

# Certificate

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Certificate No: C19507/1

Issue No: 3

Date of issue: 12 January 2006

This is to certify that UKAS Notified Body

**BSRIA Limited**

Identification Number 0480

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

Products covered by this certificate:

**Manufacturer** Grant Engineering Limited  
Crinkle  
Birr  
Co. Offaly  
Ireland

**Products** Vortex 46-58  
Vortex 58-70

**Date of test** 6 & 7 October 2005

**Type** Condensing

**Test engineer** M. Lightfoot

**Quality approved**

  
DR ARNOLD TEEKARAM  
Head of Testing and Certification

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**Test results**

Rated output	60kW (205,000 Btu/h) & 70kW (240,000 Btu/h)	
Declared CO <sub>2</sub> setting	13.0%	
Net efficiency at rated output:	60kW output: 97.6%	70kW output: 97.0%
Mean boiler water temperature:	70°C	
Measured output	60kW output: 60.6 kW	70kW output: 70.4kW
Test CO <sub>2</sub> setting	13.0%	
Net efficiency at 30% part-load	60kW output: 103.2%	70kW output: 102.7%
Mean boiler water temperature	40°C	

Test report reference number	19507/1
Test standard:	BS EN 304:1992
Test fuel:	Class C2 Kerosene (to BS 2869:1998)

Test model	Grant Vortex Condensing
Burner type(s)	Riello RDB3
Burner head(s)	LD3
Control box	RBL 535 SE/LD
Fan motor	RBL 172T
Fuel pump	RBL 8-15bar
Nozzles	60kW output: Danfoss 1.65 x 80°S    70kW output: Danfoss 1.75 x 80°S
Control thermostat	IMIT 75°C TYPE TR2 9305 T85
Limit thermostat	TYPE LS/1 L1 114°C T80
Instructions	User Installation and Servicing Instructions Pt No. DOC37 Rev 07 Dec04
Drawings	Heat Exchanger: Drawing No: 011337 Rev 0 29-09-05 Upper & Lower Baffles for 70kW output: 3 x 2 baffles on drawing 12651 Rev 0 29-09-05  Upper & Lower Baffles for 60kW output: 3 x 2 baffles on drawing 12650 Rev 0 29-09-05

Note: This certificate supercedes Certificate Number 19507/1 Issue 2, dated 15 December 2005 with a name change - previously Vortex 46-58 & Vortex 58-60

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