Product fiche concerning the COMMISSION DELEGATED REGULATIONS

(EU) No 811/2013 of 18 February 2013
(EU) No 813/2013 of 2 August 2013

Oil Boilers

Pro Range: Vortex Outdoor Module	Symbols	Unit	15-21	15-26	26-36	36-46
Condensing boiler			Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No
B1 Boiler			No	No	No	No
Combination heater			No	No	No	No
Rated heat output	*Prated*	kW	21	26	36	46
Useful heat output						
At rated heat output and high temp regime	P_4	kW	21	26	36	46
At 30% of rated heat output and low temp regime	P_1	kW	6.3	7.8	10.8	13.8
Auxiliary electricity consumption						
At Full load	*Elmax*	kW	0.158	0.130	0.150	0.148
At part load	*Elmin*	kW	0.052	0.039	0.049	0.052
In standby mode	P_{SB}	kW	0	0	0	0
Useful efficiency						
Seasonal space heating energy efficiency	ηs	%	90.81	91.71	94.56	90.00
At rated heat output and high temperature regime	η_4	%	88.9	93.6	95.1	90.8
At 30% of rated heat output and low temperature regime	η_1	%	97.1	96.4	99.3	94.4
Other items						
Standby heat loss	P_{stby}	kW	0.23	0.264	0.293	0.301
Ignition burner power consumption	P_{ign}	kW	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-
Sound power level, indoors	L_{WA}	db	49.6	50.6	53.7	51.1
Emissions of nitrogen oxides	*NOx*	mg/ kWh	180.4	151.8	127.3	132.8
Emissions Class			2	2	2	2
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-
Annual fuel consumption	*AFC*	GJ	-	-	-	-

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Pro Range: Vortex Pro External	Symbols	Unit	46-58	58-70
Condensing boiler			Yes	Yes
Low temperature boiler			No	No
B1 Boiler			No	No
Combination heater			No	No
Rated heat output	*Prated*	kW	58	70
Useful heat output				
At rated heat output and high temp regime	P_4	kW	58	70
At 30% of rated heat output and low temp regime	P_1	kW	17.4	21
Auxiliary electricity consumption				
At Full load	*Elmax*	kW	0.189	0.182
At part load	*Elmin*	kW	0.072	0.075
In standby mode	P_{SB}	kW	0	0
Useful efficiency				
Seasonal space heating energy efficiency	ηs	%	91.94	91.61
At rated heat output and high temperature regime	η_4	%	91.5	90.9
At 30% of rated heat output and low temperature regime	η_1	%	96.7	96.2
Other items				
Standby heat loss	P_{stby}	kW	0.309	0.306
Ignition burner power consumption	P_{ign}	kW	0	0
Annual energy consumption	Q_{HE}	kWh	-	-
Sound power level, indoors	L_{WA}	db	55.7	55.0
Emissions of nitrogen oxides	*NOx*	mg/ kWh	106.9	98
Emissions Class			3	3
Daily fuel consumption	Q_{fuel}	kWh	-	-
Annual fuel consumption	*AFC*	GJ	-	-

Pro range: **Vortex Utility**	Symbols	Unit	15-21	15-26 Kitchen Boiler	26-36 Utility Boiler	36/46	46-58	58-70	System 15-26S	26-36-S Utility System Boiler	System 36-46S
Condensing boiler			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No	No	No	No	No	No
B1 Boiler			No	No	No	No	No	No	No	No	No
Combination heater			No	No	No	No	No	No	No	No	No
Rated heat output	*Prated*	kW	21	26	36	46	58	70	26	36	46
Useful heat output											
At rated heat output and high temp regime	P_4	kW	21	26	36	46	58	70	26	36	46
At 30% of rated heat output and low temp regime	P_1	kW	6.3	7.8	10.8	13.8	17.4	21	7.8	10.8	13.8
Auxiliary electricity consumption											
At Full load	*elmax*	kW	0.158	0.130	0.150	0.148	0.189	0.182	0.130	0.150	0.148
At part load	*elmin*	kW	0.052	0.039	0.049	0.052	0.072	0.075	0.039	0.049	0.052
In standby mode	P_{SB}	kW	0	0	0	0	0	0	0	0	0
Useful efficiency											
Seasonal space heating energy efficiency	ηs	%	90.81	91.71	94.56	90.00	91.94	91.61	91.71	94.56	90.00
At rated heat output and high temperature regime	η_4	%	88.9	93.6	95.1	90.8	91.5	90.9	93.6	95.1	90.8
At 30% of rated heat output and low temperature regime	η_1	%	97.1	96.4	99.3	94.4	96.7	96.2	96.4	99.3	94.4
Other items											
Standby heat loss	P_{stby}	kW	0.23	0.264	0.293	0.301	0.309	0.306	0.264	0.293	0.301
Ignition burner power consumption	P_{ign}	kW	0	0	0	0	0	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-	-	-	-	-	-
Sound power level, indoors	L_{WA}	db	49.6	50.6	53.7	51.1	55.7	55.0	50.6	53.7	51.1
Emissions of nitrogen oxides	*NOx*	mg/ kWh	180.4	151.8	127.3	132.8	106.9	98	151.8	127.3	132.8
Emissions Class			2	2	2	2	3	3	2	2	2
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-	-	-	-	-	-
Annual fuel consumption	*AFC*	GJ	-	-	-	-	-	-	-	-	-

Pro Range: Vortex Condensing Combi	Symbols	Unit	21	26	36
Condensing boiler			Yes	Yes	Yes
Low temperature boiler			No	No	No
B1 Boiler			No	No	No
Combination heater			Yes	Yes	Yes
Rated heat output	*Prated*	kW	21	26	36
Useful heat output					
At rated heat output and high temperature regime	P_4	kW	21	26	36
At 30% of rated heat output and low temperature regime	P_1	kW	6.3	7.8	10.8
Auxiliary electricity consumption					
At Full load	*elmax*	kW	0.158	0.13	0.15
At part load	*elmin*	kW	0.052	0.052	0.039
In standby mode	P_{SB}	kW	0.009	0.009	0.009
Declared load profile			XL	XL	XL
Daily electricity consumption	Q_{elec}		0.293	0.23	0.205
Annual electricity consumption	*AEC*		65.4	50.5	45.2
Useful efficiency					
Seasonal space heating energy efficiency	ηs	%	90.81	91.71	94.56
At rated heat output and high temperature regime	η_4	%	88.9	93.6	95.1
At 30% of rated heat output and low temperature regime	η_1	%	97.1	96.4	99.3
Other items					
Standby heat loss	P_{stby}	kW	0.23	0.264	0.522
Ignition burner power consumption	P_{ign}	kW	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-
Sound power level, indoors	L_{WA}	dB	50.6	50.6	53.7
Emissions of nitrogen oxides	*NOx*	mg/ kWh	180.4	151.8	127.3
Emissions Class			2	2	2
Water heating efficiency	η_{wh}	%	68.23	62.6	60.38
Daily fuel consumption	Q_{fuel}	kWh	27.2	30	31.1
Annual fuel consumption	*AFC*	GJ	21.556	26.673	24.67

Pro Range: **Vortex Boiler House**	Symbols	Unit	26/36 Boilerhouse	Pro Boilerhouse 36-46	Pro Boilerhouse 46-58	Pro Boilerhouse 58-70
Condensing boiler			Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No
B1 Boiler			No	No	No	No
Combination heater			No	No	No	No
Rated heat output	P_{rated}	kW	36	46	58	70
Useful heat output						
At rated heat output and high temperature regime	P_4	kW	36	46	58	70
At 30% of rated heat output and low temperature regime	P_1	kW	10.8	13.8	17.4	21
Auxiliary electricity consumption						
At Full load	*elmax*	kW	0.147	0.155	0.215	0.215
At part load	*elmin*	kW	0.046	0.046	0.064	0.064
In standby mode	P_{SB}	kW	0	0	0	0
Useful efficiency						
Seasonal space heating energy efficiency	ηs	%	94.61	90.06	91.98	91.66
At rated heat output and high temperature regime	η_4	%	95.1	90.8	91.5	90.9
At 30% of rated heat output and low temperature regime	η_1	%	99.3	94.4	96.7	96.2
Other items						
Standby heat loss	P_{stby}	kW	0.09	0.1	0.12	0.12
Ignition burner power consumption	P_{ign}	kW	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-
Sound power level, indoors	L_{WA}	dB	53.7	51.1	55.7	51.7
Emissions of nitrogen oxides	*NOx*	mg/ kWh	127.3	132.8	106.9	98
Emissions Class			2	2	3	3
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-
Annual fuel consumption	*AFC*	GJ	-	-	-	-

Pro Range: **Vortex Outdoor Condensing Combi**	Symbols	Unit	Vortex Outdoor Combi 21	26	36
Condensing boiler			Yes	Yes	Yes
Low temperature boiler			No	No	No
B1 Boiler			No	No	No
Combination heater			Yes	Yes	Yes
Rated heat output	*Prated*	kW	21	26	36
Useful heat output					
At rated heat output and high temperature regime	P_4	kW	21	26	36
At 30% of rated heat output and low temperature regime	P_1	kW	6.3	7.8	10.8
Auxiliary electricity consumption					
At Full load	*elmax*	kW	0.158	0.13	0.15
At part load	*elmin*	kW	0.052	0.052	0.039
In standby mode	P_{SB}	kW	0.009	0.009	0.009
Declared load profile			XL	XL	XL
Daily electricity consumption	Q_{elec}		0.293	0.23	0.205
Annual electricity consumption	*AEC*		65.4	50.5	45.2
Useful efficiency					
Seasonal space heating energy efficiency	ηs	%	90.81	91.71	94.56
At rated heat output and high temperature regime	η_4	%	88.9	93.6	95.1
At 30% of rated heat output and low temperature regime	η_1	%	97.1	96.4	99.3
Other items					
Standby heat loss	P_{stby}	kW	0.23	0.264	0.522
Ignition burner power consumption	P_{ign}	kW	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-
Sound power level, indoors	L_{WA}	dB	50.6	50.6	53.7
Emissions of nitrogen oxides	*NOx*	mg/ kWh	180.4	151.8	127.3
Emissions Class			2	2	2
Water heating efficiency	η_{wh}	%	68.23	62.6	60.38
Daily fuel consumption	Q_{fuel}	kWh	30	30	31.1
Annual fuel consumption	*AFC*	GJ	21.556	26.673	24.67

Pro Range: **Vortex Pro Combi XS**	Symbols	Unit	26
Condensing boiler			Yes
Low temperature boiler			No
B1 Boiler			No
Combination heater			Yes
Rated heat output	*Prated*	kW	26
Useful heat output			
At rated heat output and high temperature regime	P_4	kW	26
At 30% of rated heat output and low temperature regime	P_1	kW	8.3
Auxiliary electricity consumption			
At Full load	*elmax*	kW	0.167
At part load	*elmin*	kW	0.049
In standby mode	P_{SB}	kW	0.001
Declared load profile			XL
Daily electricity consumption	Q_{elec}		0.269
Annual electricity consumption	*AEC*		59.2
Useful efficiency			
Seasonal space heating energy efficiency	ηs	%	92.00
At rated heat output and high temperature regime	η_4	%	91.92
At 30% of rated heat output and low temperature regime	η_1	%	97.64
Other items			
Standby heat loss	P_{stby}	kW	0.135
Ignition burner power consumption	P_{ign}	kW	0
Annual energy consumption	Q_{HE}	kWh	-
Sound power level, indoors	L_{WA}	dB	49.6
Emissions of nitrogen oxides	*NOx*	mg/ kWh	162
Emissions Class			2
Water heating efficiency	η_{wh}	%	68.11
Daily fuel consumption	Q_{fuel}	kWh	27.3
Annual fuel consumption	*AFC*	GJ	21.6

Eco Range: **Vortex Eco Utility**	Symbols	Unit	15-21	21-26	26-35	SYSTEM 15-21	SYSTEM 21-26	SYSTEM 26-35
Condensing boiler			Yes	Yes	Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No	No	No
B1 Boiler			No	No	No	No	No	No
Combination heater			No	No	No	No	No	No
Rated heat output	P_{rated}	kW	21	26	35	21	26	35
Useful heat output								
At rated heat output and high temperature regime	P_4	kW	21	26	35	21	26	35
At 30% of rated heat output and low temperature regime	P_1	kW	5.8	7.4	9.6	5.8	7.4	9.6
Auxiliary electricity consumption								
At Full load	*elmax*	kW	0.113	0.154	0.146	0.113	0.154	0.146
At part load	*elmin*	kW	0.035	0.047	0.045	0.035	0.047	0.045
In standby mode	P_{SB}	kW	0	0	0	0	0	0
Useful efficiency								
Seasonal space heating energy efficiency	ηs	%	92.7	91.7	92.4	92.7	91.7	92.4
At rated heat output and high temperature regime	η_4	%	92.2	92.4	92.4	92.2	92.4	92.4
At 30% of rated heat output and low temperature regime	η_1	%	98.4	97.2	97.5	98.4	97.2	97.5
Other items								
Standby heat loss	P_{stby}	kW	0.082	0.091	0.09	0.082	0.091	0.09
Ignition burner power consumption	P_{ign}	kW	0	0	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-	-	-
Sound power level, indoors	L_{WA}	dB	50.6	50.6	53.7	50.6	50.6	53.7
Emissions of nitrogen oxides	*NOx*	mg/ kWh	176	168	166	176	168	166
Emissions Class			2	2	2	2	2	2
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-	-	-
Annual fuel consumption	*AFC*	GJ	-	-	-	-	-	-

Eco Range: **Vortex Eco External**	Symbols	Unit	15-21	21-26	26-35	SYSTEM 15-21	SYSTEM 21-26	SYSTEM 26-35
Condensing boiler			Yes	Yes	Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No	No	No
B1 Boiler			No	No	No	No	No	No
Combination heater			No	No	No	No	No	No
Rated heat output	P_{rated}	kW	21	26	35	21	26	35
Useful heat output								
At rated heat output and high temperature regime	P_4	kW	21	26	35	21	26	35
At 30% of rated heat output and low temperature regime	P_1	kW	5.8	7.4	9.6	5.8	7.4	9.6
Auxiliary electricity consumption								
At Full load	*elmax*	kW	0.113	0.154	0.146	0.113	0.154	0.146
At Part load	*elmin*	kW	0.035	0.047	0.045	0.035	0.047	0.045
In standby mode	P_{SB}	kW	0	0	0	0	0	0
Useful efficiency								
Seasonal space heating energy efficiency	ηs	%	92.7	91.7	92.4	92.7	91.7	92.4
At rated heat output and high temperature regime	η_4	%	92.2	92.4	92.4	92.2	92.4	92.4
At 30% of rated heat output and low temperature regime	η_1	%	98.4	97.2	97.5	98.4	97.2	97.5
Other items								
Standby heat loss	P_{stby}	kW	0.082	0.091	0.09	0.082	0.091	0.09
Ignition burner power consumption	P_{ign}	kW	0	0	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-	-	-
Sound power level, indoors	L_{WA}	dB	50.6	50.6	53.7	50.6	50.6	53.7
Emissions of nitrogen oxides	*NOx*	mg/ kWh	176	168	166	176	168	166
Emissions Class			2	2	2	2	2	2
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-	-	-
Annual fuel consumption	*AFC*	GJ						

Eco Range: **Vortex Eco Wall Hung**	Symbols	Unit	12-16	16-21	SYSTEM 12-16	SYSTEM 16-21
Condensing boiler			Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No
B1 Boiler			No	No	No	No
Combination heater			No	No	No	No
Rated heat output	P_{rated}	kW	16	21	16	21
Useful heat output						
At rated heat output and high temperature regime	P_4	kW	16	21	16	21
At 30% of rated heat output and low temperature regime	P_1	kW	4.8	6.3	4.8	6.3
Auxiliary electricity consumption						
At Full load	*elmax*	kW	0.164	0.150	0.164	0.150
At part load	*elmin*	kW	0.062	0.07	0.062	0.07
In standby mode	P_{SB}	kW	0	0	0	0
Useful efficiency						
Seasonal space heating energy efficiency	ηs	%	90.13	90.52	90.13	90.52
At rated heat output and high temperature regime	η_4	%	93.1	90.8	93.1	90.8
At 30% of rated heat output and low temperature regime	η_1	%	96.7	96.9	96.7	96.9
Other items						
Standby heat loss	P_{stby}	kW	0.207	0.236	0.207	0.236
Ignition burner power consumption	P_{ign}	kW	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-
Sound power level, indoors	L_{WA}	dB	51.2	51.7	51.2	51.7
Emissions of nitrogen oxides	*NOx*	mg/ kWh	147	149	147	149
Emissions Class			2	2	2	2
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-
Annual fuel consumption	*AFC*	GJ	-	-	-	-

Eco Range: **Vortex Eco Wall Hung External**	Symbols	Unit	12-16	16-21	SYSTEM 12-16	SYSTEM 16-21
Condensing boiler			Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No
B1 Boiler			No	No	No	No
Combination heater			No	No	No	No
Rated heat output	P_{rated}	kW	16	21	16	21
Useful heat output						
At rated heat output and high temperature regime	P_4	kW	16	21	16	21
At 30% of rated heat output and low temperature regime	P_1	kW	4.8	6.3	4.8	6.3
Auxiliary electricity consumption						
At Full load	*elmax*	kW	0.164	0.150	0.164	0.150
At part load	*elmin*	kW	0.062	0.07	0.062	0.07
In standby mode	P_{SB}	kW	0	0	0	0
Useful efficiency						
Seasonal space heating energy efficiency	ηs	%	90.13	90.52	90.13	90.52
At rated heat output and high temperature regime	η_4	%	93.1	90.8	93.1	90.8
At 30% of rated heat output and low temperature regime	η_1	%	96.7	96.9	96.7	96.9
Other items						
Standby heat loss	P_{stby}	kW	0.207	0.236	0.207	0.236
Ignition burner power consumption	P_{ign}	kW	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-
Sound power level, indoors	L_{WA}	dB	51.2	51.7	51.2	51.7
Emissions of nitrogen oxides	*NOx*	mg/ kWh	147	149	147	149
Emissions Class			2	2	2	2
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-
Annual fuel consumption	*AFC*	GJ	-	-	-	-

End of Life Information

General
Grant oil boilers incorporate components manufactured from a variety of different materials. The majority of these materials can be recycled whilst the smaller remainder cannot.
Materials that cannot be recycled must be disposed of according to local regulations using appropriate waste collection and/or disposal services.

Disassembly
There is little risk to those involved in the disassembly of this product. Please refer to and follow the Health and Safety Information given in the Installation & Servicing Instructions provided with the boiler.
For guidance on the disassembly of the boiler refer to the information given in the Servicing section of the Installation & Servicing Instructions provided with the boiler.

Recycling
Many of the materials used in Grant oil boilers can be recycled, these are listed in the table below:

Component	Material
Outer casing panels	Mild steel (polyester powder coated)
Primary heat exchanger and baffles	Mild steel
Secondary heat exchanger	Stainless steel
Secondary heat exchanger spirals	Aluminium alloy
Pipework	Copper
Burner body/flange	Aluminium alloy
Burner oil pump	Aluminium alloy/steel
Riello oil burner cover	Plastic
Electrical wiring	Copper/plastic
Thermostats	Copper/plastic
Printed Circuit boards	Copper/plastic

Disposal
All materials other than those listed above must be disposed of responsibly as general waste.

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