

DOMIcompact

24kW and 30kW combination models
SEDBUK "B" high efficiency condensing boilers





DOMIcompact

Introduction



DOMIcompact is a SEDBUK Band B rated high efficiency combi boiler. Within its compact dimensions is the latest in condensing combi technology yet the design of DOMIcompact is totally focused on ease of installation and simplicity of control.

DOMIcompact's clean-burn technology ensures that both models in the range live up to FERROLI's demanding standards

for environmental concern. Whichever size of output you choose, **DOMIcompact** combines high efficiency with ultra-low CO₂ emissions.

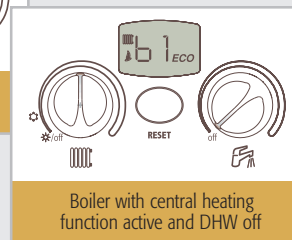
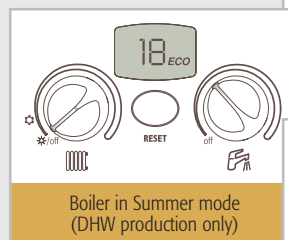
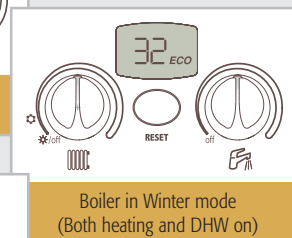
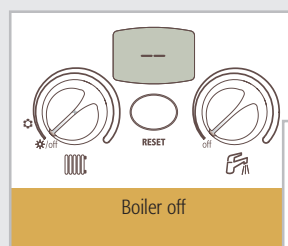
The **DOMIcompact** combi range features two models for central heating and instant production of domestic hot water:

Model	Output	SEDBUK Band	Type
24 B	24kW	B	combi
30 B	30kW	B	combi

Simplified control

Any adjustments to be made by the user are extremely simple with the user-friendly control panel.

Simply turn the central heating and DHW control knobs to set the operating temperature and select the boiler operating modes.



High Specification As Standard

HOW DOES IT WORK?

By using two heat exchangers this Band B condensing boiler is designed to extract more sensible heat from the flue gases. This provides greater efficiency in operation. By cooling the flue gases to less than the 'dew point' temperature, a change of state occurs, releasing the water vapour within the flue gas (product of combustion) creating a by-product called 'condense' or condensate. This change of state will release the latent heat of vapourisation into the system, and therefore increases the boiler efficiency. This is normally lost into the atmosphere via the flue.

UNIQUE TWIN PASS MAIN HEAT EXCHANGER

FERROLI's copper main heat exchanger, one of the most advanced on the market, is the result of considerable research and development by one of the world's 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.

ANTI-SEIZE DEVICE ON THE CENTRAL HEATING PUMP

After 24 hours of inactivity, the boiler pump is automatically started for around 5 seconds

to prevent it from sticking after extended inactivity (for example, in the summer).

MICROPROCESSOR ELECTRONICS

All **DOMIcompact** models feature electronic flame modulation via the microprocessor.

FROST THERMOSTAT

The **DOMIcompact** boilers are fitted with an anti-frost detection device on the central heating circuit. If the system water temperature falls below +5°C, the burner will ignite until the temperature reaches +15°C. In this phase, the central heating pump is kept on. This protection device remains active whenever the boiler is powered and supplied with gas.

POST-CIRCULATION DEVICE

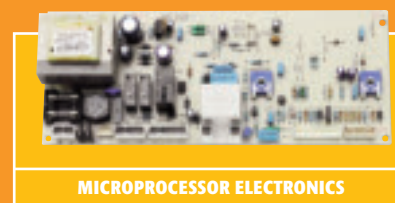
Both models are fitted with a special device that continues to operate the pump after the burner has shut down (in central heating operation). This ensures that heat accumulated in the heat exchanger (because of thermal inertia) is distributed into the radiator circuit for maximum efficiency.

HEAT EXCHANGER PROTECTION DEVICE

A clip-on N.T.C. central heating sensor constantly monitors changes in temperature and the electronic board is programmed to avoid any thermal shock, which could damage the heat exchanger, thereby extending its working life.

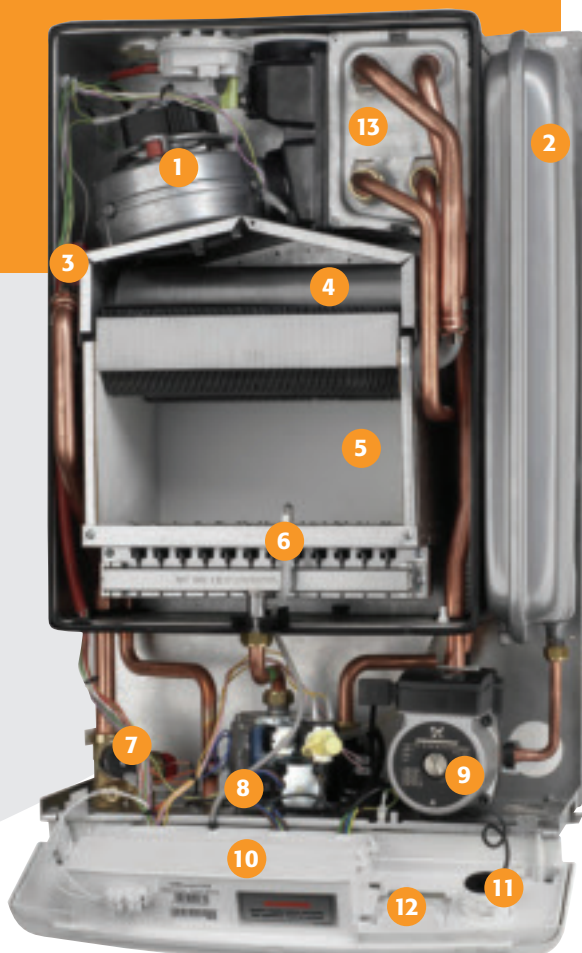


UNIQUE TWIN MAIN HEAT EXCHANGER



MICROPROCESSOR ELECTRONICS

model 24 B



1. FAN ASSEMBLY

Constant speed fan with differential flue gas pressure switch

2. EXPANSION VESSEL

Built-in 8 litre expansion vessel

3. ECO/COMFORT SENSOR

Heating temperature sensor with DHW eco/comfort function

4. HEAT EXCHANGER

High performance built-in twin pass heat exchanger

5. COMBUSTION CHAMBER

Insulated with ecological fibre

6. IGNITION SYSTEM

Electric ignition and flame detection electrode, for quiet and reliable operation

7. WATER ASSEMBLY

Brass assembly with low water pressure switch, safety valve and central heating sensor

8. GAS ASSEMBLY

Modulating gas valve

9. PUMP

Three-speed pump with built-in air vent and system drain cock

10. ELECTRICAL PANEL

Easy access control panel cover

11. PRESSURE GAUGE

System pressure gauge with range of display from 0 to 4 bar

12. TIMER OPTION

A built-in 24 hour time clock is available as an option

13. SECONDARY HEAT EXCHANGER

To optimise combustion efficiency



Control Panel



1. HEATING SYMBOL

Displays during heating operation

2. TEMPERATURE DISPLAY

Displays heating temperature or hot water temperature when operating

3. HOT WATER SYMBOL

Displays during hot water operation

4. FLAME SYMBOL

Displays when the burner is on

5. ECO SYMBOL

ECO is displayed when the Economy function is on

6. HEATING TEMPERATURE ADJUSTMENT

7. MULTIFUNCTION BUTTON

8. HOT WATER TEMPERATURE ADJUSTMENT



ECO/COMFORT FUNCTION

All **DOMIcompact** models feature

the new ECO/COMFORT function, which can be selected directly using the multifunction button on the control panel. In COMFORT operation, the system maintains the temperature of the water in the heat exchanger, making the delivery of domestic hot water even faster and more satisfying. In ECO operation, the exchanger is not kept at the comfort temperature and the domestic hot water is produced in the standard way by heating the water from cold.

MULTIFUNCTION RESET BUTTON

The multifunction reset button,

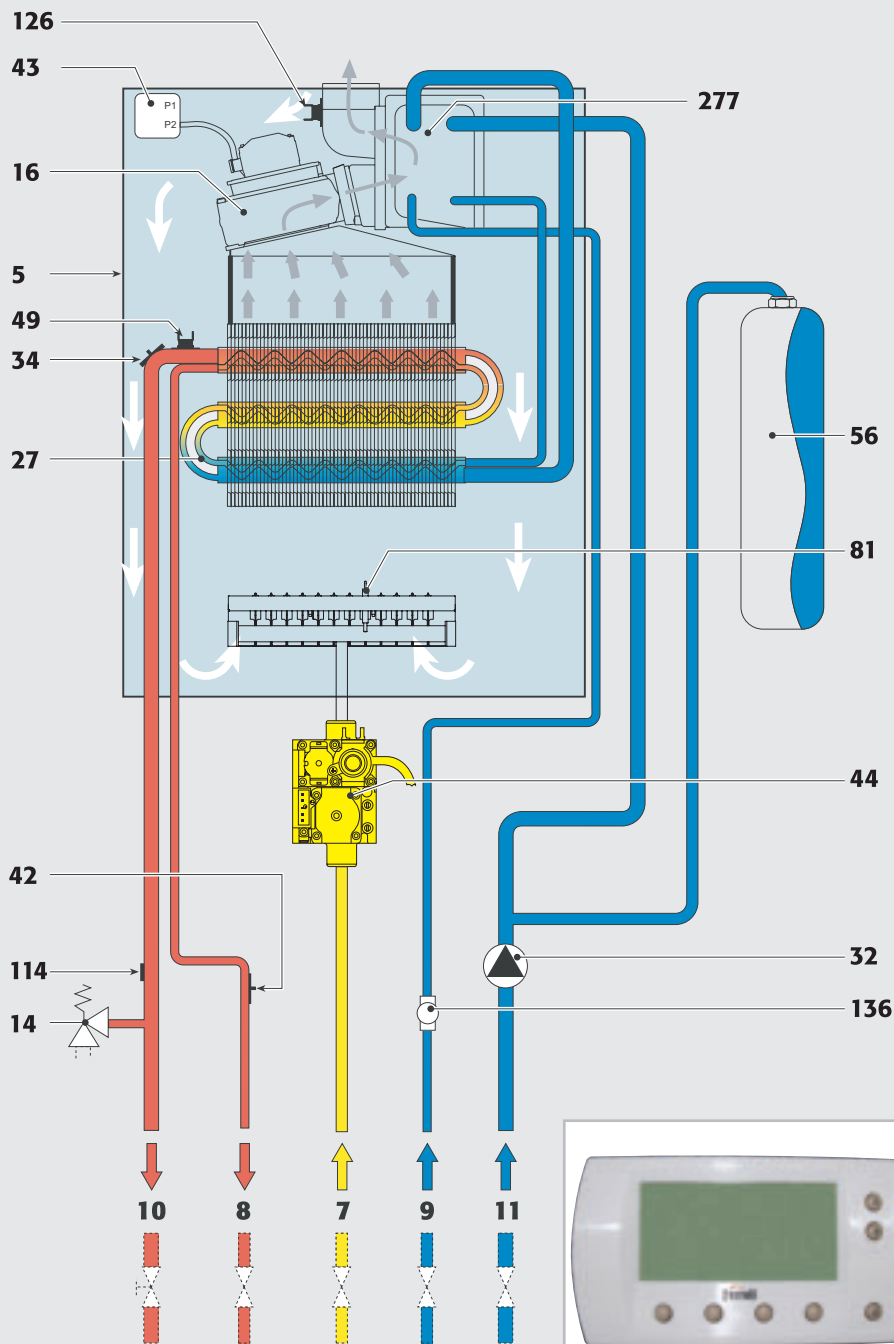
located between the central heating and DHW setting knobs, can be used by both the user and the installer to activate various functions. Simply press the button, for example, to reset the appliance in the event of boiler lockout, or activate/deactivate the ECO/COMFORT function. The same button can be used by the installer to enter TEST mode, simplifying the setting and commissioning of the appliance, for example setting the maximum output in central heating mode or adjusting the ignition pressure.

LCD DISPLAY

The control panel features an LCD display that shows the operating status of the appliance at all times.

Display	Type of operation
--	Boiler off
28	Boiler in stand-by (display temperature varies)
8 ECO	Boiler in stand-by / ECO (display temperature varies)
69	Heating operation: burner on (display temperature varies)
9 ECO	Domestic hot water operation: burner on (display temperature varies)
F1	Fault codes
80	TEST mode operation (burner on)

Water Circuit Diagram



KEY

- 5** Combustion chamber
- 7** Gas inlet
- 8** DHW outlet
- 9** Cold main inlet
- 10** CH flow
- 11** CH return
- 14** Heating safety valve
- 16** Fan
- 27** Main heat exchanger
- 32** Heating pump
- 34** Flow temperature sensor
- 42** DHW temperature sensor
- 43** Air pressure switch
- 44** Gas valve
- 49** 100°C safety thermostat
- 56** Expansion vessel
- 81** Spark electrode
- 114** Low water pressure switch
- 126** Flue gas safety thermostat
- 136** Flow switch
- 277** Secondary heat exchanger

Note: This numbering system is consistent with the installation manual.

REMOTE CONTROL (OPENTHERM)

The OpenTherm unit is a fully modulating heating and time control designed to optimise the high efficiency of the heating appliance it is connected to. Working on a pulse system it obtains information from the boiler's microprocessor and constantly feeds back information relating to the room temperature rise or fall. It can display any fault codes (should they occur) and also the operating status of the appliance, be it in heating or hot water mode.



OPENTHERM REMOTE CONTROL UNIT

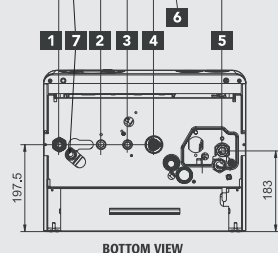
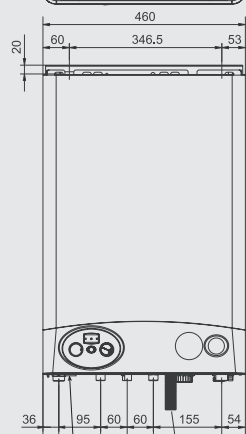
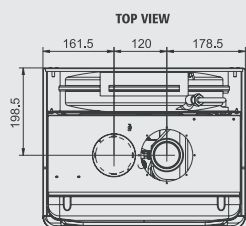
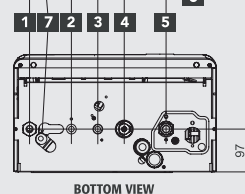
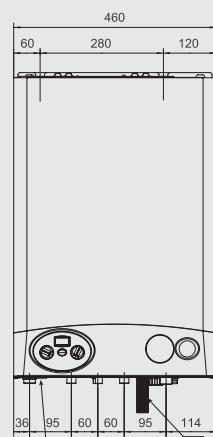
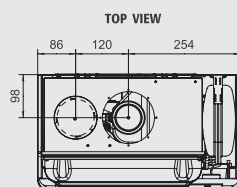


Dimensions

MODEL 24 B

KEY

- 1 Heating system flow Ø 3/4" (22mm with isolation valve fitted)
- 2 Hot water outlet Ø 1/2" (15mm with connection fitted)
- 3 Gas inlet Ø 1/2" (22mm with isolation valve fitted)
- 4 Cold mains inlet Ø 1/2" (15mm with isolation valve fitted)
- 5 Heating system return Ø 3/4" (22mm with isolation valve fitted)
- 6 Condensate outlet (22mm flexible connection)
- 7 Safety valve discharge Ø 1/2" F/Iron



MODEL 30 B

KEY

- 1 Heating system flow Ø 3/4" (22mm with isolation valve fitted)
- 2 Hot water outlet Ø 1/2" (15mm with connection fitted)
- 3 Gas inlet Ø 1/2" (22mm with isolation valve fitted)
- 4 Cold mains inlet Ø 1/2" (15mm with isolation valve fitted)
- 5 Heating system return Ø 3/4" (22mm with isolation valve fitted)
- 6 Condensate outlet (22mm flexible connection)
- 7 Safety valve discharge Ø 1/2" F/Iron

Technical Specifications

DOMIcompact			24 B		30 B		
Output				Pmax	Pmin	Pmax	Pmin
Heat input		kW		25.0	10.8	31.1	14.1
Useful heat output 80°C - 60°C		kW		24.1	9.9	30.0	12.9
Useful heat output 50°C - 30°C		kW		25.5	10.3	31.7	13.4
Central heating							
Maximum operating temperature		°C		90		90	
Operating pressures							
Maximum		bar		3		3	
Minimum		bar		0.8		0.8	
Expansion vessel capacity		litres		8		10	
Expansion vessel pre-fill pressure		bar		1		1	
Boiler water content		litres		2.0		2.3	
DHW							
Maximum DHW production	Ø 25°C	l/min		13.8		17.2	
	Ø 30°C	l/min		11.5		14.3	
	Ø 35°C	l/min		9.8		12.3	
Operating pressure DHW	Maximum	bar		9		9	
	Minimum	bar		0.25		0.25	
DHW water content		litres		0.5		0.8	
Dimensions, weights, fittings							
Height		mm		681		681	
Width		mm		460		460	
Depth		mm		266		365	
Weight with packing		kg		38		41	
Gas fitting		mm		22		22	
Central heating fittings		mm		22		22	
DHW circuit fittings		mm		15		15	
Power supply							
Max power input		W		125		135	
Power supply voltage/frequency		V / Hz		230 / 50		230 / 50	
Index of protection		IP		X 4D		X 4D	
Maximum permissible flue lengths							
Max Horizontal flue length 100mm Ø		m		3		3	
Max Vertical flue length 100mm Ø		m		4		4	
Max Horizontal flue length 125mm Ø		m		12		12	
Max Vertical flue length 125mm Ø		m		12		12	
Total equivalent length for twin flue system 80mm Ø		m		55		48	

Flue length reductions for bends

CONCENTRIC FLUE

Reduction for bends	60/100	80/125
90° bend	1m	0.5m
45° bend	0.5m	0.25m

TWO PIPE FLUE - 80MM

Equivalent permissible length of 55m

Reduction for bends	Air	Flue
90° bend	1.5m	2m
45° bend	1.2m	1.8m
Pipe - per metre length	1m	1.6m ⁺ /2m ⁺⁺
Horizontal terminal	2m	5m
Concentric vertical terminal	-	12m

⁺Vertical ⁺⁺Horizontal



Ferrolì Limited

Ferrolì began producing heating appliances and equipment in Italy during the 1950s. Today the company is still family-owned but now operates ten ultra-modern factories in Europe and is developing new production sites and offices in China, Russia and the Ukraine. The Group employs over 2,200 people and produces more than 500,000 boilers per year in addition to its growing business in water heaters and air conditioners.



Ferrolì Domestic Heating Tel: 08707 282 882

Offering gas wall mounted units with outputs from 5kW to 50kW, Ferrolì's stylish, compact domestic boilers provide maximum comfort with minimal fuel usage. With a choice of conventional, condensing and combi technologies, there's a boiler to match the heating and hot water requirements of every home. In recent years Ferrolì has also become a Northern European leader in solar heating, and has developed underfloor heating systems for the UK market.



Ferrolì Commercial and Industrial Heating Tel: 08707 272 755

Ferrolì commercial boilers for pressure jet oil, forced air gas or dual fuel are factory matched with high efficiency burners to provide outputs up to 14,000kW, while meeting the strictest emissions demands. Our range includes high efficiency aluminium, cast iron, steel and stainless steel boilers as well as stainless steel unvented hot water cylinders, pressurisation units and plate heat exchangers. We are also taking a lead in developing underfloor and solar heating solutions.



Ferrolì Technical Helpline and Service Tel: 08707 282 885

The Ferrolì technical help desk is able to assist heating engineers at the time of specifying, installing and in-guarantee servicing any of our products. Once the normal guarantee period on our boilers has expired, coverage can be extended cost-effectively with a choice of Ferrolì service contracts. All Ferrolì service engineers work to Benchmark standards and the Benchmark Code of Practice for the installation, commissioning and servicing of central heating systems.



Ferrolì Spares Tel: 08707 282 882

The rapidly growing popularity of Ferrolì as first choice for both domestic and commercial installations means that heating parts stockists offer readily available spares for Ferrolì boilers. For less frequently needed items, we maintain a fully-stocked warehouse located centrally in the UK, enabling same-day despatch of just about any part needed to keep your Ferrolì boiler running at optimum efficiency.



Ferrolì Training Tel: 08707 282 891

Ferrolì understands that well-trained installers are the key to a safe and efficient heating system. That's why we run comprehensive training courses in our purpose-built facilities for everyone concerned in the installation and servicing of Ferrolì's range of boilers. We also offer a solar appreciation training day at Burton-upon-Trent or a three day BPEC accredited course. These courses improve installers' knowledge and skills by providing both the theory and the hands-on practical experience essential to maintaining heating system performance and safety.



Ferrolì Ltd

Lichfield Road Branston Industrial Estate
 Burton-Upon-Trent Staffordshire DE14 3HD
 tel 08707 282 882
 fax 08707 282 883
 e-mail: domestic@ferrolì.co.uk
www.ferrolì.co.uk



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