

Advenco ADplus

Stainless Steel Semi-Storage Water Heaters 70-140 kW



The Advenco ADplus is a range of high-power condensing gas water heaters featuring one to two stainless steel heat exchangers connected to an integrated stainless steel water storage tank.

The ADplus is designed to serve as a semi-storage system using patented boiler heat exchanger technology to deliver efficient domestic hot water production, and is ideally suited for soft water applications with a continuous hot water demand in addition to frequent peak periods.

Each high quality heat exchanger is constructed from a continuous run of titanium-stabilised stainless steel, granting fully condensing performance with exceptional corrosion resistance and increased longevity thanks to a large-bore, circular cross-section tube design. An efficient pre-mix burner with a high modulation ratio results in high combustion efficiency with ultra-low NO_x and CO emissions.

The ADplus range features an integrated cascade controller supporting full temperature control and self-check maintenance functions for up to 8 units. The controller accommodates 0-10 input, MODBUS communication, and alarm output for seamless system integration.

STANDARD FEATURES

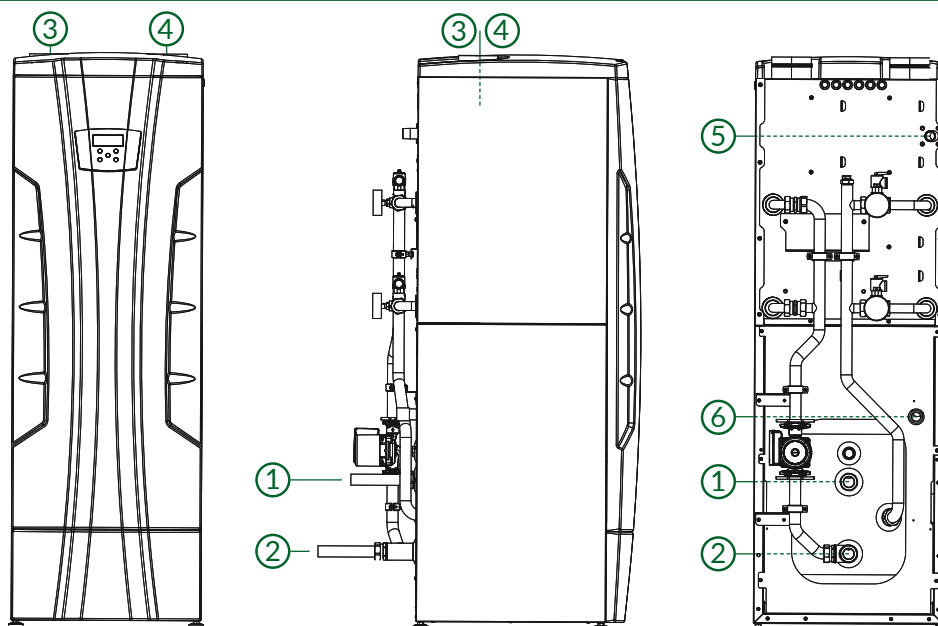
- High capacity production of domestic hot water
- Extremely high quality AISI 316Ti heat exchangers with 5 year warranty ensures lasting reliability and efficiency
- Built-in redundancy due to multiple heat engines for ADplus 115-140.
- High efficiency pre-mix burner with 5 year warranty provides large modulation range
- Compact floor standing arrangement
- High maximum run pressure up to 11 bar
- Ultra-low emissions, NO_x class 6 appliance at 27 mg/kWh
- Available for natural gas and LPG
- Acid condensate neutraliser and circulating pump included
- Flue gas non-return valve for overpressure cascade flue systems
- Standard flue systems using low cost 110-160mm diameter PP
- Integrated air inlet basket

Dimensions

Model	H x W x D (mm)
70	1815 x 600 x 706
115	1815 x 600 x 706
140	1815 x 600 x 706

Note:

The ADplus water heater range is designed for use with B23 flue arrangements only, drawing air for combustion from the surrounding room. Plantrooms must therefore be designed with purpose supplied ventilation.



Connections

Port	Purpose	ADplus 70	ADplus 115	ADplus 140
1	Hot water outlet	1 ½ "	1 ½ "	1 ½ "
2	Cold water inlet	1 ½ "	1 ½ "	1 ½ "
3	Air intake	Ø110 mm	Ø110 mm	Ø110 mm
4	Flue exhaust	Ø110 mm	Ø110 mm	Ø110 mm
5	Gas inlet	1 "	1 "	1 "
6	Condensate hose	Ø28 mm	Ø28 mm	Ø28 mm

Technical Specifications

		Units	ADplus 70	ADplus 115	ADplus 140
Gross heat input range	Maximum	kW	77.6	128.3	155.4
	Minimum		16.3	13.3	16.3
Heat output range	Maximum	kW	74.0	121.7	148.0
	Minimum		15.6	12.8	15.6
Maximum efficiency (net)	At max. output	%	105.1	105.0	105.1
	At min. output		106.3	106.6	106.3
DHW 10-minute peak		L	331	470	543
DHW recovery (ΔT 50°C)		L/h	1270	2102	2534
Gas flow rate	Natural gas	m³/h kg/h	7.39	12.22	14.80
	LPG		5.43	8.97	10.87
Heat exchanger water capacity		l	5.7	9.2	11.4
DHW temperature range		°C	20 - 80	20 - 80	20 - 80
System pressure range		bar	1 - 11	1 - 11	1 - 11
Power supply		V / Hz	230 / 50	230 / 50	230 / 50
Electrical consumption	Maximum	W	472	542	622
	Minimum				
CO emissions (0% O₂ with natural gas)		ppm	19	19	19
NO _x emissions (0% O₂ with natural gas)		mg/kWh	27	28	27
Flue gas mass flow rate	Maximum	kg/h	115	190	230
	Minimum		25	20	25
Flue gas temperature at outlet	Maximum	°C	80	80	80
	Minimum		30	30	30
Sound Power Level (LWA)		dB	66	70	70
Maximum water hardness		ppm	150	150	150
Appliance Mass	Empty	kg	180	218	218
	Full		312	350	350

Standard Flue	Size:	110mm PP	160mm PP
Suitable for		ADplus 70 ADplus 115 ADplus 140	ADplus 70* ADplus 115* ADplus 140*
		<i>*Requires 110-160mm adaptor: 0718025</i>	
Maximum total equivalent flue length:		10.0 m less 4 m per 90° bend less 2 m per 45° bend	21.5 m less 2.8 m per 90° bend less 1.2 m per 45° bend

Flue Terminals



Vertical:	MB0025	0718761
Horizontal:	MB0028	100035790094

Flue Extension 1m



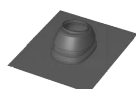
0718102	0718122
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Flue Bends



45° Bend:	0718140	0718160
90° Bend:	0718141	0718161

Roof Flashings

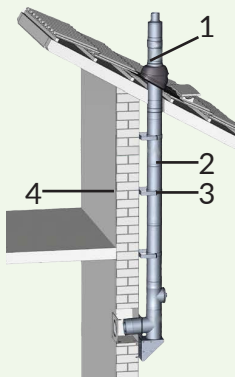


Flat:	0146184	0746066
15-55° Pitched:	MB0033	100035790099

Flue Bracket



0169158	100035790092
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External flue	size:	110/160mm PP/SS	160mm/225mm PP/SS
Suitable for:		ADplus 70 ADplus 115 ADplus 140	ADplus 70* ADplus 115* ADplus 140*
		<i>*Requires 110-160mm adaptor: 0718025</i>	
	1, 3, 4 - External Riser Kit:	MB0026	MB0029
	2 - 1m Extension Kit:	MB0027	MB0030
	45° External Bend:	n/a	200075045316
	90° External Bend:	n/a	200075045326