Prestige[®] 100 > 120 Solo



DESCRIPTION

High efficiency wall mounted gas condensing boiler. Stainless steel construction with self cleaning flue ways.

- Stainless steel heat exchanger.
- Available in 5 models, 42kW to 120kW.
- Heating only boiler.
- Premix burner air/modulating gas burner.
- All components are easily accessible from the front.
- Compact and lightweight.
- Integrated flue check valve.
- Flame inspection panel.
- ACVMax control with new graphic LCD and extended functionality.
- Versatile control: thermostat On/Off, Open Therm, 0-10 V input, alarm, Modbus.
- Concentric 100/150mm Ø flue connection.
- Integrated flue gas measurement point.
- Possibility of cascading up to four units without additional controls.
- Hydraulic kits and additional control packages available.
- Can control two heating circuits without additional external controls.

Supplied with LPG kit for easy on-site conversion.

For installations with 2 or more boilers, please consult your local Business Development Manager for guidance on cascade options and control accessories. Contact details can be found on Page 1 of this product guide.

Reference	Name	Fuel
05648401	Prestige [®] 100 Solo	Natural gas
05630001	Prestige [®] 120 Solo	Natural gas

Prestige® boilers can be combined with your choice of ACV hot water cylinders with sizes up to 1000 litres or HeatMaster® combination boilers offering the flexibility of a highly efficient heating and hot water system.

At the heart of the Prestige® boiler lies our stainless steel heat exchanger, which has been proven, developed and improved after intensive research and based on experience in the field. ACV applies the experience gained in the use of stainless steel for heating and hot water production for over 90 years manufacturing to our product development to ensure unsurpassed quality and performance.



CHARACTERISTICS



- Concentric chimney connection 100/150mm with measuring element
- Chimnev tube
- 3 Modulating Air/gas premix burner Gas pressure switch
- 4
- Air inlet
- Condensate recovery dish 6. Cold water return
- 7. 8.
 - Safety valve
- 9 Control panel with display and pressure gauge Pressure sensor
- 10. 11. Electrical panel.
- Stainless steel heat exchanger 12.
- 13.
- Water supply 14. Auto air vent
- 15. Flame sight glass
- 16. Insulated casing
- 17. Gas valve

FLUE ACCESSORIES CAN BE FOUND ON PAGE 53 - 54 OF THIS PRODUCT GUIDE

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Wall hung gas condensing boiler

TECHNICAL CHARACTERISTICS AND DIMENSIONS

Туре		P100	P120
- Fuel		Natural gas	Natural gas
Input max (heating) LCV	kW	99	117
Input max (heating) HCV	kW	109.89	129.87
Output power max (80/60°C)	kW	97.5	116.4
Output power min (80/60°C)	kW	12.2	12.2
Efficiency at 30% load (EN677)	%	108.1	107
Connection - heating	Ø"	1 1/2 M	1 1/2 M
Connection gas	Ø"	1 M	1 M
Water pressure drop boiler at $\Delta t = 20^{\circ}C$	mbar	42	80
Gas flow rate (max output)	m³/h	10.5	12.4
Chimney connection	Ømm	100/150	100/150
Weight (empty)	kg	89	93
Max operating temperature	°C	87	87
Max service pressure heating (primary)	bar	4	4
Voltage	V	230	230
Electrical consumption	W	142	178

DIMENSIONS





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TABLE OF CASCADE COMPONENTS

Description	Reference	Number of boilers						
Cascade of Prestige® Model 100-120			3	4	5	6	7	8
Balanced Header DN80 <480kW	10800161	1	1	1	•			•
Balanced Header DN100 >480kW	10800162	•	•	•	1	1	1	1
Kit collector DN 80 for 2 boilers	10800291	1	•	2	1	•	2	1
Kit Collector DN80 for 3 boilers	10800293	•	1	•	1	2	1	2
Connection Kit for Kit collector DN80	10800171	2	3	4	•	•		•
Connection Kit for Kit collector DN100	10800172	•	•	•	5	6	7	8
Kit Collector Floor Support DN80	10800169	1	1	2	•	•	•	•
Kit Collector Floor Support DN100	10800170	•	•	•	2	2	3	3
Cascade Cable for Internal control	257F1166	1	2	3	•	•	•	•
DHW Sensor	5476G003	1	1	1	•	•	•	•
Adaptor DN80 - DN100	10800164	•	•	•	1	1	1	1

EXTERNAL CONTROLS

		Number of boilers						
Description	Reference	2	3	4	5	6	7	8
Control Unit	10800188	1	1	1	1	1	1	1
Clip-in Interface for ACVMax	10800354	2	3	4	5	6	7	8
Wall mounting for Control Unit	10800121	1	1	1	1	1	1	1

CASCADE RACK SYSTEMS

		Number of boilers						
Description	Reference	2	3	4	5	6	7	8
Two boiler standard rack	507F4233	1	1	1	1	1	1	1
One boiler rack extension	537F4231	•	1	•	1	•	1	•
Two boiler rack extension	537F232	•	•	1	1	2	2	3





FLEXIBLE HEATING SOLUTIONS

4 EXCELLENT REASONS TO INSTALL A CASCADE

1 Efficiency

A cascade system allows modulation of the heating power, from the minimum output of one boiler up to the maximum output of all the boilers. Which, in the case of a four-boiler cascade, gives a modulation ratio of at least 16:1, and of course all the permutations between.

2 Back-up

The ACV cascade controllers optimise the potential of the available boilers, if one of the boilers fail, the controller simply adjusts the power of the remaining boilers to compensate.

3 Easy commissioning

One, two, three or four boilers, the commissioning procedure is the same, simple and easy when undertaken by a qualified engineer.

4 Easy maintenance

Any one boiler in a cascade can be serviced and maintained easily whilst the other boilers are operational. This enables the servicing to be carried out at any time of the year and not just during the traditional summer shut down period.

THE ONLY COMBINED HEATING AND HOT WATER CASCADE CAPABLE OF TOTAL CONDENSATION

The installation of more than one HeatMaster^{*} TC in cascade offers increased energy savings and more flexible performance than comparable systems, whether in new build or renovation.









The Prestige® 50-75-100-120 and HeatMaster® boilers can be installed in a cascade: multiple boilers joined together to offer highly flexible power output, from 25% of any one boiler up to 100% of the combined power of all units. By doing this, system efficiency is optimal and emissions are held to a minimum.

This modular system, straightforward to install with the hydraulic kit developed and proposed by ACV, is particularly adapted to systems where there is a high variability in demand, and average normal load is only a fraction of the peak load. Prestige® boilers can be installed in a cascade from 2 to 8 units with a maximum combined output of 920kW. Operating the Prestige® in cascade offers a modulation ration of 1:73, a highly flexible output from the minimum output of one unit to 100% of the combined power of all the boilers.

Maximum overall yields and minimum consumption of energy are optimised via the simple-to-adjust interface, which gives the installer complete control over the system parameters. Our local design teams are available to help you select and configure the cascade which is best adapted to your needs. For more assistance in sizing your Prestige[®] cascade please contact your local representative, *details can be found on Page 1*.

ACVMax

Further innovation in the new generation of Prestige[®] boiler is the all new ACVMax control, which has been designed to be flexible yet easy to use. The new control panel with integrated manometer and LCD provide all the necessary information with the simple push of a button. As well as monitoring the boiler to ensure optimal efficiency, the ACVMax offers many advanced control options, and native support for open protocols such as OpenTherm and Modbus, enabling easy integration to BMS.



Graphical user interface



Easy installation set up menu covers 80% of standard installations.



Controls cascades of up to 4 boilers without an additional boiler controller.



Easy diagnostics with full text error messages and problem solving information.



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