

**Product Series** 310-9 ECO**Issue Date :** June 2010

# TECHNICAL SPECIFICATION SHEET

**MODEL : Gas 310-9 ECO****No of SECTIONS : 9****General Details**

Fully condensing floor standing boiler supplied c/w electronic temperature and safety controls. Sectional cast aluminium heat exchanger. Powder coated, enamel steel casing. Ultra low Nox, Nox levels according to EN483 and EN 15420 (EN297 A3)

on/off, high/low or fully modulating (20-100%), pre - mix burner, gas/air ratio control for maximum efficiency and minimum emissions. Boiler fitted with casters for ease of positioning within plant room.

Intelligent "abc<sup>®</sup>" boiler control system c/w numerical display providing operating and service parameters. Manufactured to ISO 9001. CE approved and supplied pre-assembled.

Output @ 80/60°C kW :	106 – 531	Annual Efficiency %NCV (Hi) :	108.9
Weight (dry) kgs :	560	Min Gas Pressure mbar :	17
Overall Dim WxHxD mm :	1980x1410x720	Max Gas Pressure mbar :	100
Radiated Losses % :	< 0.3	Casing Colour BS RAL :	Red 2002 Grey 9023

BURNER TYPE	Pre-mix	Low Nox Atmospheric	
Std Fuel Available :	Natural Gas	Gas Conn. Size BSP :	2" (F)
Flame Protection :	Ionisation	NOx Level @ 0% O <sub>2</sub> :	36
Noise Levels dB(A)@1M :	< 60	Gas Consumption M <sup>3</sup> /h :	57 NG
Ignition :	Electronic		

HYDRAULICS			
Nom Flow @ 11°C Δt l/s :	11.55	Resistance @ 11°C Δt. mb :	413 (41.3 kPa)
Nom Flow @ 20°C Δt l/s :	6.35	Resistance @ 20°C Δt. mb:	125 (12.5 kPa)
Min Return Temp °C	20	Min Flow Rate l/s :	#
Op Press min/max bars :	0.3 / 6 open vent	Std Operating Temp °C :	20 – 90
Op Press min/max bars :	0.8 / 6 pressurised	High Limit Temp °C :	110
Test Press bar :	6	Boiler Conns Flanged :	Flow 80mm Return 65mm Both Flanged NW 80 DIN 2576 - (PN16)
Condensate Conn. mm:	1½" nb plastic	2 <sup>nd</sup> Return Conn Flanged (Option) :	NW 65 DIN 2576 – (PN16)
Water Content ltrs :	93		

FLUE/ AIR INLET			
Supplied as standard for conventional flue with optional kit for room sealed operation			
Residue Fan Duty Pa :	150	Air Inlet Conn mm :	250 i/d
Flue Diameter mm :	250 i/d	Min Flue Gas Mass kgs/hr :	183
Min Flue Gas Temp @ 80/60°C :	57	Max Flue Gas Mass kgs/hr :	907
Max Flue Gas Temp @ 80/60°C :	65		

ELECTRICAL			
Insulation Class IP :	20	Power Supply :	230.1.50
Start Current Amps :	4	Run Current Amps :	3.8
Fuse Rating Amps :	6.3	Power Consumption VA :	12 / 858
Modulating input V dc :	0-10	Controls Voltage V ac :	24 (max 4VA)

CONTROLS			
Standard :	High / Low	BMS Modulating (20-100%)	On / Off
	Manual o/ride	Hours Run Indication	
	High limit protection	Low water protection	
	Operating status indication		
	Volt free common alarm and boiler run indication		
	Safety interlock control pair (24V ac)		

# For a continuous supply of heat, the boiler requires a minimum flow of 30% of the relevant design temperature

Ours is a policy of continuous development, we therefore reserve the right to alter specifications without prior notification.©