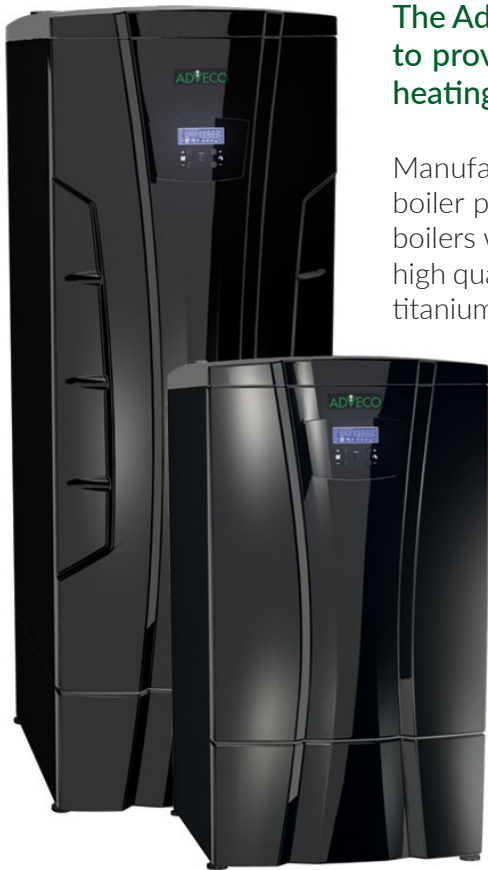


# Adveco MD Floor Standing Boilers

## High Efficiency Condensing Boilers from 70 to 280 kW



The Adveco MD range of high efficiency condensing boilers is designed to provide a high capacity and reliable solution to a building's central heating demand.

Manufactured by our European partner with over 50 years of experience in boiler production, the MD T range consists of four floor standing condensing boilers with heat outputs from 70 to 280 kW. Each boiler features one to four high quality heat exchangers constructed from a continuous, non-welded run of titanium-stabilised stainless steel. This provides exceptional durability, strength and corrosion resistance, as well as a level of in-built redundancy for all units from 140 kW and above. The brand-exclusive heat exchanger features a 3 pass design with large bore, circular tube cross sections that reduce the collection of debris.

With an efficient pre-mix burner and low NO<sub>x</sub> and CO emissions, the MD range is an eco-friendly solution to serve a central heating system. The units additionally feature a high modulation ratio to ensure maximum efficiency even during periods of low demand.

The Adveco MD range features an inbuilt controller with LCD display that ensures full temperature control, plus cascade control for up to 8 units and a maintenance self-check of primary components and functions, 0-10 input, MODBUS communication and alarm output.

### STANDARD FEATURES

- Extremely high quality AISI 316Ti heat exchangers with **10 year warranty** ensures lasting reliability and efficiency
- Built-in redundancy due to multiple heat engines for MD 140T, 210T, and 280T.
- High efficiency pre-mix burner with 10 year warranty provides large modulation range
- Compact floor standing arrangement
- High maximum run pressure up to 11 bar
- Ultra-low emissions, NO<sub>x</sub> class 6 appliance at 34 mg/kWh
- Available for natural gas or LPG
- Acid condensate neutraliser included
- Flue gas non-return valve for overpressure cascade flue systems
- Standard flue systems using low cost 110-160mm diameter PP

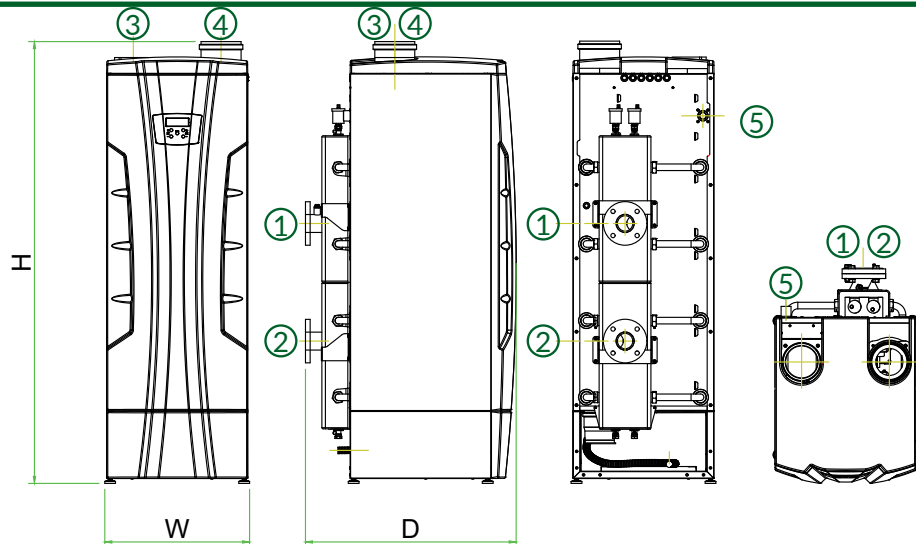


## Dimensions

Model	H x W x D (mm)
MD 70T MD 140T	1180 x 600 x 945
MD 210T MD 280T	1880 x 600 x 896

### Note:

The MD floor standing boiler 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	MD 70T	MD 140T	MD 210T	MD 280T
1	Flow	1 ½ "	1 ½ "	DN65 PN16	DN65 PN16
2	Return	1 ½ "	1 ½ "	DN65 PN16	DN65 PN16
3	Air intake	n/a	n/a	n/a	n/a
4	Flue exhaust	Ø110 mm	Ø110 mm	Ø160 mm	Ø160 mm
5	Gas inlet	1 "	1 "	1 ¼ "	1 ¼ "

## Technical Specifications

		Units	MD 70T	MD 140T	MD 210T	MD 280T
Net heat input range	Maximum	kW	69.9	140.0	210.0	280.0
	Minimum		14.7	14.7	14.7	14.7
Heat output range (80/60)	Maximum	kW	67.9	135.8	203.7	271.6
	Minimum		14.1	14.1	14.1	14.1
Maximum efficiency (80/60)	At max. output	%	96.0	96.0	96.0	96.0
	At min. output		97.0	97.0	97.0	97.0
Heat output range (50/30)	Maximum	kW	74.0	148.0	222.0	296.0
	Minimum		15.6	15.6	15.6	15.6
Maximum efficiency (50/30)	At max. output	%	106.0	106.0	106.0	106.0
	At min. output		106.0	106.0	106.0	106.0
Efficiency at 30% load (92/42/EEC Certificate: ★★★★★)		%	106.0	106.0	106.0	106.0
Nominal water flow rate		l / s	0.83	1.66	2.50	3.32
Pressure loss at nominal flow rate		kPa	48	50	50	50
Heat exchanger water capacity		l	7.57	15.14	22.71	30.28
Heating temperature range		°C	20 - 80	20 - 80	20 - 80	20 - 80
System pressure range		bar	1 - 11	1 - 11	1 - 11	1 - 11
Supply		V / Hz	230 / 50	230 / 50	230 / 50	230 / 50
Electrical consumption	Maximum	W	140	280	420	560
	Minimum		60	60	60	60
Gas flow rate	Natural gas	m <sup>3</sup> /h	7.40	14.80	22.20	29.61
	LPG		kg/h	5.43	10.87	16.30
NO <sub>x</sub> emissions (0% O <sub>2</sub> with natural gas)		mg/kWh	34	34	34	34
CO emissions		ppm	20	20	20	20
Approved flue types			B23	B23	B23	B23
Flue gas mass flow rate		kg/h	115	230	345	460
Flue gas temperature at outlet	Maximum	°C	90	90	90	90
	Minimum		30	30	30	30
Appliance Mass	Empty	kg	98	147	211	249
	Full		106	162	234	279