

# MODENA

COMBINATION BOILERS

ADVANCED  
HEATING  
FOR THE  
MILLENNIUM

2000

**FÉRROLI**

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# MODENA

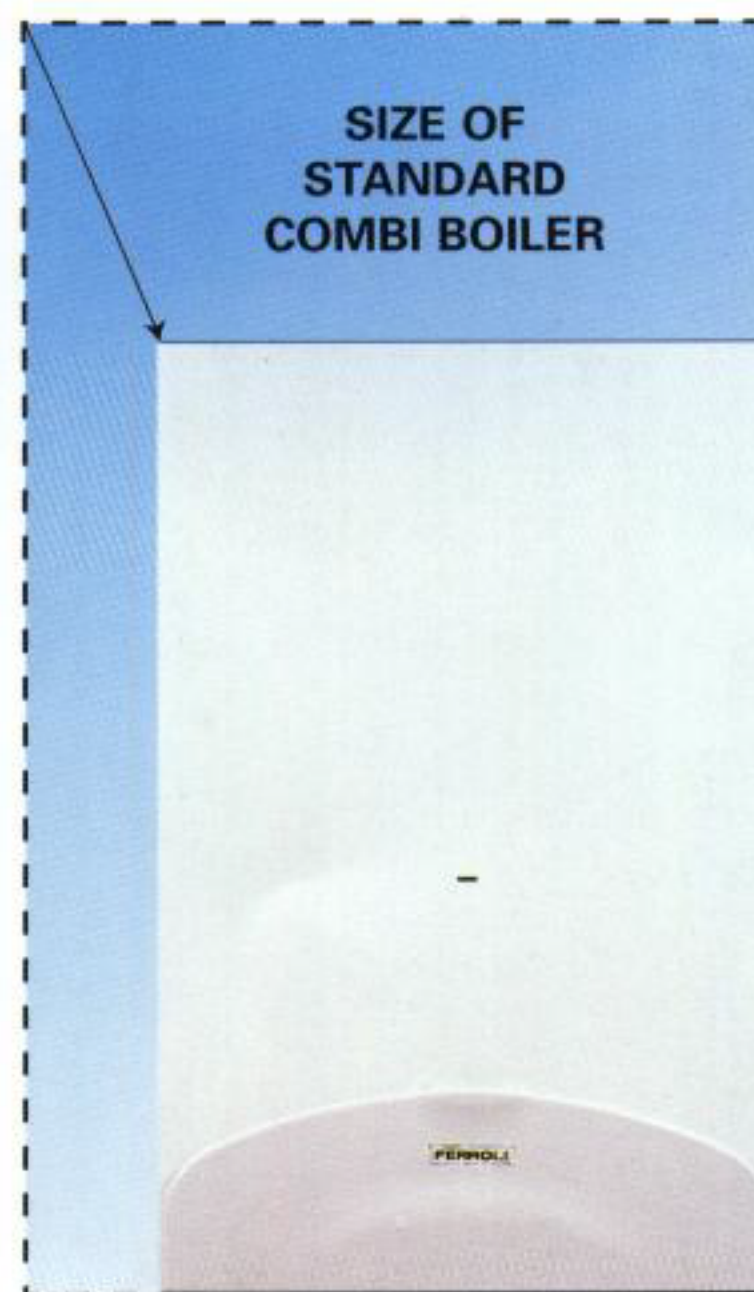
**SMALL, LIGHTWEIGHT, UNOBTRUSIVE**

## OUR SMALLEST COMBI YET

**Modena is the smallest, lightest and most versatile combination boiler we have ever produced.**

It may be small, but it offers all the advantages you have come to expect from a Ferröli combination boiler, while overcoming the traditional disadvantage of size. This means guaranteed quality, absolute reliability and, of course, maximum economy in use. And, as with all combination boilers, there is no need for hot water cylinders or expansion tanks. This means less plumbing is involved making installations far simpler.

Being up to 30% smaller and 40% lighter than traditional models, they fit unobtrusively almost anywhere in a home with the minimum of fuss.



## A CHOICE OF MODELS TO DELIVER WARMTH, COMFORT AND ECONOMY WHATEVER YOUR REQUIREMENTS

**Whatever your heating and hot water requirement, there's a Modena to meet your needs.**

### Modena 80

The Modena 80 has a range rated output of 9.7 - 23.8 kW (33,000 - 81,200 Btu/h) and a domestic hot water flow rate of 9.54 litres/min (2.12 gals/min) at 35°C temperature rise. It's tailor made for the average three to four bedroomed well-insulated home with a normal hot water requirement.

### Modena 102

For the larger family with a much higher demand for hot water, the Modena 102 comes into its own with its 12.7 - 30 kW (43,000 - 102,360 Btu/h) range rated output and its ability to deliver up to 12.28 litres/min (2.73 gals/min) of domestic hot water.

*RELAX... it's a Ferröli*

# THE PERFECT COMBINATION FOR YOUR HOME



## MORE SITING FLEXIBILITY THAN EVER BEFORE

Modena is a room-sealed fanned-flue boiler with a versatile multi-directional top flue bend. All models are available with a host of flueing options which enable them to be installed virtually anywhere in a property.

## AUTOMISER ELECTRONIC CONTROL

Modena compact combination boilers incorporate the latest ignition and boiler control system - AutoMiser. This means that the boiler automatically sets its own output each time heat is called for and then modulates, ensuring optimum performance. AutoMiser also ensures maximum economy across the full output spectrum of the boiler, an important advantage, particularly with the larger output model.

Self regulation is a major aid to reducing fuel bills and keeping  $\text{CO}_2$  and Nox levels exceptionally low.

## SIMPLE TO USE CONTROLS

Controls for heating and hot water are easily accessible behind a drop-down flap on the front of the boiler. There is also a simple to use diagnostics panel which enables the householder to readily assess the operating condition of the boiler, a useful feature which can minimise unnecessary service call-outs.

All Modena models include an electronic frost protection system. Time clocks are available as optional extras and fit conveniently to factory prepared positions on the control panels.

# YOUR HOME

## ABSOLUTE RELIABILITY

Férroli domestic heating appliances are renowned for their quality and reliability and meet all European standards of manufacture.

## ENVIRONMENTALLY FRIENDLY

All Férroli domestic appliances are designed and produced with environmental concerns high on the list of specification requirements. Férroli's compact combination boilers are no exception, with high efficiencies and low Nox and  $\text{CO}_2$  emissions very much the order of the day.



## SAFETY

Above all else, safety in operation is of prime importance. Modena is CE approved, has IP44 electrical protection and seven safety protection devices incorporated in its design to ensure total peace of mind for the user.

## EXTENDED SERVICE CONTRACTS

Once the normal guarantee period of one year expires, you can extend coverage cost effectively with a choice of Férroli Service Contracts to suit your budget.

For a brochure, call us on **0121 352 3200**.



# ADVANCED HEATING



## UNIQUE DOUBLE HEAT EXCHANGER

Férroli's copper heat exchanger, one of the most advanced on the market, is the result of considerable research and development by one of the world's acknowledged leaders in heat transfer technology. No diverter valve is required, meaning fewer components to go wrong and continued domestic hot water availability even if the pump fails.

## NEW 'COOL BURN' BURNER

One of the latest developments, Férroli's new super quiet burner, has been designed to deliver maximum efficiency while keeping Nox and Co<sub>2</sub> levels to an absolute minimum. Another major technical advance from Férroli.

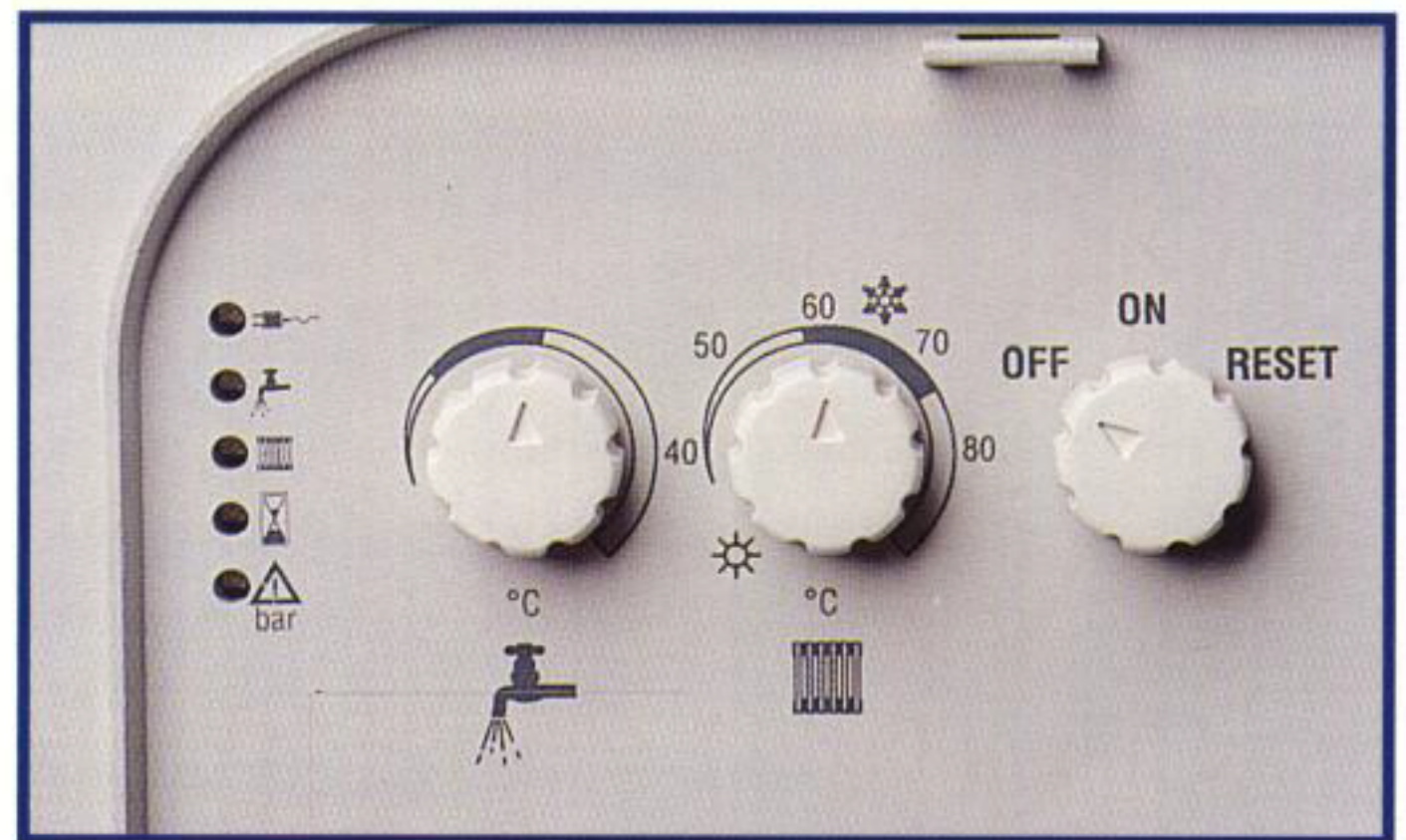


## NO COMPARTMENT VENTILATION

Being fully room-sealed fanned-flue boilers, Férroli's compact combis do not draw air for combustion from the room in which they are installed. Thus they can be sited in enclosed cupboards for a totally hidden installation.

## LOW WATER PRESSURE

All models will operate at a minimum mains pressure of only 0.25 bar for domestic hot water and, consequently, are equally at home in high rise and low rise properties as well as low water pressure areas.



## DOMESTIC HOT WATER TEMPERATURE CONTROL

A variable thermostat for domestic hot water temperature can be found on the boiler's control panel.

# NG TECHNOLOGY



## PUSH-FIT FLUEING

Push-fit flueing makes for a speedy and simple fitting procedure. The flue sections come in 100mm and 125mm diameters, in lengths up to 5m, and push together, locking accurately into position first time, every time.

## FLUE OPTIONS

Modena can be flued both horizontally and vertically. A versatile two pipe flueing system, which includes both 45° and 90° bends, can be used with all models. With the two pipe system, flue runs up to 40m are possible, which should resolve virtually every siting problem likely to be encountered.

## ELECTRICAL CONNECTION

All Modena models are fully pre-wired and supplied with a fly lead, leaving virtually no on-site electrical work. An optional 'plug-in' time clock is available with all models. These fit easily to factory prepared locations on the control panels.



## OPTIONAL CONTROLS



Other controls available from Ferroli include Chronotherm, an electronic programmer, a Ferroli room stat and an outside temperature compensation control.

## REGULAR PUMP SPIN



During the summer months when the central heating is switched off, the pump will spin briefly each time domestic hot water is used. This helps to ensure pump reliability throughout the heating season by reducing the possibility of pump impeller locking.

## SERVICING

Easy access to all key components for servicing is from the front of the boiler. A swing adjustment panel drops down to reveal the boiler electronics.

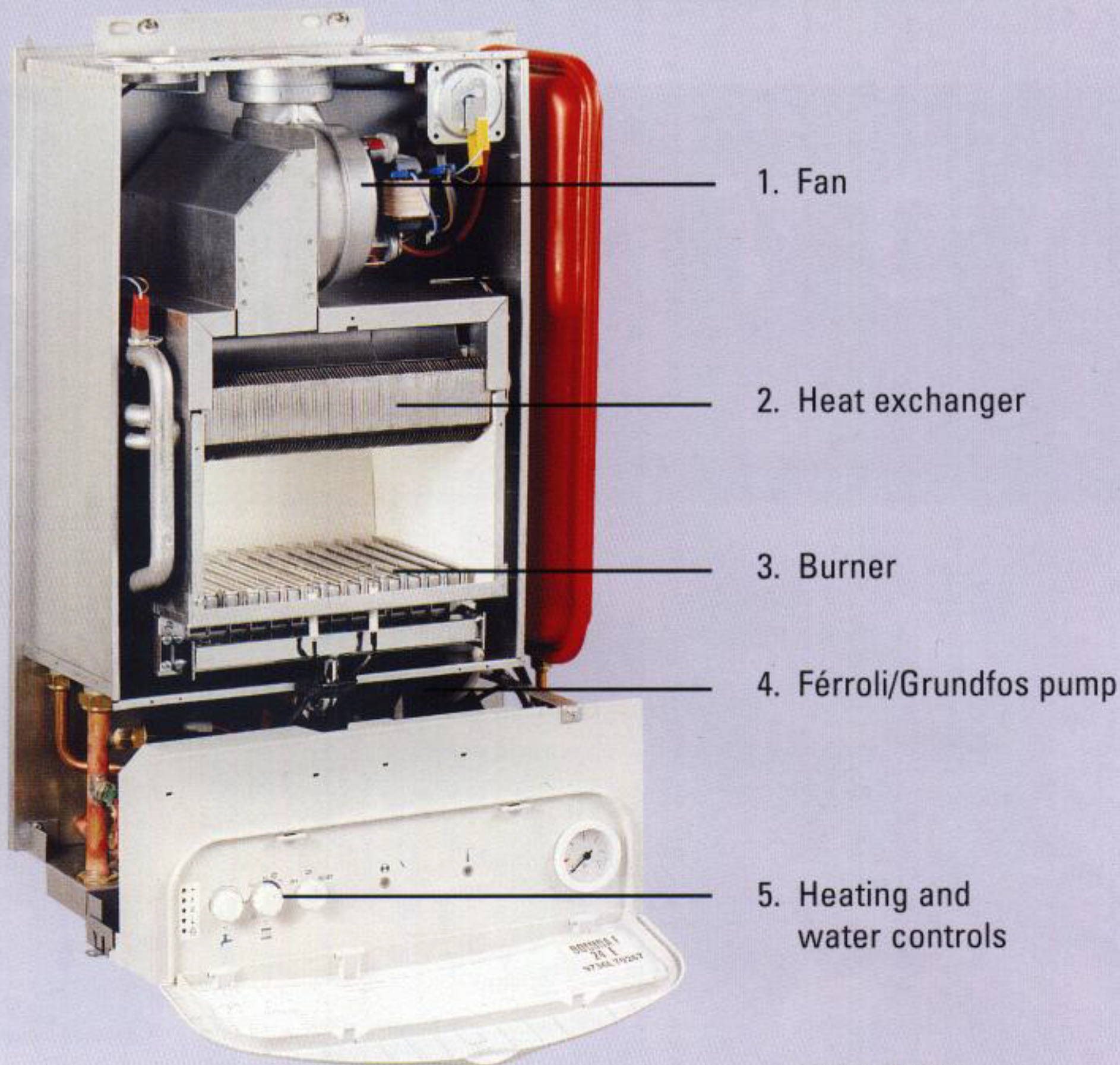
## SECURITY ON SITE

All Ferroli boilers can be supplied with a range of security devices to help prevent theft on site, including heavy duty wall brackets with padlocks and electronic tagging.

# MODENA

## 'AT A GLANCE'

1. Fan.
2. Férroli's innovative 'double' heat exchanger eliminates the need for diverter valve. Domestic hot water available, even if pump fails.
3. 'Cool burn' burner ensures low Nox and Co<sub>2</sub> emissions. Modulates for maximum economy.
4. Férroli/Grundfos pump - standard components ensure ready availability of parts.
5. Variable thermostat for domestic hot water temperature.



Modena 80 shown

## TECHNICAL SPECIFICATION

	MODENA 80	MODENA 102
Range rated output	9.7 - 23.8 kW 33,000 - 81,200 Btu/h	12.7 - 30 kW 43,000 - 102,360 Btu/h
<b>DIMENSIONS</b>		
Height	720mm*	720mm*
Depth	270mm	360mm
Width	460mm	460mm
Lift weight	32 Kg	36 Kg
Minimum operating pressure for heating	1 bar	1 bar
Maximum operating pressure for heating	2 bar	2 bar
Minimum operating pressure for domestic hot water	0.25 bar	0.25 bar
Maximum operating pressure for domestic hot water	6 bar	6 bar

\*Modena 80 and 102 height including flue bend:- 860mm

	MODENA 80	MODENA 102
Domestic hot water flow rates	9.54 litres/min (2.12 gals/min) at 35°C temperature rise	12.28 litres/min (2.73 gals/min) at 35°C temperature rise
<b>MINIMUM CLEARANCES</b>		
Left and right hand	5mm	5mm
Front	290mm	380mm
Top	200mm	200mm
Bottom	200mm	200mm
Control System	AutoMiser self-regulating control system automatically governs gas consumption in line with system demand	



The European Approval of Safety and Efficiency

### ISO 9002

The European Standard of Production Quality

### IP44

International Code of Practice for Protected Electrical System

### RF Spec

Protection from radio frequency interference. Conforms with the European Standards EEC 87/308 and EN 55014.

### British Gas

GC No. 47-267-05  
GC No. 47-267-24



### Water Research Council

Ref No: 9807027

Férroli pursues a policy of continuous product improvement and reserves the right to alter specifications and design without prior notice.

## FÉRROLI - ONE OF THE WORLD'S LARGEST MANUFACTURERS

Férroli is one of the largest and most successful manufacturers of heating appliances in the world today. Its seven European plants produce over 300,000 domestic boilers every year and many thousands of commercial boilers with outputs up to 42 million Btu/h. It is also a major producer of steel, cast iron and aluminium radiators, air conditioning and hydro-massage baths and showers.



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