

Sirius three FS 50-250kW

Floor-standing condensing boiler

Suitable for a range of projects including large domestic properties, small commercial premises and medium to large sized applications that require up to 1WM.



Features

Wide range of outputs: 50, 70, 90, 110, 130, 150, 200, 250kW
Modulation ratio of up to 9:1
Gross seasonal efficiency up to 97.5%
Supplied with the latest Siemens controls
QA75 Twist Knob Controller
Can be programmed to work with solar thermal, biomass and buffer tanks
Suitable for LPG conversion
Lightweight stainless steel heat exchanger
Integrated Low Loss Headers and Plate Heat Exchangers (available as options)
Very compact design with casters on the bottom of larger output boilers
1" flow and return connections (50-70kW)
Integrated Cascade function
0-10 volt connection
Weather compensation
Low NOx under 24.7mg/kW
ERP compliant
Certified for the ETL*
5 year parts and labour warranty**

Benefits

Suitable for a wide range of commercial applications
Wide modulation ratio reduces constant on/off cycling to improve efficiency and boiler longevity
Reduced energy consumption
State of the art PCB offering improved control options
Simple descriptive display and easy to use advanced programming functions
Sustainable, energy efficient solution across complete range
LPG conversion kits available for off-grid applications
Reliable and energy efficient heat transfer
Professional finish, easier to install, offers a reduced footprint
Boilers will pass through 700mm doors. Easier to position when space is at a premium
Avoids major pipework modification
Up to 16 boilers can be managed by the Siemens controller
Provides a quick and simple interface with BMS
To reduce operation costs
Minimises impact on the environment
Reduce carbon emissions and improve efficiencies in support of government targets
Part of the Enhanced Capital Allowance (ECA) tax scheme for businesses
For complete peace of mind

*Most outputs. Please visit www.pottertoncommercial.co.uk for details.

**Terms and conditions apply. Please visit www.pottertoncommercial.co.uk for details.
Sirius FS 400 and 525kW also available

Specification

Performance

	Fuel Type		Sirius three FS 50	Sirius three FS 70	Sirius three FS 90	Sirius three FS 110
Output @ 80/60°C	NG	kW	45.1	65.1	85.1	102
Output @ 50/30°C	NG	kW	48.6	70.3	91.8	110.2
Input (Gross) Maximum	NG	kW	51.4	74.3	97	116.4
Input (Net) Maximum	NG	kW	46.3	67.0	87.4	104.9
Output @ 80/60°C	LPG	kW	45.1	65.1	85.1	102
Output @ 50/30°C	LPG	kW	48.6	70.3	92.2	110.2
Input (LPG) (Gross) Maximum	LPG	kW	51.4	74.3	97.5	116.4
Input (LPG) (Net) Maximum	LPG	kW	47.3	68.4	89.8	107.2

Efficiency

	Value %					
Efficiency @ 80/60°C - 100% Load	% Gross		87.8	87.6	87.7	87.6
Efficiency at 50/30°C - 100% Load	% Gross		94.6	94.6	95.1	94.7
Efficiency @ 30% Load	% Gross		97.1	96.8	96.9	96.8
Current Building Regulations - Part L2 Seasonal Efficiency	% Gross		97.1	96.9	97.0	96.9
ErP efficiency rating			A	A	N/A	N/A

Gas

Gas Consumption (Natural Gas)	m³/h	4.9	7.07	9.25	11.1
Gas Consumption (LPG)	Kg/h	3.59	5.19	6.79	8.15
Inlet Gas Pressure (Natural Gas - G20)	m/bar		20		
Inlet Gas Pressure (LPG - G31)	m/bar		37		
Gas Connection Size	inch	¾	¾	1	1
Gas Connection Type			Male Thread		

Flue

Flue Gas Volume at 80/60°C (NG)	m³/h at STP	67.6	97.7	127.6	147.2
Flue Gas Volume at 50/30°C (NG)	m³/h at STP	62.8	90.5	117.7	136.2
Flue Gas Volume at 80/60°C (LPG)	m³/h at STP	61.5	88.9	114.1	139.3
Flue Gas Volume at 50/30°C (LPG)	m³/h at STP	57.1	82.4	105.2	128.9
Max Flue Gas Pressure @ Outlet (B23)	pa		200		

Hydraulic

Water Flow Rate @ 15°C ΔT	l/s	0.72	1.04	1.36	1.63
Water Flow Rate @ 20°C ΔT	l/s	0.54	0.78	1.02	1.22
Water Flow Rate @ 30°C ΔT	kW	0.36	0.52	0.68	0.81
Hydraulic Resistance @ 15°C ΔT	kPa	94	52	40	40
Hydraulic Resistance @ 20°C ΔT	kPa	54	32	22	22
Hydraulic Resistance @ 30°C ΔT	kPa	22	18	10	11
Water Content	litres	3	5	9	10
Flow & Return Connection Size	inch	1	1	1½	1½
Flow & Return Connection Type			Male Thread		
Flue Connection Size	mm	80/125	80/125	110/160	110/160
Maximum Boiler Operating Pressure	bar			4	
Minimum Boiler Operating Pressure	bar			1	
Maximum Flow Temperature	°C			85	

General

Appliance Dry Weight	Kg	60	70	104	109
NOx Level (Dry @ 0% O₂)	mg/kWh	27	31	36	22
CO₂ Content – Natural Gas	%	8.5 - 9	8.5 - 9	8.5 - 9	9 - 9.2
CO₂ Content – LPG	%	9.5 - 10	9.5 - 10	9.9 - 10	9.5 - 10
High Level Ventilation (BS 6644)	cm²	93	134	175	210
Low Level Ventilation (BS 6644)	cm²	185	268	350	418

Electrical

Power consumption	W	100	117	146	185
Nominal Supply Voltage	V/Hz		230 v 1 Ph 50 Hz		

Sirius three FS 130	Sirius three FS 150	Sirius three FS 200	Sirius three FS 250
121.5	140.3	185.9	232.8
130.6	150.9	200	250
137.4	158.6	212	266.4
123.8	142.9	191.0	240.0
121	140	184	238
130	150	200	250
137.4	158.6	212	266.4
126.6	146.0	195.3	245.4

88.4	88.4	87.7	87.4
95.1	95.1	93.9	93.9
97.8	97.8	98.3	98.3
97.3	97.3	97.5	97.5
N/A	N/A	N/A	N/A

13.1	15.1	20.2	25.4
9.8	11.3	14.8	18.6
17-25			
27-45			
1	1	1½	1½
Male Thread			

181	208	331	422
166	191	303	386
207	240	320	400
190	219	292	367
200	200	200	200

2.08	2.71	3.19	3.99
1.56	1.80	2.39	2.99
1.0	1.2	1.6	2.0
69	70	67	65
41	41	41	41
18	20	20	22
10	11	13	15
1½	1½	2	2
Male Thread			
110/160	110/160	150	150
6			
1			
85			

126	132	212	232
17	23	37	39
9.2 - 9.4	9.2 - 9.4	9.2 - 9.4	8.8 - 9
10 - 10.2	10 - 10.2	10.2 - 10.4	10.2 - 10.4
275	317	424	534
550	634	848	1068

187	283	242	369
230 v 1 Ph 50 Hz			

Single boiler outputs

**50kW to
250kW**

Gross seasonal efficiency

Up to
97.5%

Modulation ratio

Up to **9:1**

Cascade output

Up to **1MW**

High efficiency condensing boilers

Designed to
meet carbon
reduction
targets

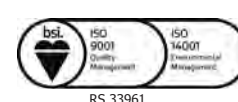
Lifetime
service and
support



sales 0345 070 1055

technical 0345 070 1057

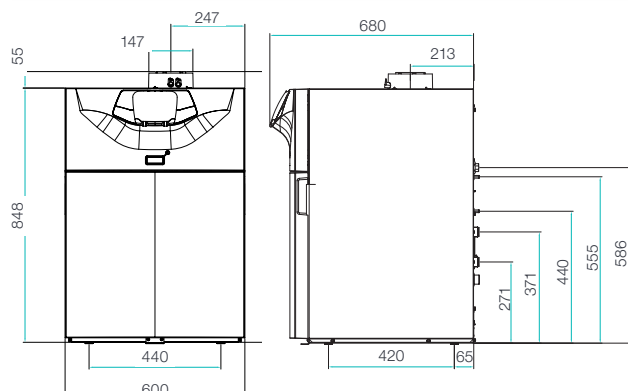
web pottertoncommercial.co.uk



Sirius three FS 50-250kW

Dimensions

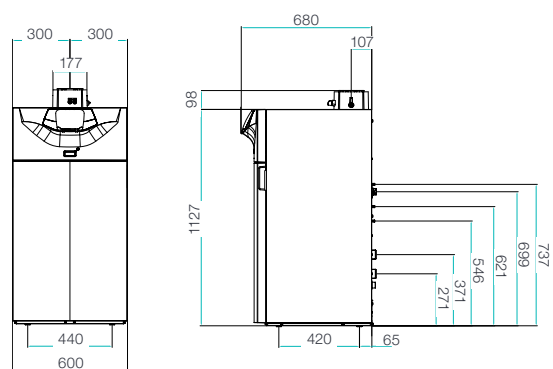
Sirius three FS 50/70kW



Front View

Side View

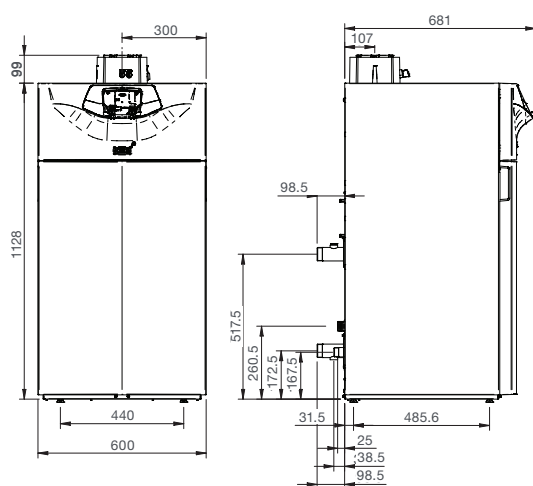
Sirius three FS 90/110kW



Front View

Side View

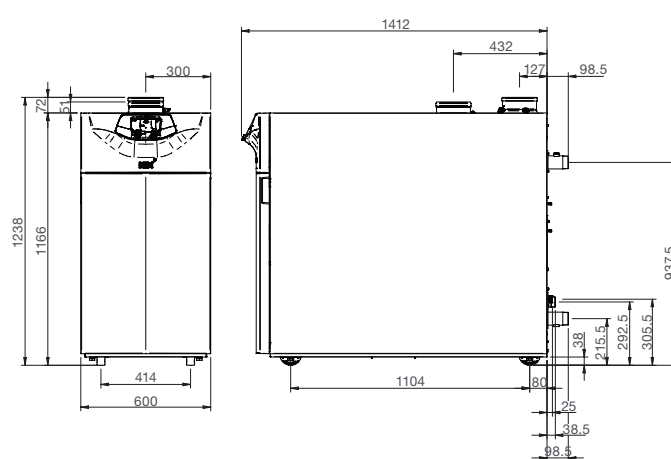
Sirius three FS 130/150kW



Front View

Side View

Sirius three FS 200/250kW



Front View

Side View

POTTERTON
COMMERCIAL

Totally dependable.

ALL TOGETHER BETTER

BAXI
HEATING

remeha

ANDREWS
WATER HEATERS

POTTERTON
COMMERCIAL

HEATRAESADIA

PACKAGED
PLANT
SOLUTIONS



COMMERCIAL SOLUTIONS FROM **BAXI HEATING**