

MICROGENUS

WALL-HUNG ELECTRONIC IGNITION GAS COMBINATION BOILER



**COMPACT DESIGN -
OUTSTANDING PERFORMANCE**





ARISTON MICROGENUS - SMALL IN SIZE, AMPLE IN COMFORT



with optional
5 year extendable
guarantee

The *microGENUS* combines the most advanced central heating and domestic hot water production technologies into an extremely competitive product, with minimised dimensions, that can be located almost anywhere. This quiet, reliable and durable boiler is covered by a 2 year guarantee that can be extended to 5 years.



MICROGENUS – DEVELOPED FROM 50 YEARS OF ARISTON QUALITY

The *microGENUS* comes closer to satisfying your needs and is the result of Ariston's extensive experience within the domestic appliance sector where it has been a leading brand for over 50 years, this demonstrates our ability to anticipate consumer demands.

The manufacturing process that guarantees the quality of Ariston boilers has ISO 9001 certification. Produced on recently built manufacturing lines where each process is constantly tested, checked and subjected to strict Quality Control to guarantee the long-life and the absolute reliability of each boiler.

For any further needs that may arise after installation, Ariston places the best in technical support and customer service at your disposal, offering swift and highly qualified assistance.

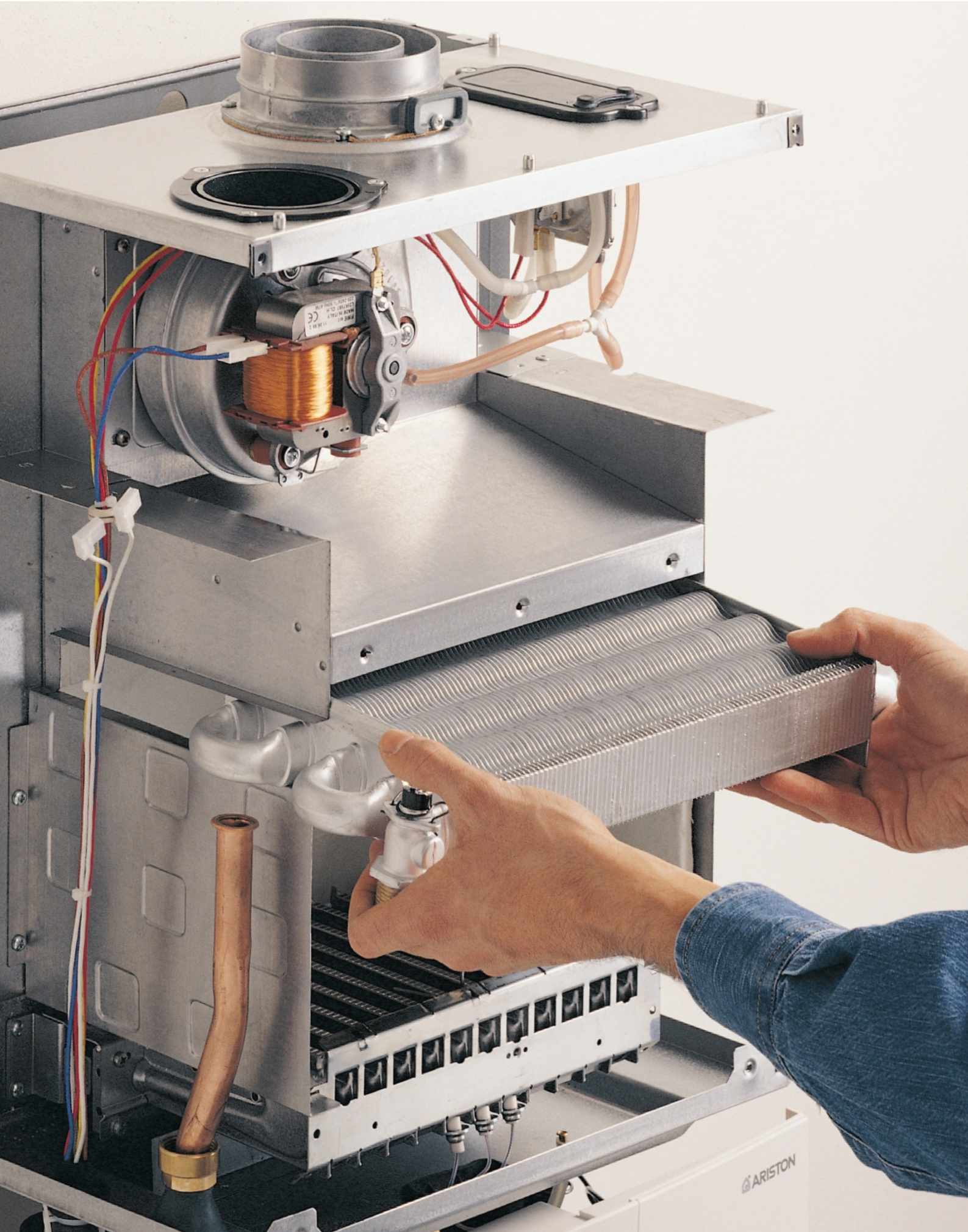
CONTROL PANEL - FUNCTIONALITY WITH EASE OF USE

The *microGENUS* control panel has all the controls that you need and has been designed for easy and instinctive operation. It features an Economy/Comfort switch that allows you to immediately select instant hot water.

The panel also features temperature adjustment knobs and lights that indicate the boiler's operating status.



**Ariston works
to Benchmark standards**



MICROGENUS - SMALL, LIGHT AND EASY TO INSTALL

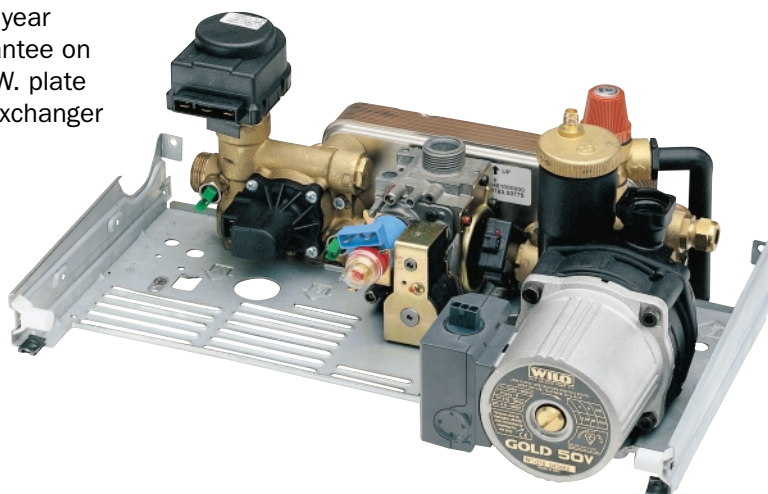
In its continuous attention to installer requirements, Ariston has instilled the best technical and design solutions into the *microGENUS*, to make its installation easier and possible in extremely tight spaces.

The *microGENUS* is in fact only 30 cm deep and weighs just 35 kg, allowing easy handling by a single person. The flue system is designed to simplify the problems related to installation saving time while improving efficiency. Servicing and Maintenance are made simple and rapid thanks to easy access to all components, outlets for the analysis of combustion products and the revolutionary new PCB with micro processor system that allows all of the boiler functions to be tested.

The front panel can be easily dismantled by removing a single screw!



5 year
guarantee on
D.H.W. plate
heat exchanger



THE CHARACTERISTICS OF A BOILER WITH LARGER DIMENSIONS WITHOUT ANY COMPROMISES

With the *microGENUS*, Ariston has increased the level of quality and performance that is normally achieved by boilers of much larger dimensions. It is a product that is decidedly different from others offered on the market that need to sacrifice quality or performance to reduce dimensions.

The *microGENUS* is equipped with an anti-frost device, an hour-by-hour programmable time clock, an anti-scale system and a comprehensive range of accessories.



WALL-HUNG GAS COMBINATION BOILER ROOM-SEALED COMBUSTION CHAMBER

- Compact dimensions (300x400x700 mm)
- Aesthetically pleasing design
- Available in 80,000 or 95,000 Btu/h
- Fully modulating in C.H./D.H.W. with an accuracy to $\pm 1^\circ\text{C}$
- High performance: High efficiency
- Government Standard Assessment Procedure (SAP) efficiency rating up to 80.3%
- Comfort switch (pre-heat function)
- D.H.W. flow rate of up to 11.2 l/min (2.6 gal/min) (95,000 Btu/h version)
- Anti-frost and anti-scale device
- Built-in automatic by-pass
- Built-in mechanical time clock
- Coaxial flue system up to 4 m, twin pipe flue system up to 27 m
- Split exhaust and intake pipes for built-in combustion analysis
- Direct access to air pressure switch and relative signal
- D.H.W. stainless steel plate heat exchanger guaranteed for 5 years
- 2 year manufacturer's guarantee
- Guarantee extendable up to 5 years



Fully modulating



Electronic ignition



D.H.W. plate heat exchanger



Automatic by-pass



C.H. Temp adjustment



High efficiency



D.H.W. Temp adjustment



P.C.B. adjustment



IPX4D



Anti-frost device



Anti-scale device

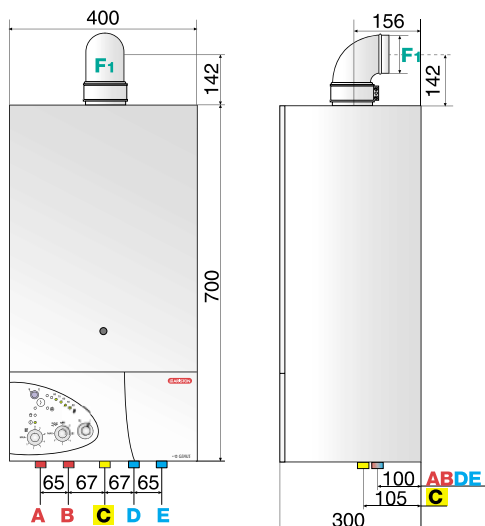


Insufficient system pressure shutdown

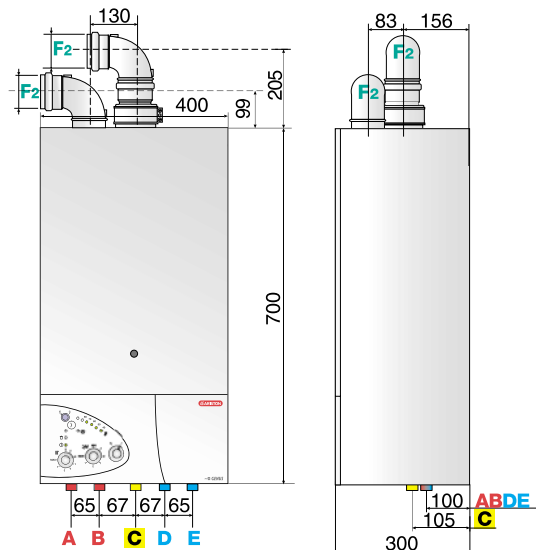
CLEARANCE DIMENSIONS - PIPE FITTINGS - EXHAUST OUTLETS

| | A Central heating flow | B Domestic hot water outlet | C Gas inlet | D Domestic hot water inlet | E Central heating return | F Flue (\emptyset mm) |
|---------------------------|----------------------------------|---------------------------------------|-----------------------|--------------------------------------|------------------------------------|--|
| MICROGENUS 23 MFFI | \emptyset 3/4" BSP | \emptyset 1/2" BSP | \emptyset 3/4" BSP | \emptyset 1/2" BSP | \emptyset 3/4" BSP | \emptyset mm G ₁ 60/100 - G ₂ 80 |
| MICROGENUS 27 MFFI | \emptyset 3/4" BSP | \emptyset 1/2" BSP | \emptyset 3/4" BSP | \emptyset 1/2" BSP | \emptyset 3/4" BSP | \emptyset mm G ₁ 60/100 - G ₂ 80 |

Coaxial exhaust



Twin pipe exhaust



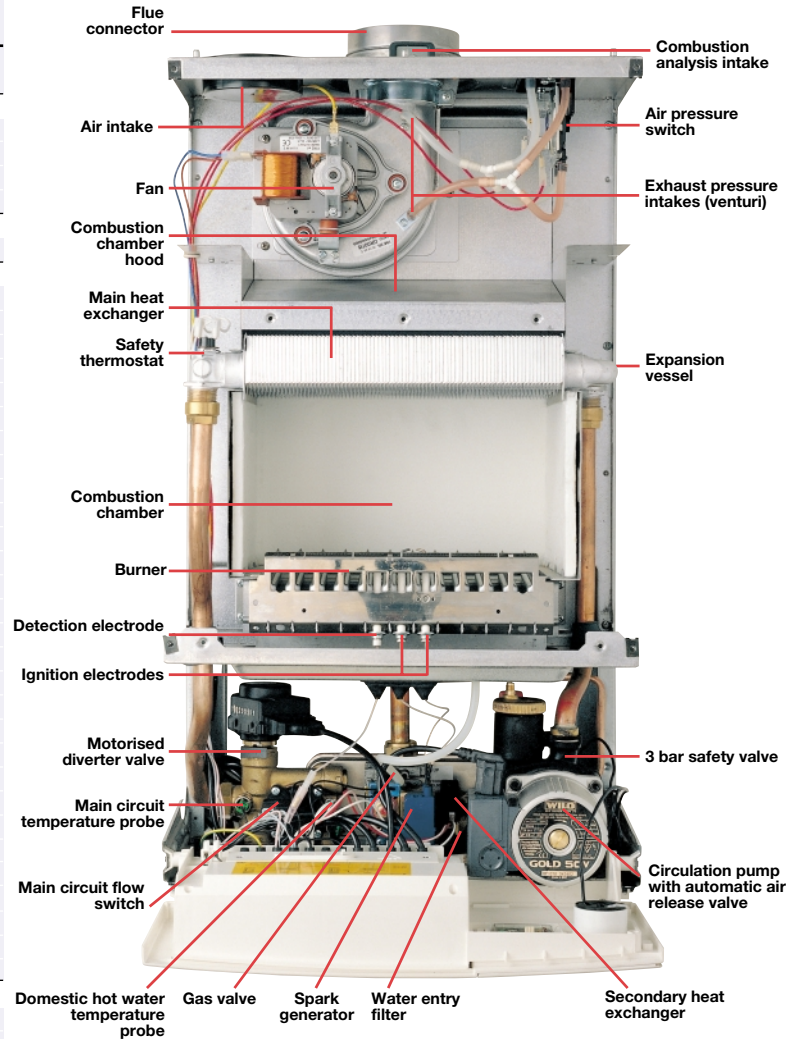
TECHNICAL INFORMATION

MICROGENUS MICROGENUS 23 MFFI 27 MFFI

| Category | II 2H3+ | II 2H3+ C* | C* |
|---|-------------------|---------------|----------------|
| POWER | | | |
| Heat input max. | kW - Btu/h | 25.6 - 88,000 | 29.8 - 101,700 |
| Heat input min. | kW - Btu/h | 11.0 - 37,500 | 12.0 - 41,000 |
| Heat output max. | kW - Btu/h | 23.8 - 81,300 | 27.8 - 95,000 |
| Heat output min. | kW - Btu/h | 9.7 - 32,000 | 10.5 - 36,000 |
| EFFICIENCY | | | |
| SEDBUK Rating | Band | D | D |
| CHARACTERISTICS | | | |
| Heat loss to the casing ($\Delta T = 50^\circ\text{C}$) | % | 1.0 | 0.2 |
| Heat loss through the flue when burner on | % | 6.1 | 6.3 |
| Heat loss through the flue when burner off | % | 0.4 | 0.4 |
| Maximum exhaust discharge (Natural Gas) | kg/h | 49.5 | 60 |
| Residual discharge head | mbar | 0.96 | 1.60 |
| Consumption at nominal capacity G20 ⁽¹⁾ | m ³ /h | 2.72 | 3.15 |
| Gas consumption after 10 minutes* (15°C, 1013 mbar) G30-G31 ⁽¹⁾ | kg/h | 2.02/2.00 | 2.34/2.31 |
| Exhaust gas temperature at nominal capacity | °C | 123 | 123.8 |
| CO ₂ content | % | 7.2 | 6.9 |
| O ₂ content | % | 7.5 | 8.1 |
| CO ₂ content (0% O ₂) | ppm | 51.9 | 48 |
| Minimum ambient temperature | °C | +5 | +5 |
| Pressure loss through boiler (max) ($\Delta T = 20^\circ\text{C}$) | mbar | 200 | 200 |
| Residual head of system | bar | 0.25 | 0.25 |
| Central heating temperature | max/min C° | 82/42 | 82/42 |
| Domestic hot water temperature | max/min C° | 56/36 | 56/36 |
| D.H.W. flow rate $\Delta T = 35^\circ\text{C}$ | l/min | 9.7 | 11.4 |
| D.H.W. flow rate $\Delta T = 35^\circ\text{C}$ | gal/min | 2.2 | 2.6 |
| D.H.W. minimum flow rate | l/min | 2.6 | 2.6 |
| Domestic hot water pressure | max/min bar | 8/0.2 | 8/0.2 |
| Built-in expansion vessel capacity | l | 6 | 6 |
| Built-in expansion vessel pre-charged pressure | bar | 1 | 1 |
| Maximum water content of system | l | 130 | 130 |
| Maximum heating pressure | bar | 3 | 3 |
| Gas inlet pressure - Natural Gas (G20) | mbar | 20 | 20 |
| Gas inlet pressure - LPG (G30-G31) | mbar | 30-37 | 30-37 |
| Weight | Kg | 34 | 35 |
| G.C. number | | 47-116-14 | 47-116-15 |
| ELECTRICAL DATA | | | |
| Electrical supply | V/Hz | 230/50 | 230/50 |
| Power consumption | W | 140 | 155 |
| Protection grade of electrical system | IP | X4D | X4D |
| Internal fuse rating | | FAST 2 AT | FAST 2 AT |

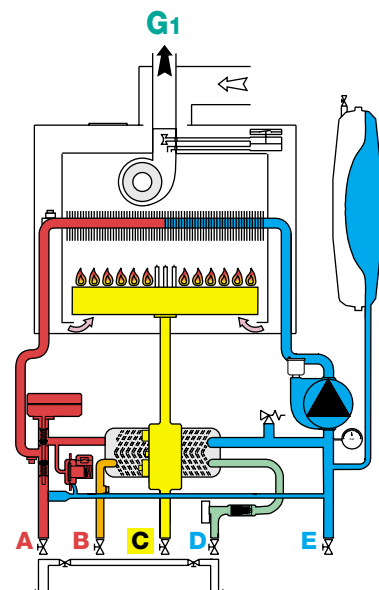
C*: C12, C32, C42, C52, C82; ⁽¹⁾: 15°C, 1013 mbar

*: Calculated at 70% maximum output

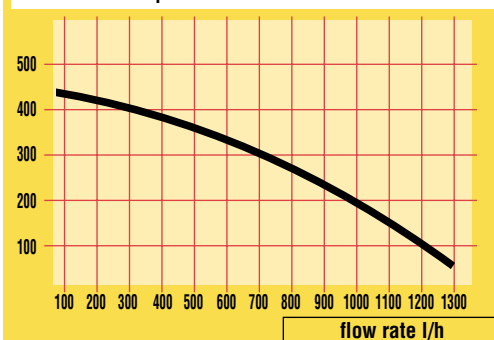


SCHEMATIC

ROOM-SEALED FAN FLUE 23 MFFI - 27 MFFI

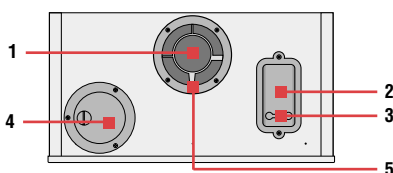


Graph of boiler residual head



FLUE EXHAUST CONNECTION SYSTEM (room-sealed fan flue version)

1. Simplified coaxial system coupling.
2. Air pressure switch can be accessed directly from the exterior.
3. Check the pressure switch is functioning directly from the exterior.
4. Separation of the intake.
5. External combustion analysis points integrated into the boiler.



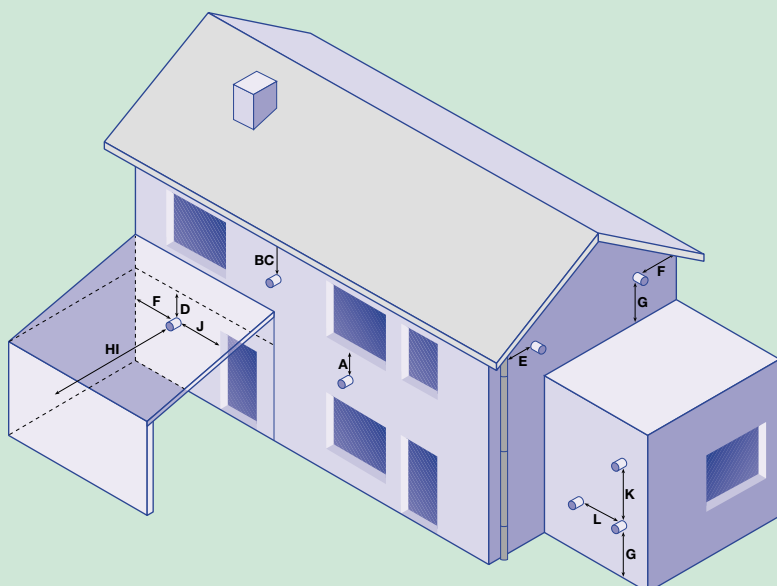
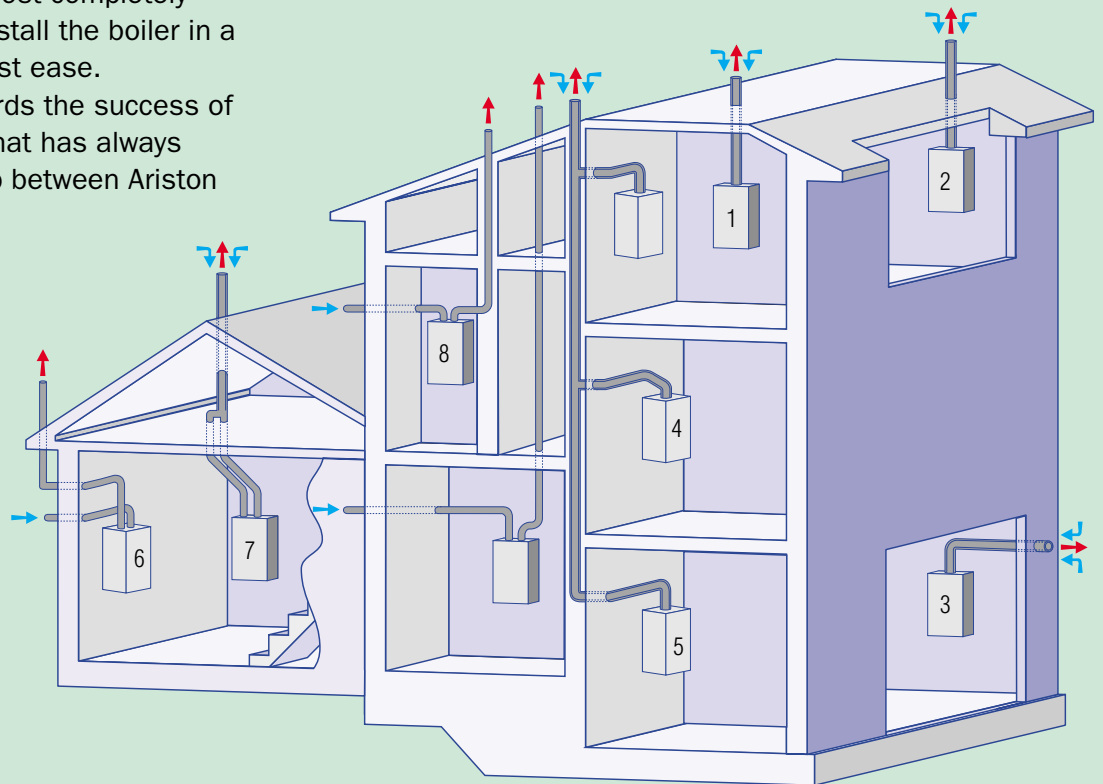


FLUE PIPE ACCESSORIES - FOR ANY INSTALLATION, THE RIGHT PARTS FOR MAKING YOUR JOB EASIER

Ariston boilers offer the best choice because they are all designed to be completely adaptable to the many different situations that may be encountered on a daily basis.

The need for alteration is almost completely eliminated, allowing you to install the boiler in a short time and with the utmost ease.

This will also contribute towards the success of your business: an objective that has always distinguished the relationship between Ariston and its customers/partners.

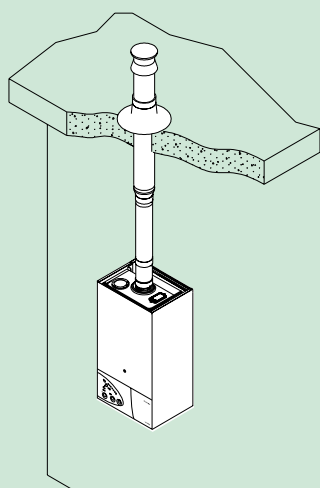


| INSTALLATION CONDITIONS | | |
|-------------------------|---|------|
| TERMINAL POSITION | mm | |
| A | Directly below an openable window or other opening | 300 |
| B | Below gutters, solid pipes or drain pipes | 75 |
| C | Below eaves | 200 |
| D | Below balconies or car-port roof | 200 |
| E | From vertical drain pipes and soil pipes | 75 |
| F | From internal or external corners | 300 |
| G | Above ground or below balcony level | 300 |
| H | From a surface facing a terminal | 600 |
| I | From a terminal facing a terminal | 1200 |
| J | From an opening in the car port (e.g. door, window) into dwelling | 1200 |
| K | Vertically from a terminal in the same wall | 1500 |
| L | Horizontally from a terminal in the same wall | 300 |

Coaxial system: up to 4 m

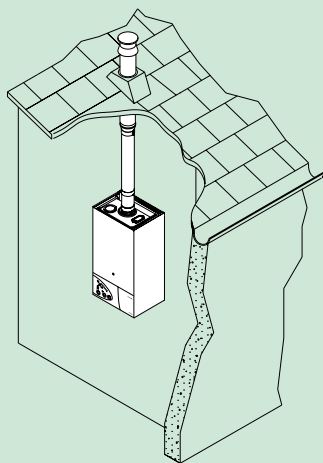
Twin pipe system up to 27 m

TYPE 1 Coaxial System



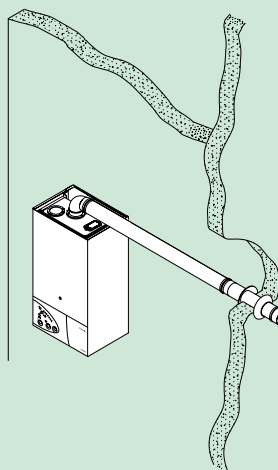
Vertical exhaust / suction system with coaxial piping on a flat roof.

TYPE 2 Coaxial System



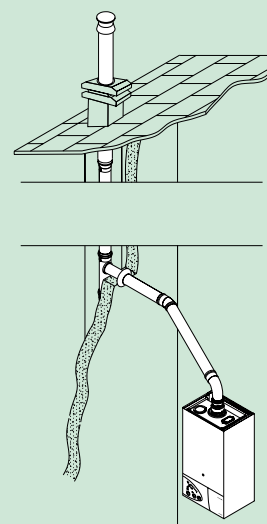
Vertical exhaust / suction system with coaxial piping on a pitched roof.

TYPE 3 Coaxial System



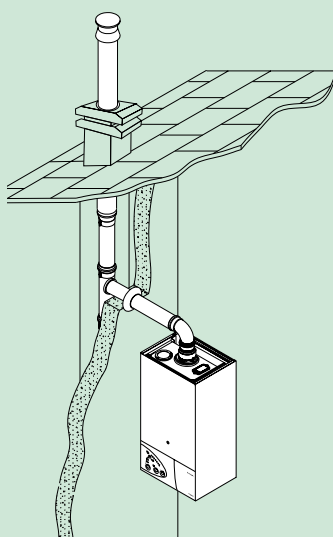
Horizontal exhaust / suction system with coaxial piping.

TYPE 4 Coaxial System



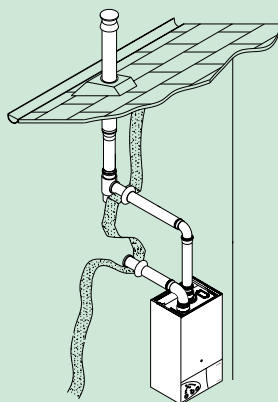
Exhaust / suction system with 45° elbows, connected to an air / fume flue duct system.

TYPE 5 Coaxial System



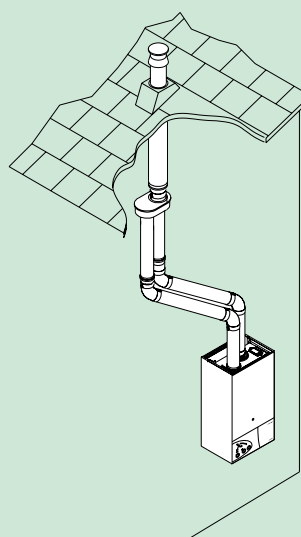
Exhaust / suction system with a 90° elbow, connected to an air / fume flue system.

TYPE 6 Twin pipe system



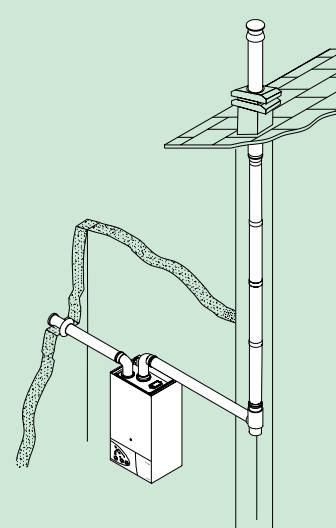
Exhaust / suction system with two separate pipes - exhaust on a pitched roof, suction through a wall.

TYPE 7 Twin pipe system



Exhaust / suction system with two separate pipes - exhaust and suction on a pitched roof via a coaxial adaptor.

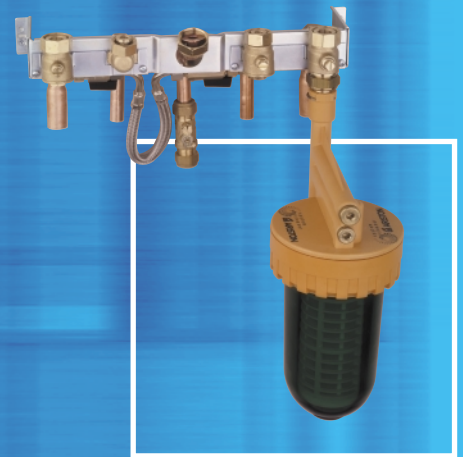
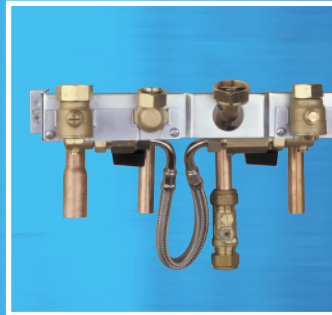
TYPE 8 Twin pipe system



Exhaust / suction system with two separate pipes - exhaust via flue duct, suction through a wall.



ACCESSORIES AND SPARE PARTS ENGINEERED FOR PERFECT INSTALLATION



REAR-PIPING CHASSIS

Allows easy installation where the system pipes are required to run up the rear of the boiler.

The rear-piping chassis consists of a bracket on which the boiler is hung, this has two flanks that extend the side panel of the boiler chassis. Assemble by just bringing forward the valve kit and connecting the pipes.

The rear-piping chassis kit includes the pipe work elements for connection to the system.

MICROGENUS JIG-KIT

Supplied within the boiler as standard

The jig-kit makes installation easier because it allows you to fill the system even without the boiler fitted. It is equipped with 4 isolation valves: 2 for the heating circuit, 2 for the domestic water system.

The system return isolation valve can be connected to the system cleaner using the plug provided. The bracket that holds the valves can be positioned in two ways depending on whether installation is with or without the rear-piping chassis, and allows small adjustments for irregular walls.

The kit is supplied with:

- double non-return valves on the filling loop for filling the system;
- cold domestic water inlet with three settings: summer, winter, and off;
- “end-feed” connections on copper tail pipes to ease soldering to the system piping.

SYSTEM CLEANER

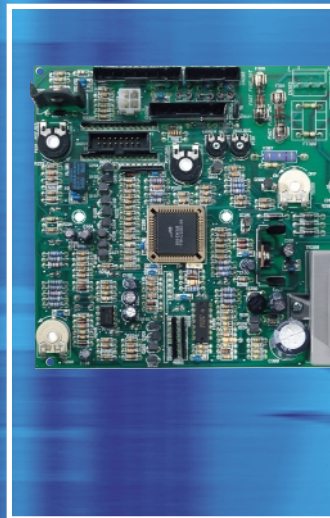
A practical accessory for cleaning the heating system.

It is simple to use: connect the system cleaner to the system return isolation valve, open the system return isolation valve, switch on the boiler, allow the pump to run for the necessary time then remove the system cleaner from the kit.

The filter provided is made up of a removable cartridge which absorbs any impurities in the system.

This allows the flushing of a new heating system without the impurities damaging the boiler components.

The system cleaner can also be used to add chemical additives such as inhibitors.



ANTI-THEFT DEVICE

Protects the boiler from theft and can be assembled in two ways: with or without the rear-piping chassis. The simple assembly instructions are included in the jig-kit and on the anti-theft device itself.

PRINTED CIRCUIT BOARD

Regulates the sophisticated management and control functions:

- flame control
- water control
- overheating switch-off device
- anti-frost safety device
- anti-scale device
- maximum heating power adjustment
- “soft-light” gas pressure adjustment
- combustion analysis device

JIG-KIT COVER

To conceal the pipe-work or jig-kit below the boiler a specially designed cover is available. The cover is simply and easily mounted to the bottom of the boiler.

DIGITAL TIME CLOCK

7 day timer.

ARISTON QUALITY PRODUCTS EXCEPTIONAL SERVICE



- Belfast
- Bristol
- Edinburgh
- **High Wycombe**
- Manchester
- Portsmouth
- Rochester
- Rotherham

COMPREHENSIVE TRAINING

The numerous Ariston Training Centres allow you to learn and expand your knowledge of the field. Courses cover areas such as customer relations, product selection, installation, system start-up, checks, maintenance, guarantees, and legislative standards.

TECHNICAL HOT LINE

Immediate and effective technical assistance is only a phone call away. Assistance is also available for any information or advice on the product most suitable for your needs and the requirements of your system installation.

PROFESSIONAL SERVICE

Ariston service technicians are swift and prepared for any eventuality. They offer you and your customers a high level of assistance, comprising the best technical, logistic and human resources available. Ariston invests a great deal in this field to guarantee a decisive advantage that others cannot offer.



MTS (GB) Limited
MTS Building
Hughenden Avenue
High Wycombe
Bucks, HP13 5FT
Tel: 01494 755600
Fax: 01494 459775

Technical Service Hot Line 01494 539579
Technical Service Fax Line 01494 463066
E-mail: technical@mtsgb.ltd.uk
www.ariston.co.uk
E-mail: info@mtsgb.ltd.uk

