



HeatMaster[®] 35TC-85TC

Total condensing storage combination boiler - Sedbuk A rated.

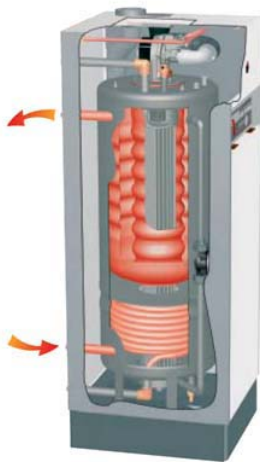
With the high levels of building insulation now in place in most properties, the requirements for heating output are reducing – this trend is set to continue with some experts predicting a drop in the boiler load due to heating from around 75% to as low as 45%. At the same time, hot water usage is increasing year-by-year as demand rises for luxury bathing facilities such as high performance showers and spa baths. If hot water demand has risen to 55% of the boiler load, the natural progression is to gain as much efficiency in hot water mode as possible.

The HeatMaster TC can also be used as a standalone water heater.

MCBA electronic control fitted as standard. Managing boiler and burner functions, this helps reduce the stop/start cycle significantly, ultimately saving fuel and component wear and tear.

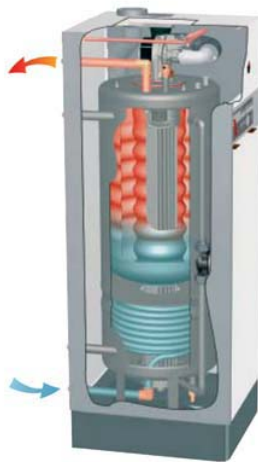
Additional controls available, please discuss your requirements with our technical department.

How does it work?



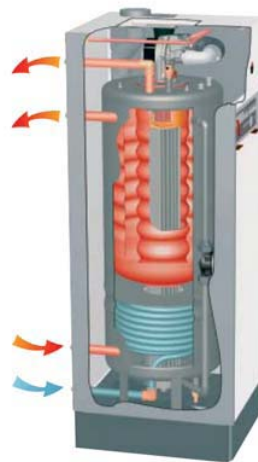
Heating

The heating return enters the lower circuit of the boiler, which allows the boiler to operate in condensing mode. The upper circuit of the HeatMaster TC is kept at a consistently high temperature due to the internal shunt pump which ensures that the primary water circulates around the heat exchanger flue tubes.



Hot Water

With the upper circuit maintained at a high temperature, the HeatMaster TC is always ready to supply hot water on demand. The cold water enters through the dual coil at the base of the heat exchanger and is pre-heated before entering the hot water tank. The low temperature of the bottom circuit results in continuous condensation of the flue gases in hot water mode.



Heating and Hot Water

Once up to temperature, the HeatMaster TC is capable of producing heating and hot water simultaneously.

Technical Data

	HeatMaster® 35TC		HeatMaster® 85TC		
		Natural Gas	LPG	Natural Gas	LPG
Fuel					
Input max/min	kW	34.9/10.0	30.6/10.0	85.0/17.2	85.0/17.2
Output max/min	kW	34.1/9.8	29.9/9.8	82.5/16.5	82.5/16.5
Efficiency hot water mode	%	105.9	105.9	103.9	103.9
Efficiency heating mode (30% load EN677)	%	108.5	108.5	107.8	107.8
SAP seasonal efficiency	%	90.9	92.6	-	-
Total capacity	L	189	189	315	315
Primary capacity	L	108.5	108.5	125	125
Gas connection (male)	Ø	¾"	¾"	¾"	¾"
Primary flow & return connection (female)	Ø	1"	1"	1½"	1½"
Secondary hot water Connection (male)	Ø	1"	1"	1"	1"
Flue connection	Ø mm	80/125	80/125	100/150	100/150
Max length concentric flue	mtr	20	20	8	8
Nox class (EN483)		class 5	class 5	class 5	class 5
Weight empty	kg	174	174	284	284
Natural gas flow rate - 20mbar	m³/h	3.7		8.99	
Pressure drop	mbar	30	30	200	200
Maximum operating temperature	°C	90	90	90	90
Maximum operating pressure Primary: 3 bar Secondary: 10 bar					

Performance Data

		HeatMaster® 35TC	HeatMaster® 85TC
		Litres in first 10 minutes	40°C
Litres in first 10 minutes	45°C	381	722
Litres in first 10 minutes	60°C	224	459
Litres in first hour	40°C	1312	3177
Litres in first hour	45°C	1080	2717
Litres in first hour	60°C	692	1778
Continuous flow 40°C	Ltrs/hr	1057	2793
Continuous flow 45°C	Ltrs/hr	898	2394
Continuous flow 60°C	Ltrs/hr	578	1583

Please Note: Performance data assumes a primary flow temperature of 85°C and a domestic cold water supply of 10°C

Dimensions

