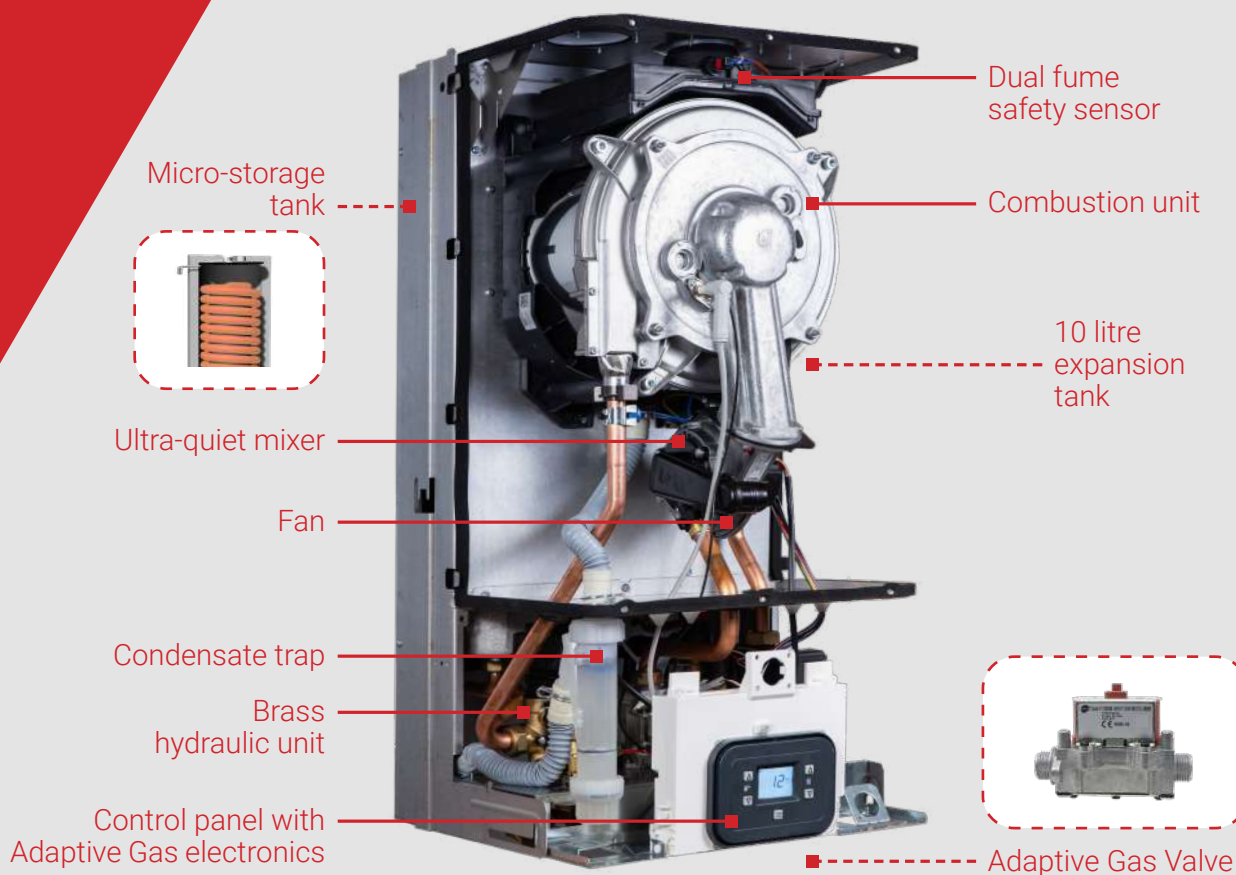


Tax credits and incentives

Both versions of RinNova Adaptive Fast are **energy class A** appliances, and thus eligible to meet requirements for tax credits and/or incentives in some countries.

- The RinNova Adaptive Fast A+ versions (incorporating the iControl system) are **energy class A+**, in other words the highest energy efficiency level achievable with a boiler.

| RinNova Adaptive FAST | |
|-----------------------|------------------------------|
| | Description |
| | RINNOVA ADAPTIVE FAST 25S |
| | RINNOVA ADAPTIVE FAST 30S |
| | RINNOVA ADAPTIVE FAST 25S A+ |
| | RINNOVA ADAPTIVE FAST 30S A+ |



Advantages

10 litre expansion tank

High level of DHW comfort

Heat exchanger with micro-storage tank

Immediate hot water response

High temperature stability

High level of modulation up to 1:9 / with e-garc
(combustion control -> low CO and NOx emissions)

Electronic combustion control = low NOx emissions

FAST function: the temperature of the storage tank varies on the basis of the DHW setpoint, but it is also possible to increase the maintenance temperature of the storage tank as desired. Can be programmed with the advanced control system to define the hours of use

New ultra-low noise mixer

Low-consumption modulating circulation pump

Pressure transducer

Reading of DHW flow rate with operation down to 2.0 l/min

New Heat Exchanger/Micro-Storage Tank: a solution for unique levels of comfort

The exclusive DHW heat exchanger with micro-storage tank offers storage of four litres of hot water, guaranteeing the immediate availability of sanitary hot

water without the oscillations of a normal instantaneous boiler during the start-up phase; it is made from steel and copper with EPS insulation to reduce heat losses in stand-by, an exclusive system which keeps the heat exchanger/micro-storage tank at temperature at all times. During DHW demand, the boiler switches to instantaneous production in accordance with the demand from the terminal devices, following which it is already at the set temperature, ready for the next draw-off.

Control Panel Operation

Winter/Summer/Off selector

Heating temperature regulator

DHW temperature regulator

Digital pressure reading

Screen display of DHW and heating temperature

Display of fault diagnostics, lockout conditions and fault log

Display of recommended filling and filling guide

Display of annual servicing expiry

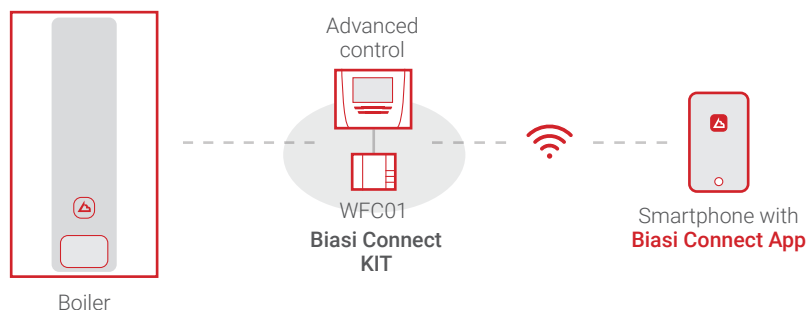
DHW pre-heating enablement

FAST function: DHW storage tank preheating

Remote temperature control



Comfort at your fingertips with the "Biasi Connect" KIT and App



Biasi Connect

Thanks to the Biasi Connect App, it is possible to control the boiler remotely. To use it is necessary to have the Biasi Connect KIT in addition to the advanced remote control (the latter is required to make use of the Ecobonus 65% incentive in Italy).

The advanced control system (class V) allows the water flow temperature of the system to be modulated according to the room temperature and the outside temperature.

What are the advantages?

- Reduced consumption, energy savings and extreme flexibility: flexible control to meet individuals' needs and daily habits. You can also adjust the hot water temperature with a simple click.
- Awareness of your system: you can always check correct operation of the boiler in real time.
- Safety: Any faults can be seen in real time, together with the corresponding error code. This allows for immediate intervention, even remotely where possible.



The "BIASI Connect" Kit is a WiFi connection device which is connected to the domestic WLAN network; it allows room temperature regulation and boiler operation to be controlled both locally and remotely via our dedicated APP.



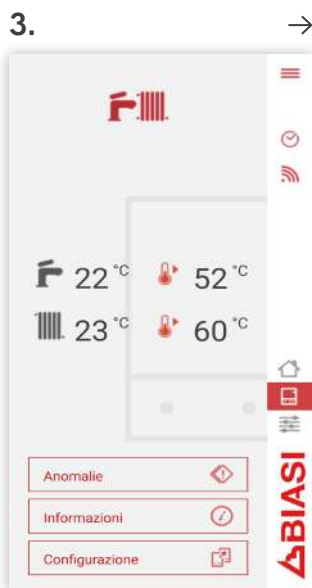
SIMPLICITY OF INSTALLATION AND USE

1. The "home" screen shows the room temperature and system status. On the right is the side menu.

2. Device timing allows you to set a period of time for which it is possible to vary the status of the system and temperatures.

3. The "Boiler" screen displays the status of the temperatures and other information about the boiler.

4. Example of an error reported by the App, with explanatory text.



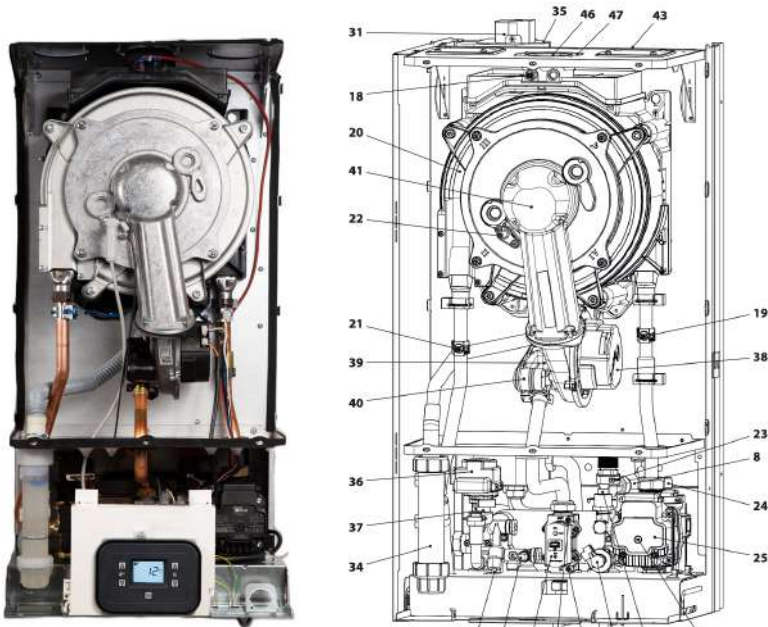
For the installation of the "BIASI Connect" kit and for the configuration and use of the the use of the App, please consult the "Biasi Connect" instruction, installation and use manual.

The App can be downloaded from your device's store:



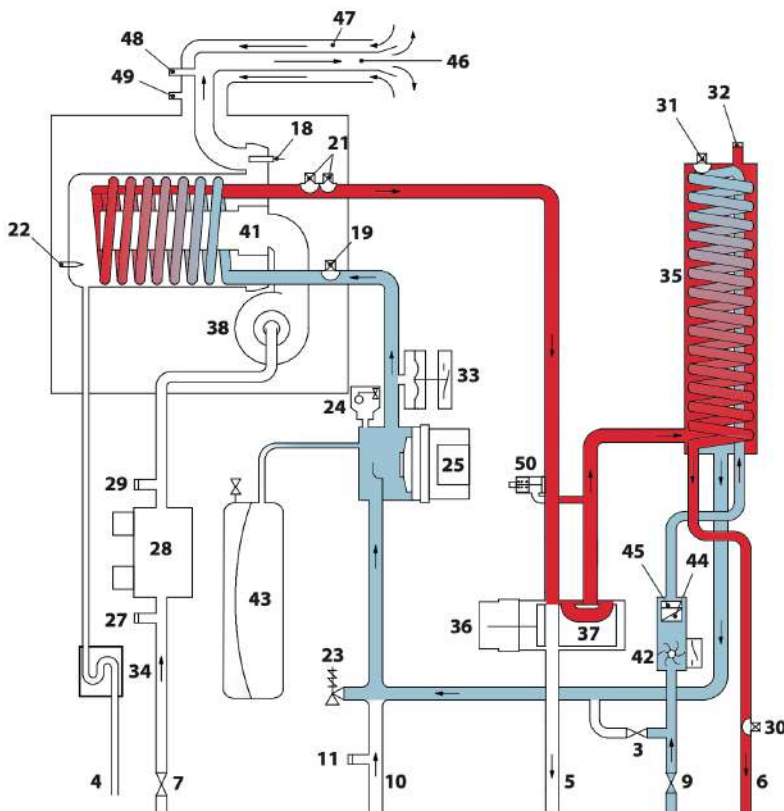
System components and diagram

General Layout



3. Heating circuit filling cock
4. Condensate discharge line
5. Heating flow line
6. Sanitary DHW outlet
7. Gas cock
8. Heating circuit safety valve discharge line
9. Cold water inlet cock
10. Heating return line
11. Heating circuit drain cock
18. Fume NTC sensor and fume thermal fuse
19. Heating return NTC sensor
20. Primary condensing heat exchanger
21. Heating flow NTC sensor - Max temperature NTC
22. Flame detection electrode / Ignition electrode
23. Safety valve (3 bar)
24. Automatic bleed valve
25. Pump
26. Pump bleed cock
27. Gas valve inlet pressure port
28. Gas valve
29. Gas valve outlet pressure port
30. Sanitary DHW NTC sensor
31. Micro-storage tank NTC sensor
32. Micro-storage tank manual bleeder
33. Heating transducer
34. Condensate discharge trap
35. Sanitary DHW micro-storage tank
36. Three-way valve
37. Three-way valve shutter
38. Fan
39. Air/Gas mixer
40. Silencer
41. Burner
42. Sanitary DHW flow meter
43. Expansion tank
44. Sanitary DHW filter
45. Sanitary DHW flow rate limiter (optional)
46. Fume discharge duct
47. Air intake duct
48. Fume test port
49. Air test port
50. Integrated bypass

System Diagram



Operating principle with FAST system operational



| Technical Data | | RinNova Adaptive FAST | |
|---|----------|-----------------------|-----------------|
| | | 25 S | 30 S |
| Nominal heating/DHW heat input | kW | 21.0 / 26.0 | 25.0 / 30.0 |
| Minimum heat input for heating/DHW | kW | 3.0 / 3.0 | 3.0 / 3.0 |
| Maximum usable heating/DHW power 60°/80°C * | kW | 20.7 / 25.6 | 24.6 / 29.5 |
| Minimum usable heating/DHW power 60°/80°C * | kW | 2.9 / 2.9 | 2.9 / 2.9 |
| Maximum usable heating/DHW power 30°/50°C ** | kW | 22.7 / 28.2 | 26.9 / 32.3 |
| Minimum usable heating/DHW power 30°/50°C ** | kW | 3.2 / 3.2 | 3.2 / 3.2 |
| Quantity of condensate at Q.nom. 30°/50°C (in heating mode) ** | l/h | 4.2 | 4.8 |
| Quantity of condensate at Q.min. 30°/50°C (in heating mode) ** | l/h | 0.5 | 0.5 |
| Condensate pH | | 4.0 | 4.0 |
| Nom. efficiency 60°/80°C * | % | 98.6 | 98.4 |
| Min. efficiency 60°/80°C * | % | 95.1 | 95.1 |
| Nom. efficiency 30°/50°C ** | % | 108.3 | 107.7 |
| Min. efficiency 30°/50°C ** | % | 105.6 | 105.6 |
| Efficiency at 30 % load ** | % | 109.8 | 109.7 |
| Energy efficiency η_s | % | 94 | 94 |
| Thermal losses at the flue with burner in operation | Pf (%) | 1.2 | 1.3 |
| Thermal losses at the flue with burner turned off ΔT 50°C | Pfbs (%) | 0.2 | 0.3 |
| Thermal losses to the environment through the casing with the burner in operation | Pd (%) | 0.7 | 0.7 |
| NOx class | no. | 6 | 6 |
| Weighted NOx [Hs] *** | mg/kWh | 48 | 51 |
| Minimum/maximum heating temperature **** | °C | 25 / 80 | 25 / 80 |
| Minimum/maximum heating pressure | bar | 0.3 / 3.0 | 0.3 / 3.0 |
| Available heating head (at 1000 l/h) | mbar | 340 | 340 |
| Expansion tank capacity (total/usable) | l | 10 | 10 |
| Minimum/maximum DHW temperature | °C | 35 / 55 | 35 / 55 |
| Minimum/maximum DHW pressure | bar | 0.5 / 10.0 | 0.5 / 10.0 |
| Maximum flow rate ($\Delta t = 25$ K) / ($\Delta t = 35$ K) | l/min | 15.3 / 10.7 | 17.6 / 12.3 |
| Specific DHW flow ($\Delta t = 30$ K) ***** | l/min | 12.8 | 14.7 |
| Voltage/power draw at nominal heat input | V~/ W | 230 / 100 | 230 / 124 |
| Power draw at minimum heat input | W | 52 | 52 |
| Power draw in stand-by | W | 3 | 3 |
| Ingress protection | no. | IPX5D | IPX5D |
| Minimum/maximum flue gas temperature# | °C | 41 / 78 | 41 / 82 |
| Minimum/Maximum flue gas mass flow rate # | kg/s | 0.0014 / 0.0121 | 0.0014 / 0.0139 |
| Minimum/maximum air mass flow rate # | kg/s | 0.0013 / 0.0116 | 0.0013 / 0.0134 |
| Max. length of coaxial flue outlet (\varnothing 60/100 mm / \varnothing 80/125 mm) | m | 10 / 12 | 10 / 12 |
| Max length of twin flue exhaust (\varnothing 80+80 mm) | m | 40 | 40 |
| Height x Width x Depth | mm | 800 x 400 x 385 | 800 x 400 x 385 |
| Weight | kg | 44 | 44 |
| Water content of the boiler | l | 5.4 | 5.4 |

* With return water temperatures that do not allow condensation. ** With return water temperatures that allow condensation.
 *** With coaxial flue outlet \varnothing 60/100 L 0.9 m and G20 natural gas. **** At minimum usable power. ***** With reference to EN 625.
 # Values relate to tests with 80 mm 1 + 1 twin flue and G20 natural gas.



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