

Certificate

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Certificate No: 52518/1

Issue No: 1

Date of issue: 7 April 2009

**EC type examination certificate for product tested against
The Boiler (Efficiency) Regulations 1993
under EC Directive 92/42/EEC for hot water boilers**

This is to certify that

BSRIA Limited

(Notified Body Identification Number 0480)

have type-tested the product described below to the requirements contained in Schedule 2 and Schedule 7 of the Boiler (Efficiency) Regulations 1993 for a standard gas boiler and have satisfied themselves that the product meets the relevant provisions of the regulations.

Manufacturer	HRM Boilers Limited Haverscroft Industrial Estate Attleborough Norfolk NR17 1YE
Product (models included)	12/16 Wallstar, 12/16 System Wallstar, 12/16 X-Ternal, 12/16 System X-Ternal
Date of test	02-03 April 2009
Expiry date	07 April 2012
Test engineer	M Lightfoot
Quality approved	ANDREW FREETH Test and Microclimate

Note: Test unit was a 12/16 Wallstar, all other models are essentially the same. X-Ternal models have rock wool insulated fibreglass casing

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Test results

Rated outputs	16 kW (54,592 Btu/h)	
Burner type	Ecoflam	EOGB X400
Declared CO ₂ setting	12.5%	12.5%
Net efficiency at rated output (FL)	96.4%	96.4
Mean FL water temperature	69.9°C	70.0°C
Net efficiency at 30% part-load (PL)	97.2%	98.4%
Mean PL water temperature	40.2°C	40.2°C
Measured output	16.2 kW	15.8 kW
Measured CO ₂	12.45%	12.45%
Measured NO _x	113 ppm (281 mg/kWh)	86 ppm (222 mg/kWh)
Measured CO	66 ppm (89 mg/kWh)	56 ppm (76 mg/kWh)
Test report reference number	52518/1	
Test standard	BS EN 304:2000	
Test fuel	Class C2 Kerosene (BS2869:1998)	

Test model	16 kW condensing wall mounted boiler	
Burner	Model Ecoflam	Model EOGB X400
Control box	DKO 970 Mod. 05	DKO 970 Mod. 2.1
Fan motor	EB 95 C28/2 75W	EOGB E90-110-104-090-01 90W
Fuel pump	Danfoss BFP11 R3	Danfoss BFP11 L3
Burner nozzle	0.50 x 80°EH	
Control thermostats	TR 96803 T120 90°	
Limit thermostats	STB 98103 02/04 100°	
Instructions	User handbook and Instruction manual (Doc ref LI044 Issue 1)	
Other drawings	Combustion chamber assembly Heat exchanger front outer Heat exchanger inner front Heat exchanger front outer Baffle assembly upper Baffle assembly lower	Drawing SHT2054-A1 date: 12-03-07 Drawing SHT2001-A1 date: 10-02-07 Drawing SHT2004-A1 date: 10-02-07 Drawing SHT2001-A1 date: 10-02-07 Drawing SHT2100 date: 27-11-08 Drawing SHT2104 date: 27-11-08

Note: Any modifications made to the above boiler specifications may invalidate this certificate