

The logo for Ferroli, featuring the brand name in a bold, black, sans-serif font with a stylized orange swoosh above the 'i'.A starburst-shaped badge with an orange-to-yellow gradient background. It contains the number '5' in a large, bold, black font, with the text 'year parts and labour guarantee with Optimax HE boilers' written in a smaller, black, sans-serif font below it.

5
year parts and labour
guarantee with
Optimax HE boilers

Optimax HE Boilers

SEDBUK 'A' high efficiency condensing boilers
Combi, system and regular open vented models
18kW – 38kW models

A solid green square color swatch.

band A

A solid orange square color swatch.

combi

A solid grey square color swatch.

system

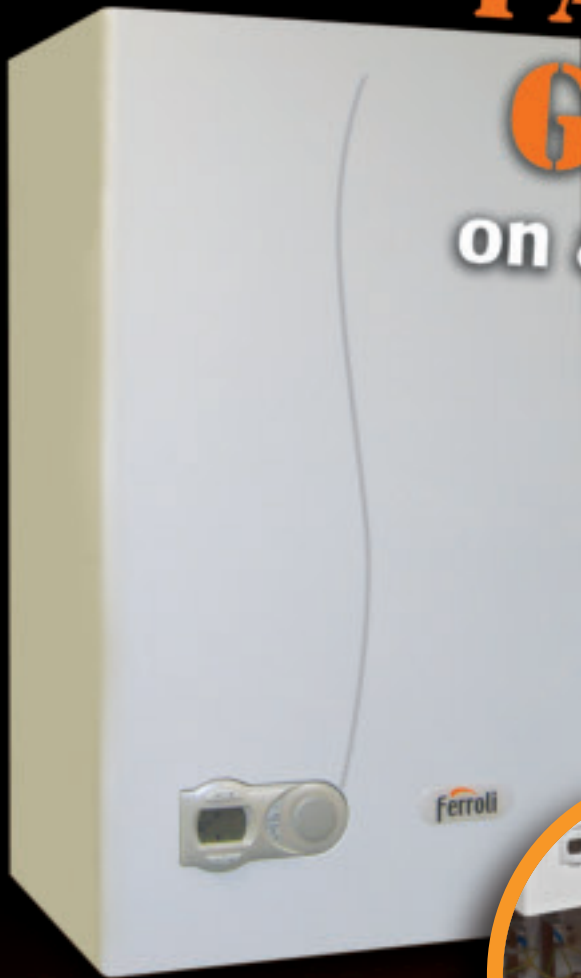
A solid dark blue square color swatch.

regular

ferroli

5 YEAR PARTS & LABOUR GUARANTEE

on all Optimax HE models



- More power, higher efficiency
- Easy to install
- User-friendly control panel
- Proven technology for greater reliability
- Super quiet operation
- Integral filling loop
- Built-in automatic bypass

Terms and conditions apply, please contact Ferroli for more details



Ferroli Ltd
Lichfield Road
Branston Industrial Estate
Burton-Upon-Trent
Staffordshire DE14 3HD

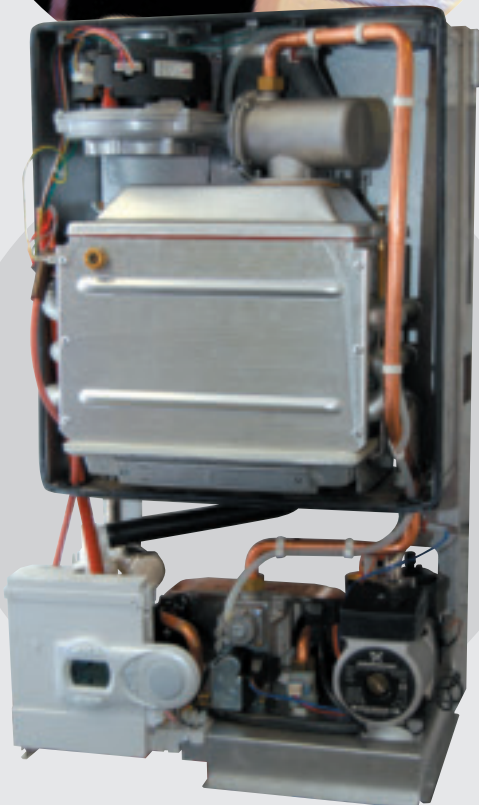
Domestic tel: 08707 282 882 fax: 08707 282 883 e-mail: domestic@ferroli.co.uk
Service tel: 08707 282 885 fax: 08707 282 886 e-mail: service@ferroli.co.uk

www.ferroli.co.uk



Why is it new?

- At Ferroli our motto is 'making life easier'. So we planned to upgrade our existing best-selling Band A Optimax range to make it even better
- We started by listening to our customers. We listened to merchants, installers, and specifiers for comments both good and bad about our proven range
- It was clear that the Optimax was well respected but that we could make a number of detail improvements to make life easier
- So we did



What's new?

- Stylish boiler casing with an integral fascia
- Re-designed internal water group assembly to include a built-in automatic bypass valve
- Integral filling loop that forms part of the boiler valve assembly
- 3 Amp fused three pin plug for simple electrical connection
- New Optimax HE range of outputs:
 - 31kW and 38kW combi models
 - 18kW, 25kW and 31kW system models
 - 18kW regular open vented model
- All models available in both natural gas and LPG versions
- All new boiler control system and liquid crystal display
- Option of a plug-in seven day digital timer (combi)
- OpenTherm compliant ready for our Romeo controller
- Built-in outside weather compensation software (combi)



Benefits to you

- For the merchant : one range satisfies all your Band A needs
- For the installer : easiest ever to install; easy access for installation and servicing
- For the user : more power and higher efficiency from a more compact unit; super quiet operation; proven technology for greater reliability; 5 year parts and labour guarantee

combi

band A

Optimax HE Combi

31kW and 38kW models

5
year parts
and labour
guarantee

Features and benefits

- Engineered to produce more power and higher efficiency
- Choice of 31kW or 38kW combi models to give higher DHW flow rates
- 31kW model produces an impressive 12.6 l/min flow rate at 35°C rise
- 38kW model produces an unbeatable 15.4 l/min flow rate at 35°C rise
- Compatible with our AquaSol solar system
- Compatible with our underfloor heating system
- New Italian-styled casing design
- High-density foam lining absorbs almost all operational sounds, making it extremely quiet during normal operation
- Built-in bypass speeds up installation and ensures the minimum flow rate through the heat exchanger at all times
- Integral filling loop that forms part of the boiler valve assembly
- 3 Amp fused three pin plug for simple electrical connection
- All models available in both natural gas and LPG versions
- All new boiler control system and liquid crystal display
- Option of a plug-in seven day digital timer
- Built-in outside weather compensation software
- Optional pre-plumb jig also available – Product Code 046006G0
- 5 year manufacturer's parts and labour guarantee

Optimax HE combi controls

- Liquid crystal display for simple user operation
- Full diagnostic software ensures optimum reliability
- Option of a plug-in seven day digital timer
- OpenTherm compliant ready for optional Romeo controller which modulates the room temperature by altering the boiler output ensuring maximum efficiency
- Option of outside weather compensation sensor. The Optimax HE microprocessor compares external and internal temperatures and increases or decreases the flow temperature accordingly, maximising efficiency
- Optional RF unit available



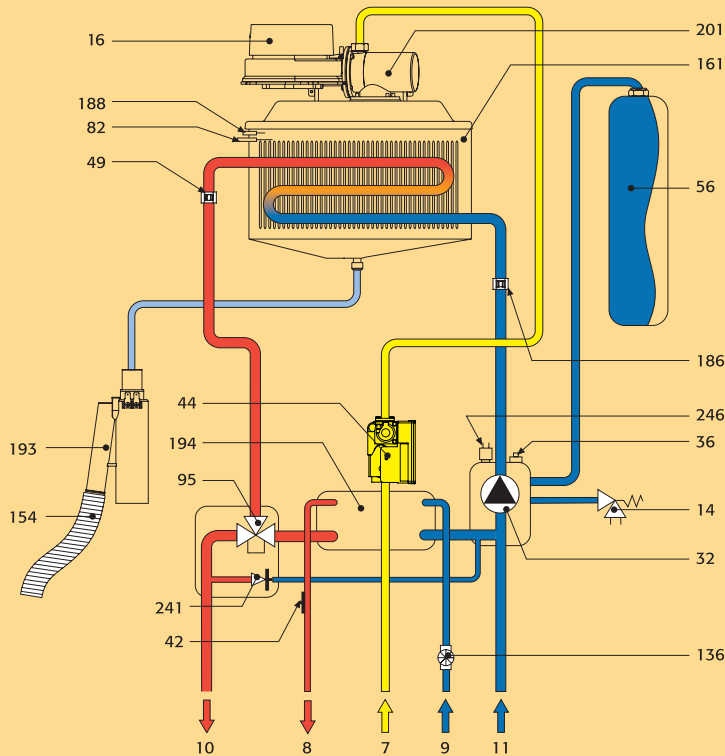
LCD diagnostic boiler fascia panel

combi

band A

Optimax HE combi

WATER CIRCUIT DIAGRAM



KEY

7	Gas inlet
8	DHW outlet
9	Cold main inlet
10	CH flow
11	CH return
14	Heating safety valve
16	Premix fan assembly
32	Heating pump
36	Automatic air vent
42	DHW temperature sensor
44	Gas valve
49	Overheat protection and heat sensor
56	Expansion vessel
82	Ionisation probe
95	Motorised diverter
136	Flow meter
154	Condensate outlet pipe
161	Heat exchanger
186	Return sensor
188	Ignition probe
193	Condensate trap
194	Domestic plate heat exchanger
201	Fan venturi
241	Automatic bypass
246	System pressure sensor

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

1. PRE-MIX FAN ASSEMBLY

The 24 volt pre-mix fan is extremely quiet in operation and in conjunction with our down-firing ceramic burner ensures the most efficient process of combustion possible.

2. CERAMIC PLAQUE BURNER

Unlike many condensing appliances the **Optimax** allows viewing of the flame through a conveniently positioned window within the combustion cover. The Ceramic Plaque Burner provides the optimum in clean burn technology, ultra-quiet with spark generated ignition, which being an extremely reliable and proven system gives peace of mind for the end user.

3. CLIP-ON SENSORS

Negative Temperature Co-efficient sensors (NTC) are dry clip-on style. This helps to prevent premature failure from system contamination. In the unlikely event of a sensor failure, they can easily be changed without draining down the boiler.

4. ALUMINIUM HEAT EXCHANGER

Designed and built within our "State of the Art" research and development department in San Bonifacio, Northern Italy. This aluminium heat exchanger ensures proven reliability and energy efficiency in conjunction with standard heating system design. (Typical flow and return temperature differential of 15°C.)

5. GRUNDFOS PUMP

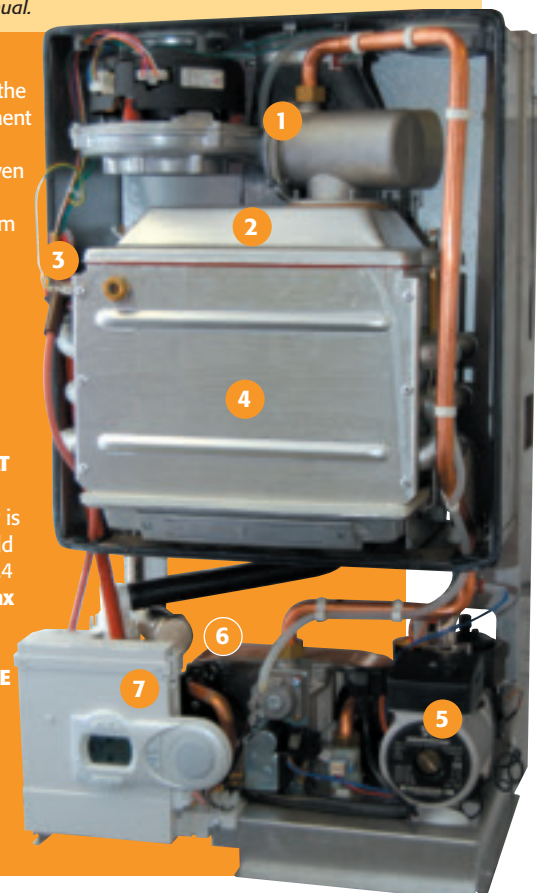
A Grundfos pump is used to ensure reliable delivery of hot water and heating.

6. STAINLESS STEEL DHW PLATE HEAT EXCHANGER (COMBI MODELS ONLY)

The Stainless Steel plate heat exchanger is guaranteed for 5 years against scale build up; it allows a hot water flow rate of 15.4 litres per minute at 35°C for the **Optimax HE 38C**.

7. MULTIFUNCTIONAL USER INTERFACE

All **Optimax** boilers are fitted with a multifunctional, simple to use interface with installer programming access.



system

band A

Optimax HE System

18kW, 25kW and 31kW models

5
year parts
and labour
guarantee

Features and benefits

- Engineered to produce more power and higher efficiency
- Choice of 18kW, 25kW or 31kW system models – ideal for most homes
- Compatible with our AquaCyl cylinder range
- Compatible with our underfloor heating system
- New Italian-styled casing design
- High-density foam lining absorbs almost all operational sounds, making it extremely quiet during normal operation
- Built-in bypass speeds up installation and ensures the minimum flow rate through the heat exchanger at all times
- Integral filling loop that forms part of the boiler valve assembly
- 3 Amp fused three pin plug for simple electrical connection
- Factory-fitted expansion vessel and heating pump
- All models available in both natural gas and LPG versions
- All new boiler control system and liquid crystal display
- Optional pre-plumb jig also available for 25 S and 31 S models – Product Code 046006G0
- 5 year manufacturer's parts and labour guarantee

Optimax HE System controls

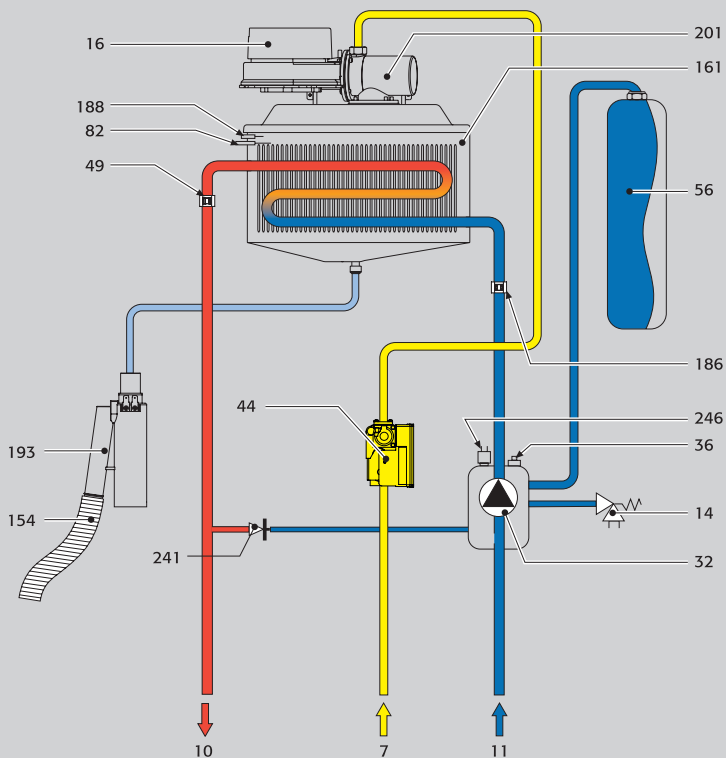
- Liquid crystal display for simple user operation
- Full diagnostic software ensures optimum reliability
- Suitable for Y plan or S plan fully pumped heating systems



LCD diagnostic boiler fascia panel

Optimax HE System

WATER CIRCUIT DIAGRAM



KEY

7	Gas inlet
10	CH flow
11	CH return
14	Heating safety valve
16	Premix fan assembly
32	Heating pump
36	Automatic air vent
44	Gas valve
49	Overheat protection and heat sensor
56	Expansion vessel
82	Ionisation probe
154	Condensate outlet pipe
161	Heat exchanger
186	Return sensor
188	Ignition probe
193	Condensate trap
201	Fan venturi
241	Automatic bypass
246	System pressure sensor

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

PRE-MIX FAN ASSEMBLY

The 24 volt pre-mix fan is extremely quiet in operation and in conjunction with our down-firing ceramic burner ensures the most efficient process of combustion possible.

CERAMIC PLAQUE BURNER

Unlike many condensing appliances the **Optimax** allows viewing of the flame through a conveniently positioned window within the combustion cover. The Ceramic Plaque Burner provides the optimum in clean burn technology, ultra-quiet with spark generated ignition, which being an extremely reliable and proven system gives peace of mind for the end user.

CLIP-ON SENSORS

Negative Temperature Co-efficient sensors (NTC) are dry clip-on style. This helps to prevent premature failure from system

contamination. In the unlikely event of a sensor failure, they can easily be changed without draining down the boiler.

ALUMINIUM HEAT EXCHANGER

Designed and built within our "State of the Art" research and development department in San Bonifacio, Northern Italy. This aluminium heat exchanger ensures proven reliability and energy efficiency in conjunction with standard heating system design. (Typical flow and return temperature differential of 15°C.)

GRUNDFOS PUMP

A Grundfos pump is used to ensure reliable delivery of hot water and heating.

MULTIFUNCTIONAL USER INTERFACE

All **Optimax** boilers are fitted with a multifunctional, simple to use interface with installer programming access.

regular

band A

Optimax HE 18 OV

(regular open vented)

18kW model

5
year parts
and labour
guarantee

Features and benefits

- Engineered to produce more power and higher efficiency
- Compatible with our underfloor heating system
- New Italian-styled casing design
- High-density foam lining absorbs almost all operational sounds, making it extremely quiet during normal operation
- Built-in bypass speeds up installation and ensures the minimum flow rate through the heat exchanger at all times
- Integral filling loop that forms part of the boiler valve assembly
- 3 Amp fused three pin plug for simple electrical connection
- Available in both natural gas and LPG versions
- All new boiler control system and liquid crystal display
- Built-in outside weather compensation software
- 5 year manufacturer's parts and labour guarantee



Optimax HE 18 OV regular open vented model

- At the time of going to press with this brochure the new Optimax HE 18 OV is in the final stages of field trials after months of research and development.

regular

band A

Optimax 25 OV

(regular open vented)

25kW model

2

year parts
and labour
guarantee

Features and benefits

- 25kW OV model
- Engineered for maximum efficiency
- Available in both natural gas and LPG versions
- For use with existing installations
- Compact design for easy siting
- Lightweight – easy one person lift
- Top outlet tapplings for easy installation
- Easy access for installation and servicing
- 2 year manufacturer's parts and labour guarantee

1. PRE-MIX FAN ASSEMBLY

The 24 volt pre-mix fan is extremely quiet in operation and in conjunction with our down-firing ceramic burner ensures the most efficient process of combustion possible.

2. CERAMIC PLAQUE BURNER

Unlike many condensing appliances the **Optimax** allows viewing of the flame through a conveniently positioned window within the combustion cover. The Ceramic Plaque Burner provides the optimum in clean burn technology, ultra-quiet with spark generated ignition, which being an extremely reliable and proven system gives peace of mind for the end user.

3. CLIP-ON SENSORS

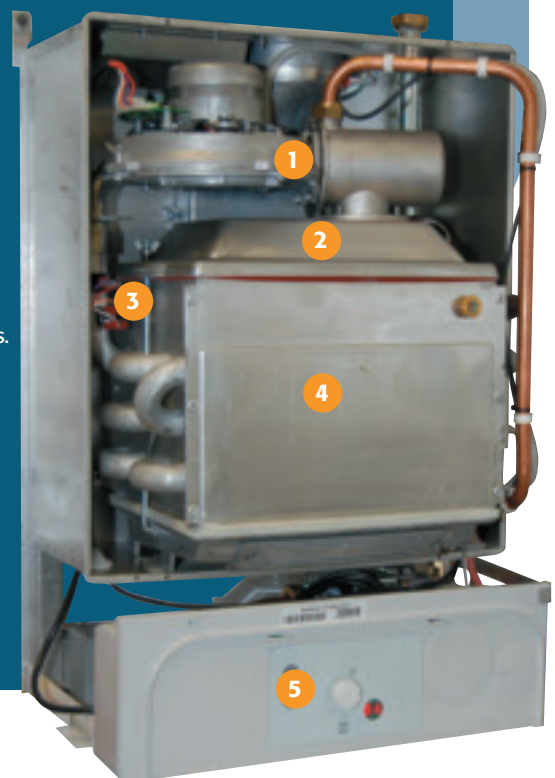
Negative Temperature Co-efficient sensors (NTC) are dry clip-on style. This helps to prevent premature failure from system contamination. In the unlikely event of a sensor failure, they can easily be changed without draining down the boiler.

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5. MULTIFUNCTIONAL USER INTERFACE

Fitted with a multifunctional, simple to use interface with installer programming access.



Technical Specifications

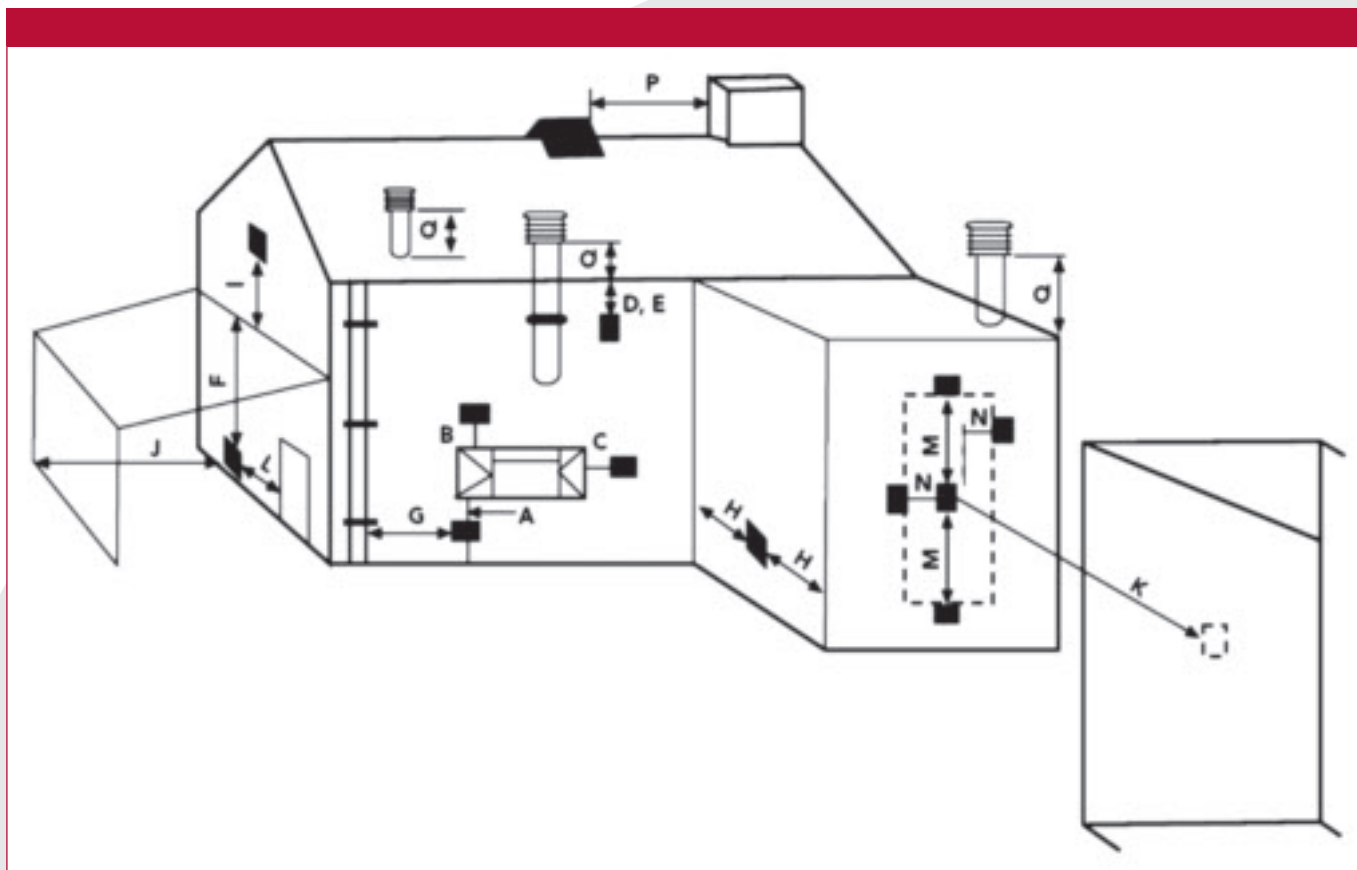
Optimax		COMBI		SYSTEM			OPEN VENTED	
		31 C	38 C	18 S	25 S	31 S	18 OV	25 OV
Output max/min								
Heat input	kW	25.2/5.3	30.8/6.5	19.9/4.4	25.2/5.3	30.8/6.5	19.9/4.4	28.0/8.3
Useful heat output 80°C - 60°C	kW	24.6/5.2	30.2/6.3	18/4	24.6/5.2	30.2/6.3	18/4	24.7/7.3
Useful heat output 50°C - 30°C	kW	26.6/5.7	32.5/6.9	TBA	26.6/5.7	32.5/6.9	TBA	26.4/8.0
Central heating								
Maximum operating temperature	°C	95	95	95	95	95	80	80
Operating pressure central heating								
	Maximum	bar	3	3	3	3	3	3
	Minimum	bar	0.8	0.8	0.8	0.8	0.1	0.1
Expansion vessel capacity	litres	7	9	7	7	7	N/A	N/A
Expansion vessel pre-fill pressure	bar	1	1	1	1	1	N/A	N/A
Boiler water content	litres	1.5	2.0	1.5	1.5	1.5	N/A	N/A
DHW								
DHW output max/min	kW	30.8/5.2	37.7/6.3	N/A	N/A	N/A	N/A	N/A
Maximum DHW production	Δt 25°C	l/min	17.6	21.6	N/A	N/A	N/A	N/A
	Δt 30°C	l/min	14.7	18.0	N/A	N/A	N/A	N/A
	Δt 35°C	l/min	12.6	15.4	N/A	N/A	N/A	N/A
Operating pressure DHW	Maximum	bar	9	9	N/A	N/A	N/A	N/A
	Minimum	bar	0.25	0.25	N/A	N/A	N/A	N/A
DHW water content	litres	0.3	0.5	N/A	N/A	N/A	N/A	N/A
Dimensions, weights, fittings								
Height	mm	700	700	700	700	700	630	582
Width	mm	400	450	320	400	450	320	400
Depth	mm	330	330	300	330	330	280	306
Weight (empty)	kg	39	45	TBA	37	43	TBA	34
Gas fitting	mm	22	22	22	22	22	22	22
Central heating fittings	mm	22	22	22	22	22	22	22
DHW circuit fittings	mm	15	15	N/A	N/A	N/A	N/A	N/A
Power supply								
Max power input	W	135	145	TBA	120	130	TBA	50
Power supply voltage/frequency	V/Hz	230V/50Hz			230V/50Hz		230V/50Hz	
Index of protection	IP	IPX5D			IPX5D		IPX5D	IPX4D
Maximum permissible flue lengths								
Max horizontal flue length 60/100mm Ø	m	5	5	5	5	5	5	5
Max vertical flue length 60/100mm Ø	m	6	6	6	6	6	6	6
Max horizontal flue length 80/125mm Ø	m	15	15	15	15	15	15	15
Max vertical flue length 80/125mm Ø	m	16	16	16	16	16	16	16
Total equivalent length two pipe 80mm Ø	m	75	55	95	95	55	75	75
SEDBUK SAP efficiency								
	%	90.4	90.4	TBA	90.4	TBA	TBA	90.4

Pipe and flues connections

	Top view	Bottom view	Key
Optimax HE 31C			<ol style="list-style-type: none"> 1 CH flow (22mm with isolation valve fitted) 2 DHW outlet (15mm with connection valve fitted) 3 Gas inlet (22mm with isolation valve fitted) 4 Cold main inlet (15mm with isolation valve fitted) 5 CH return (22mm with isolation valve fitted (c/w filter)) 6 Pressure relief valve 7 Condensate outlet
Optimax HE 38 C			<ol style="list-style-type: none"> 1 CH flow (22mm with isolation valve fitted) 2 DHW outlet (15mm with connection valve fitted) 3 Gas inlet (22mm with isolation valve fitted) 4 Cold main inlet (15mm with isolation valve fitted) 5 CH return (22mm with isolation valve fitted (c/w filter)) 6 Pressure relief valve 7 Condensate outlet
Optimax HE 25 S			<ol style="list-style-type: none"> 1 CH flow (22mm with isolation valve fitted) 2 Gas inlet (22mm with isolation valve fitted) 3 CH return (22mm with isolation valve fitted (c/w filter)) 4 Pressure relief valve 5 Condensate outlet
Optimax HE 31 S			<ol style="list-style-type: none"> 1 CH flow (22mm with isolation valve fitted) 2 Gas inlet (22mm with isolation valve fitted) 3 CH return (22mm with isolation valve fitted (c/w filter)) 4 Pressure relief valve 5 Condensate outlet
Optimax 25 OV			<ol style="list-style-type: none"> 1 CH flow (22mm with compression coupler fitted) 2 Gas inlet (22mm with isolation valve fitted) 3 CH return (22mm with compression coupler fitted) 4 Pressure relief valve 5 Condensate outlet

Please consult Ferrolì for details of the new Optimax HE 18 S and Optimax HE 18 OV

Flue terminal positions



Flue terminal positions	mm
A Directly below an opening, air brick, opening windows etc	300
B Above an opening, air brick, opening windows etc	300
C Horizontally to an opening, air brick, opening windows etc	300
D Below gutters, soil pipes or drain pipes	75
E Below eaves	200
F Below balconies or car port	200
G From a vertical drain pipe or soil pipe	150
H From an internal or external corner	100
I Above ground roof or balcony level	300
J From a surface facing the terminal	600
K From a terminal facing the terminal	1200
L From an opening in the car port (ie door, window) into the dwelling	1200
M Vertically from a terminal on the same wall	1500
N Horizontally from a terminal on the same wall	300
O From the wall on which the terminal is mounted	N/A
P From a vertical structure on the roof	150
Q Above intersection with roof	300

Notes

In addition, the terminal must not be nearer than 300mm to an opening in the building fabric formed for the purpose of accommodating a built-in element such as a window frame.

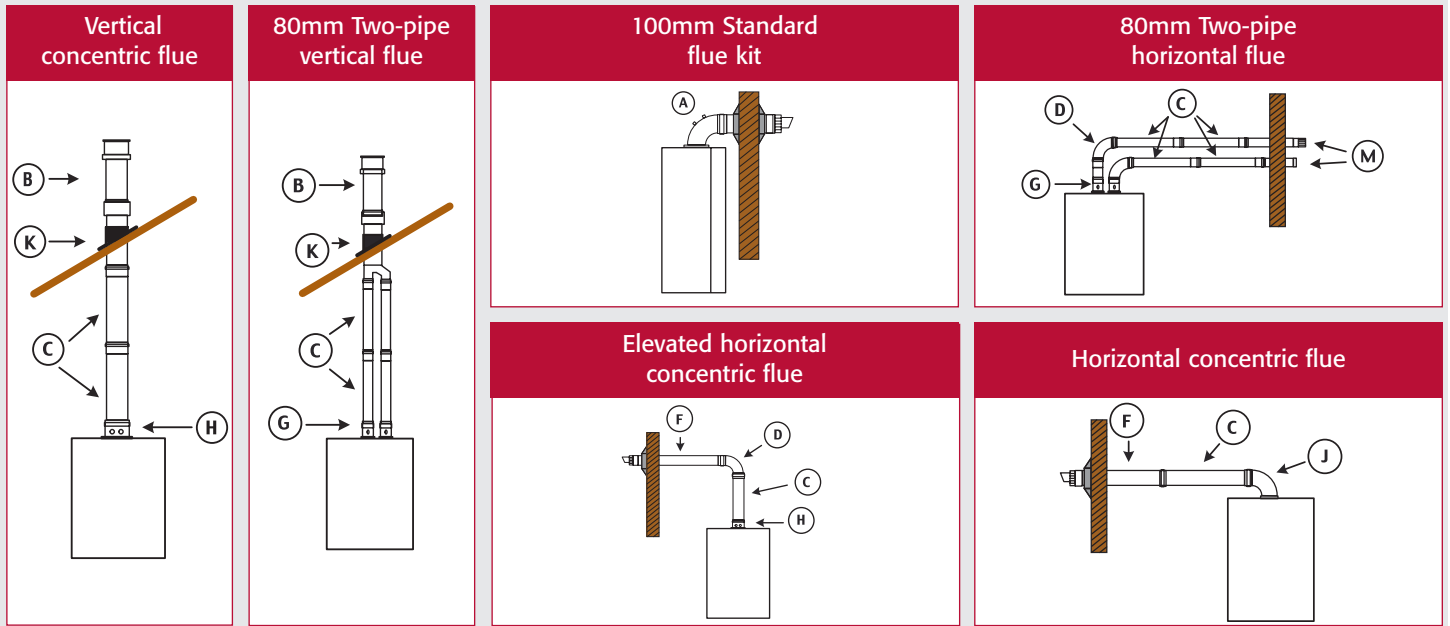
Condensing terminal positions: If the flue is to be terminated at low level, then the potential effect of the plume must be considered.

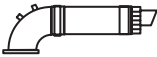

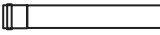


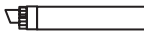






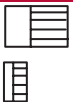
The plume should not be directed:

- across a frequently used access route
- towards a window
- across a neighbouring property

For more information on terminal positions please contact our technical department on 08707 282 885 OPTION 1

Flue options



A Standard flue kit  100mm – 1KWWR53A (includes appliance bend and horizontal flue terminal)	B Vertical roof terminal  80mm – 1KWMA84U 100mm – 1KWMA83U 125mm – 1KWWR83A	C 1m flue extension  80mm – 1KWMA83A 100mm – 1KWMA56U 125mm – 1KWWR56U
D 90° bend  80mm – 1KWMA82A 100mm – 1KWWR81U 125mm – 1KWMA73K	E 45° bend  80mm – 1KWMA65A 100mm – 1KWMA64A 125mm – 1KWMA72K	F Horizontal terminal  100mm – 1KWMA56W 125mm – 1KWWR56A
G 80mm Two pipe adaptor kit (pair)  1KWWR54A	H Vertical adaptor  100mm – 1KWMA71W 125mm – 1KWMA74Y	J Appliance bend  100mm – 1KWMA68W 125mm – 1KWMA74Y (vertical adaptor)* 1KWMA73K (bend)* (*both required for 125mm)
K Roof slate  Pitched roof slate – 1KWMA82U Flat roof slate – 1KWMA81U	L Support bracket  80mm – 1KWWR48A 100mm – 1KWWR46A 125mm – 1KWWR49A	M Wall seal  80mm – 1KWMA84A 100mm – 1KWWR11A 125mm – 1KWWR09A
N 80mm Horizontal terminals  Flue gas terminal – 1KWMA86A Air terminal – 1KWMA85A		

Flue length reductions for bends

TWO PIPE FLUE - 80MM

Reduction for bends	Air	Flue
90° bend	1.5m	2.0m
45° bend	1.2m	1.8m
Pipe - per metre length	1m	1.6m ⁺ /2m ⁺⁺
Horizontal terminals	2m	5m
Concentric vertical	-	12m

⁺Vertical ⁺⁺Horizontal

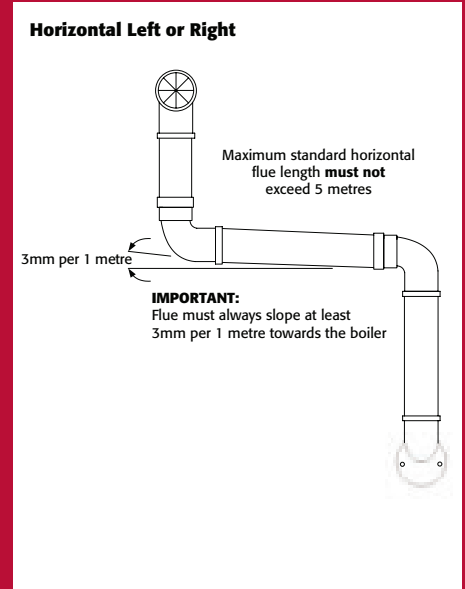
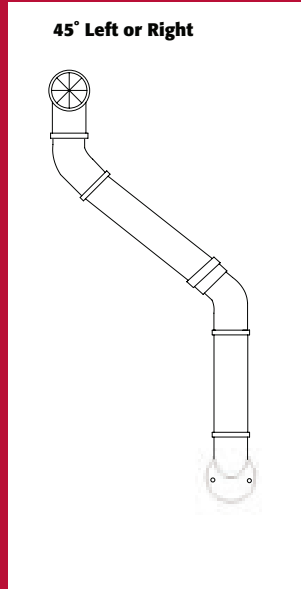
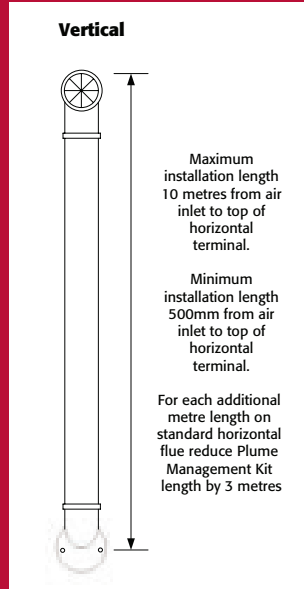
CONCENTRIC FLUE

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

New accessories for the Optimax HE

Plume management kit

- Kit Part No: 041004G0 includes 1x appliance bend, 1x horizontal terminal, 1x wall bracket, 1x extension and 1x 90° terminal bend
- Additional extensions, bends and brackets are available. Please contact Ferroli for details



Space frame kit

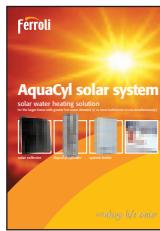
- Allows piping to run vertically behind the boiler
- Part No: 046007G0 for Optimax HE 25S and 31C
- Part No: 046008G0 for Optimax HE 31S and 38C



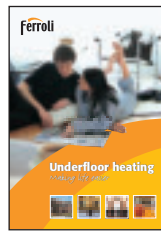
Brochure request



**DOMESTIC
RANGE GUIDE**



**AQUACYL TWIN
COIL CYLINDER
SOLAR WATER
HEATING**



**UNDERFLOOR
HEATING**



**DOMICOMPACT
BAND B
BOILERS**



**AQUACYL
UNVENTED
CYLINDERS**

PLEASE SEND COPIES OF THE BROCHURES TICKED ABOVE TO:

NAME

POSITION

COMPANY

ADDRESS

POST CODE

TELEPHONE

EMAIL

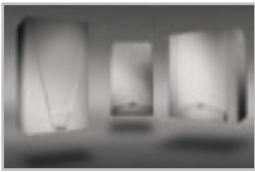
**PHOTOCOPY AND FAX THIS FORM TO
08707 282 883**

Ferrolì



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.



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