



With the future in mind



Prestige Solo

50 - 75 - 100 - 120

High capacity condensing boilers

High efficiency and quiet operation
Cascade installation from 100 to 920 kW
Easy maintenance
State of the art electronics

NEW Model 2014



excellence in hot water

World Class Heat Exchanger



At the core of the Prestige is ACV's unique stainless steel heat exchanger, developed and improved after intensive research and laboratory testing. ACV applied expertise from the use of stainless steel for heating and hot-water production applications gained from over 90 years of manufacturing experience. Combustion gases flow vertically into the heat exchanger flue ways: the flue gases condense in the lower section, drawing off all of the energy created by combustion and giving the Prestige its exceptionally high level of efficiency.

UNRIVALLED CORROSION RESISTANCE

The use of stainless steel provides unparalleled resistance to corrosion and the additives used in heating systems. The stainless steel used in ACV products is highly resistant to the acidity of the condensates even if the natural gas or propane has Sulphur residues.



LOW MAINTENANCE

The heat exchanger of the Prestige is self-cleaning: the condensate continuously flows across the surface of the flue-ways and automatically removes the residues from combustion.

This way the boiler maintains its high efficiency and maintenance is reduced to an absolute minimum.

OPTIMUM WATER VOLUME FOR MORE STABLE OPERATION

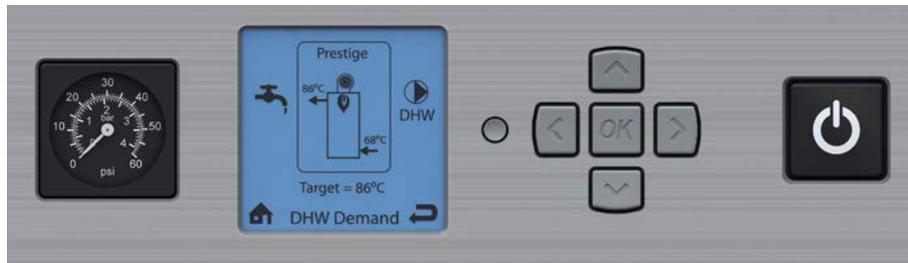
The specially designed flue tubes optimizes the heat exchanger water volume, thus stabilizing the temperature in the boiler reducing the risk of overheating.

HIGH EFFICIENCY

Thanks to the stainless steel design of the heat exchanger, which eliminates oxidation. The Prestige boiler keeps a high and stable efficiency level over its whole lifetime, and the low energy losses of the heat exchanger guarantee low energy consumption.



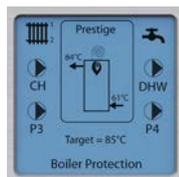
State of the Art ACVMax[®] Electronics



The all new ACVMax[®] system control is designed to be flexible yet easy to use. The new control panel with integrated manometer and LCD display provides all necessary information with the simple push of a button.

It monitors and controls the boiler to operate as efficiently as possible. ACVMax[®] monitors the boiler supply, return and flue gas temperatures and operates the igniter, gas valve and fan. It uses this information to modulate the boiler's firing rate to maintain the required setpoint. ACVMax[®] offers many advanced control options, which may be adjusted for various applications to achieve optimum boiler efficiency and operation. The integrated manometer allows a simple check of the pressure without having to power-on the boiler.

Commissioning and servicing has never been easier!



- Graphical user interface



- Easy menu structure



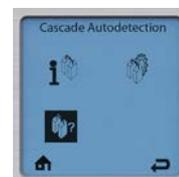
- Easy installation set up menu covers 80% of standard installations



- Extended set up menus for cascades, expert installation



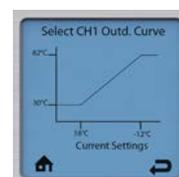
- Easy diagnostics with full-text error messages and problem solving information



- Controlling of cascades up to 4 units without an additional controller



- Reset to factory settings



- Easy read-out of system parameters
Shown: set outdoor curve

A Wealth of Features



New inclined viewing glass positioning

The viewing glass allows easy visual inspection:

- Positioned at the front of the heat exchanger
- Inclined



Mechanical manometer (no need to power unit on)

Integrated mechanical manometer allows controlling the pressure without having to power on the boiler



New burner hood with fan oriented sideways

The positioning of the burner hood reduces servicing time

- No need to remove the top cover

Easy fan mounting/removal with new clamp system

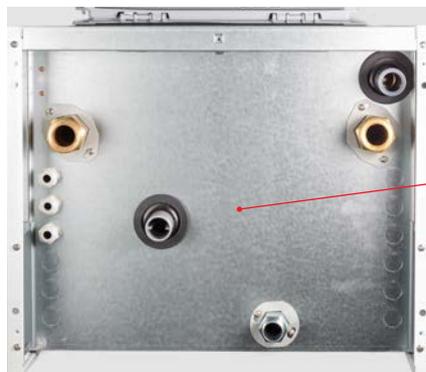
The fan can simply be removed without having to remove other parts first

All parts serviceable from front of unit

By giving access to all parts by simply removing the front cover of the boiler, servicing time is reduced.



Bottom



Connections located identically to previous models

The connections on the underside of the Prestige give easy access during installation with the added benefit of being in the same position as the previous model. There is no need to adapt pipework or wiring.

Model shown: Prestige 75 Solo



Support of multiple protocols

OPEN TO THE OUTSIDE WORLD

The new Prestige is the most open appliance ever developed by ACV.

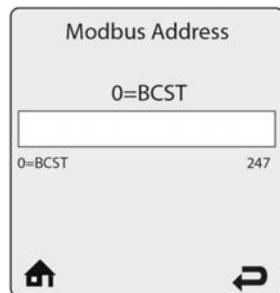
With native support for open protocols such as OpenTherm® 3.2 and Modbus®, Prestige appliances can easily be integrated in BMS (Building Management System) systems.



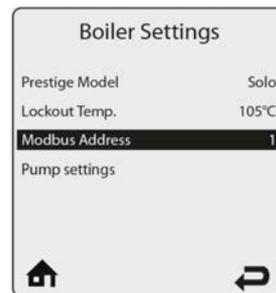
The new Prestige also provides control connectivity for 0-10 V modulation control and two room thermostats. The thermostats can be used in several configurations: On/Off switch with fixed temperature or set by outdoor sensor, constant temperature running on heating set point or set by outdoor sensor.

Further connections allow for triggering alarm systems, connecting different NTC sensors and cascade temperature sensor, drive pumps, solenoids and 3-way valves, ...

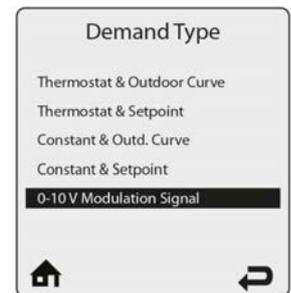
All connections and functions are easily programmed and activated using the ACVMax® graphical user interface.



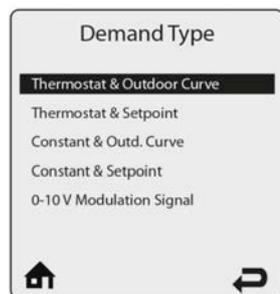
Modbus® Configuration



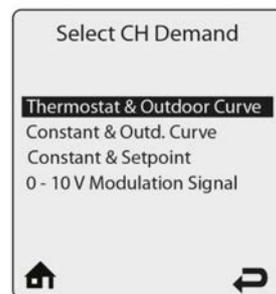
Modbus® Configuration



0-10 V Modulation



Thermostat configuration



Thermostat Configuration



External Relays Configuration



Prestige boilers and hot water cylinders

Prestige boilers can be combined with your choice of ACV hot water Tank-in-Tank cylinders with sizes up to 1000 litres.

Operation in Cascade



Prestige boilers can be installed in a cascade from 2 to 8 boilers with a maximum output of 920kW. Multiple boilers linked together offer a highly flexible output from 20% of one unit to 100% of the combined power of all the boilers. This greatly improves the system efficiency and keeps emissions to a minimum. A modular cascade system combined with the ACV developed hydraulic kit makes installation straight forward. It also provides the Prestige boilers with the ability to control a system with high variability in demand where the average normal load is a fraction of the peak load. With the simple to adjust interface, the Prestige units are installer and user friendly and give complete control of the system parameters.



- Integrated non-return flue valve for cascades
- Up to four units in cascade without additional controller
- Broad modulation range
- High availability with redundancy
- Boilers in a cascade can be configured to serve either CH or DHW circuits

Four good reasons for cascade installation

■ 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 27:1, and of course all the permutations between.

■ Back-up

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

■ Easy commissioning

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

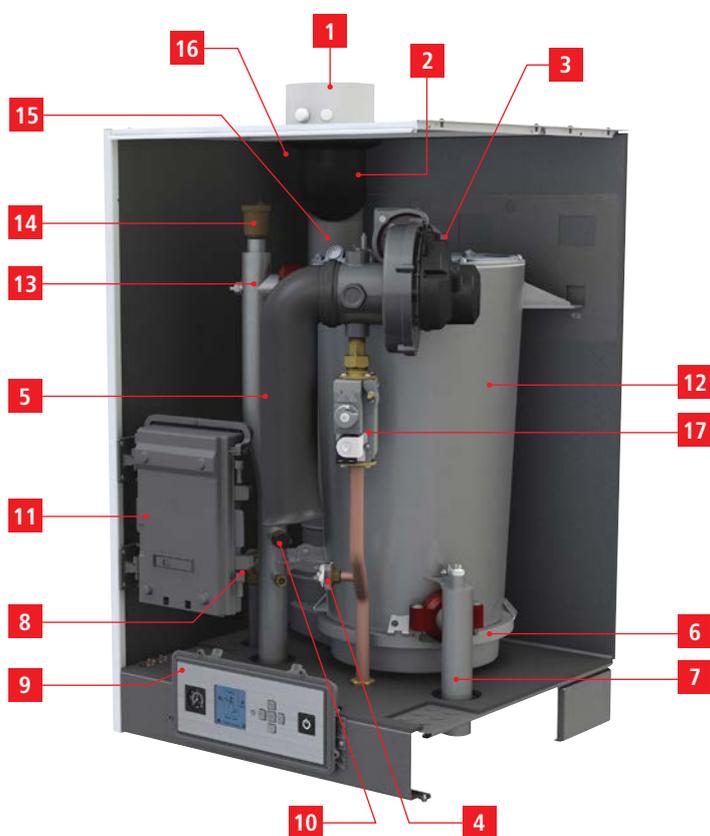
■ Easy maintenance

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.



Prestige Solo 50 - 75 - 100 - 120 technical

Type		P50	P75	P100	P120
Fuel		Natural Gas	Natural Gas	Natural Gas	Natural Gas
Input max - LHV	kW	50	69,9	99	115
Efficiency at 100% (80/60°C)	%	96,3	96,8	97,6	96,3
Efficiency at 30% load (EN677)	%	106,8	107,3	107,9	108
Heating connection (M)	Ø"	1 1/4 M	1 1/4 M	1 1/2 M	1 1/2 M
Gas connection (M)	Ø"	3/4 M	3/4 M	1 M	1 M
Water pressure drop (primary circuit) Δt = 20°K	mbar	30	74	42	80
Flow rate G20 (Max gas)	m³/h	5,3	7,4	10,5	12,2
Chimney connection Ø	Ø mm	100/150	100/150	100/150	100/150
Drained weight	kg	54	59	89	93
Max. temp of flue gases	°C	90	90	90	90
Max. operating pressure of primary circuit	bar	4	4	4	4
Rated voltage	V	230	230	230	230
Class IP		X4D	X4D	X4D	X4D
Electrical consumption	W	78	126	150	180



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

Model shown: Prestige 100 Solo

With the future in mind

Since 1922



excellence in hot water

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