

<b>Product Series</b>	<b>110 ECO - 65</b>
<b>Issue Date :</b>	<b>July 2008</b>



## TECHNICAL SPECIFICATION SHEET

**MODEL : Gas 110 ECO 65** **No of Sections: One piece casting**

### General Details

Fully condensing floor standing boiler supplied c/w electronic temperature and safety controls. One piece cast aluminium heat exchanger. Powder coated, enamel steel casing forming sealed air box. On / off, high / low or fully modulating (18-100%), pre - mix burner, gas/air ratio control for maximum efficiency and minimum emissions. Ultra low Nox, Nox levels according to EN483 and EN 15420 (EN297 A3) 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.

<b>Output @ 80/60°C kW :</b>	12 - 61	<b>Efficiency % GCV :</b>	> 99
<b>Weight (dry) kgs :</b>	116	<b>Min/Max Gas Pressure mbar:</b>	17 - 30
<b>Overall Dim WxHxD mm :</b>	600x1100x770	<b>Casing Colour BS RAL :</b>	De Dietrich White & 2002 Red
<b>Radiated Losses % :</b>	< 0.1		

<b>BURNER TYPE</b>	Pre-mix	Low Nox	
<b>Std Fuel Available :</b>	Natural Gas	<b>Gas Conn. size BSP :</b>	3/4" M
<b>Opt Fuel Available :</b>	LPG	<b>Nox Level dry @ O% O2 :</b>	32 mg/kWh
<b>Flame Protection :</b>	Ionisation	<b>Gas Consumption M<sup>3</sup>/h:</b>	6.6 NG
<b>Noise Levels dB(A) :</b>	< 48	<b>Propane Consumption Kg/h:</b>	4.8 LPG
<b>Ignition :</b>	Electronic		

<b>HYDRAULICS</b>			
<b>Nom Flow @ 11°C Δt l/s :</b>	1.32	<b>Resistance @ 11°C Δt.mb :</b>	580/58 kpa
<b>Nom Flow @ 20°C Δt l/s :</b>	0.73	<b>Resistance @ 20°C Δt. mb:</b>	175/17.5 kpa
<b>Water Content ltrs :</b>	6.5	<b>Min Flow Rate l/s :</b>	#
<b>Op Press min/max bars :</b>	0.5 / 4 open vent	<b>Std Operating Temp °C :</b>	20 - 90
<b>Op Press min/max bars :</b>	0.8 / 4 pressurised	<b>Max Operating Temp °C :</b>	90
<b>Test Press bar :</b>	4	<b>Min Return Temp °C</b>	20
<b>Condensate Conn. mm:</b>	25 o/d	<b>Boiler Connections BSP :</b>	1 1/4"

<b>FLUE/ AIR INLET</b>			
Concentric connection supplied as Standard for conventional or room sealed operation (twin pipe option)			
<b>Residue Fan Duty Pa :</b>	100	<b>Flue concentric mm :</b>	100/150 i/d
<b>Flue Diameter mm :</b>	100 i/d	<b>Air Inlet Connection mm :</b>	100 i/d Twin Pipe
<b>Min Flue Gas Mass kgs/hr</b>	21	<b>Max Flue Gas Mass kgs/hr</b>	104

<b>ELECTRICAL</b>			
<b>Insulation Class IP :</b>	21	<b>Power Supply : V/Hz</b>	230/50
<b>Controls Voltage V ac :</b>	24 (max 4VA)	<b>Run Current without pump, amps</b>	0.4
<b>Fuse Rating Amps :</b>	6.3 (F-6.3AT)	<b>Power Consumption W :</b>	30/ 85
<b>Modulating input V dc :</b>	0-10	<b>Pump Power Consumption W :</b>	85

<b>CONTROLS</b>	
<b>Standard :</b>	On / Off - High / Low - Manual o/ride - Hours Run Indication High limit protection 110 °C - Low water protection - Operating status indication Volt free common alarm and boiler run indication - Safety interlock control pair (24v)
<b>Optional :</b>	BMS Modulating, Rematic Optimising / Compensator (two wire communicating modulating control.) DHW Time control using Rematic control. Celcia 20 Compensator (two wire communicating modulating) MC4 Cascade controller c/w Celcia 20 (up to 4 boilers) Flue Damper (for modular flue applications)

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