

Product fiche concerning the COMMISSION DELEGATED REGULATIONS

(EU) No 811/2013 of 18 February 2013

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Oil Boilers

Vortex Utility Modules	Symbols	Unit	VORTMOD1521	VORTMOD1526	VORTMOD2636	VORTMOD3646	VORTMOD4658	VORTMOD5870
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	36	46	58	70
Useful heat output								
At rated heat output and high temp regime	P_4	kW	21	26	36	46	58	70
At 30% of rated heat output and low temp regime	P_1	kW	6.3	7.8	10.8	13.8	17.4	21
Auxiliary electricity consumption								
At Full load	El_{max}	kW	0.115	0.151	0.147	0.155	0.215	0.215
At part load	El_{min}	kW	0.037	0.046	0.046	0.046	0.064	0.064
In standby mode	P_{SB}	kW	0	0	0	0	0	0
Useful efficiency								
Seasonal space heating energy efficiency	η_s	%	91.0	91.54	94.61	90.06	91.98	91.66
At rated heat output and high temperature regime	η_4	%	88.9	93.6	95.1	90.8	91.5	90.9
At 30% of rated heat output and low temperature regime	η_1	%	97.1	96.4	99.3	94.4	96.7	96.2
Other items								
Standby heat loss	P_{stby}	kW	0.09	0.09	0.09	0.1	0.12	0.12
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	53	53	55	55	58	58
Emissions of nitrogen oxides	NO_x	mg/kWh	180.4	151.8	127.3	132.8	106.9	98
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-	-	-
Annual fuel consumption	AFC	GJ	-	-	-	-	-	-

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Vortex Utility	Symbols	Unit	VORTUT15-21	VORTUT15-26	VORTUT26-36	VORTUT36-46	VORTUT46-58	VORTUT58-70	VORTUTS15-26	VORTUTS26-36	VORTUTS36-46
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	P_{rated}	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	el_{max}	kW	0.115	0.151	0.147	0.155	0.215	0.215	0.151	0.147	0.155
At part load	el_{min}	kW	0.037	0.046	0.046	0.046	0.064	0.064	0.046	0.046	0.046
In standby mode	P_{SB}	kW	0	0	0	0	0	0	0	0	0
Useful efficiency											
Seasonal space heating energy efficiency	η_s	%	91.0	91.54	94.61	90.06	91.98	91.66	91.0	91.54	94.61
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	0.09	0.09	0.09	0.1	0.12	0.12	0.09	0.09	0.1
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	53	53	55	55	58	58	53	55	55
Emissions of nitrogen oxides	NO_x	mg/kWh	180.4	151.8	127.3	132.8	106.9	98	151.8	127.3	132.8
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-	-	-	-	-	-
Annual fuel consumption	AFC	GJ	-	-	-	-	-	-	-	-	-

Vortex Combi and Outdoor Combi	Symbols	Unit	VORTCOMBI26	VORTCOMBI36	VORTCBMOD26	VORTCBMOD36
Condensing boiler			Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No
B1 Boiler			No	No	No	No
Combination heater			Yes	Yes	Yes	Yes
Rated heat output	P_{rated}	kW	26	36	26	36
At rated heat output and high temperature regime	P_4	kW	26	36	26	36
At 30% of rated heat output and low temperature regime	P_1	kW	7.8	10.8	7.8	10.8
At Full load	e_{max}	kW	0.151	0.147	0.151	0.147
At part load	e_{min}	kW	0.046	0.046	0.046	0.046
In standby mode	P_{SB}	kW	0.009	0.009	0.009	0.009
Declared load profile			XL	XL	XL	XL
Daily electricity consumption	Q_{elec}		0.23	0.205	0.23	0.205
Annual electricity consumption	AEC		50.5	45.2	50.5	45.2
Seasonal space heating energy efficiency	η_s	%	91.54	94.61	91.54	94.61
At rated heat output and high temperature regime	η_4	%	93.6	95.1	93.6	95.1
At 30% of rated heat output and low temperature regime	η_1	%	96.4	99.3	96.4	99.3
Standby heat loss	P_{stby}	kW	0.12	0.12	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	55	53	55
Emissions of nitrogen oxides	NO_x	mg/kWh	151.8	127.3	151.8	127.3
Water heating efficiency	η_{wh}	%	62.6	60.38	62.6	60.38
Daily fuel consumption	Q_{fuel}	kWh	0.023	0.112	0.023	0.112
Annual fuel consumption	AFC	GJ	26.673	24.67	26.673	24.67

Vortex Boiler House	Symbols	Unit	VORTBH5090BS	VORTBH90120BS	VORTBH120155BS	VORTBH155200BS	VORTBH200240BS
Condensing boiler			Yes	Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No	No
B1 Boiler			No	No	No	No	No
Combination heater			No	No	No	No	No
Rated heat output	P_{rated}	kW	26	36	46	58	70
Useful heat output							
At rated heat output and high temperature regime	P_4	kW	26	36	46	58	70
At 30% of rated heat output and low temperature regime	P_1	kW	7.8	10.8	13.8	17.4	21
Auxiliary electricity consumption							
At Full load	el_{max}	kW	0.151	0.147	0.155	0.215	0.215
At part load	el_{min}	kW	0.046	0.046	0.046	0.064	0.064
In standby mode	P_{SB}	kW	0	0	0	0	0
Useful efficiency							
Seasonal space heating energy efficiency	η_s	%	91.54	94.61	90.06	91.98	91.66
At rated heat output and high temperature regime	η_4	%	93.6	95.1	90.8	91.5	90.9
At 30% of rated heat output and low temperature regime	η_1	%	96.4	99.3	94.4	96.7	96.2
Other items							
Standby heat loss	P_{stby}	kW	0.09	0.09	0.1	0.12	0.12
Ignition burner power consumption	P_{ign}	kW	0	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-	-
Sound power level, indoors	L_{WA}	dB	55	57	57	60	60
Emissions of nitrogen oxides	NO_x	mg/ kWh	151.8	127.3	132.8	106.9	98
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-	-
Annual fuel consumption	AFC	GJ	-	-	-	-	-

Euroflame Indoor and Module	Symbols	Unit	EFCON5070IND	EFCON7090IND	EFCON90120IND	EFCON5070MOD	EFCON7090MOD	EFCON90120MOD
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	el_{max}	kW	0.113	0.154	0.146	0.113	0.154	0.146
At part load	el_{min}	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	η_s	%	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	55	55	55	55	55	55
Emissions of nitrogen oxides	NO_x	mg/kWh	176	168	166	176	168	166
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-	-	-
Annual fuel consumption	AFC	GJ	-	-	-	-	-	-

Vortex Indoor And Module Wall Hung	Symbols	Unit	ECOW12/16IND	ECOW16/21IND	ECOW12/16INDS	ECOW16/21INDS	ECOW12/16MOD	ECOW16/21MOD	ECOW12/16MODS	ECOW16/21MODS
Condensing boiler			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Low temperature boiler			No	No	No	No	No	No	No	No
B1 Boiler			No	No	No	No	No	No	No	No
Combination heater			No	No	No	No	No	No	No	No
Rated heat output	P_{rated}	kW	16	21	16	21	16	21	16	21
Useful heat output										
At rated heat output and high temperature regime	P_4	kW	16	21	16	21	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	4.8	6.3	4.8	6.3
Auxiliary electricity consumption										
At Full load	el_{max}	kW	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136
At part load	el_{min}	kW	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041
In standby mode	P_{SB}	kW	0	0	0	0	0	0	0	0
Useful efficiency										
Seasonal space heating energy efficiency	η_s	%	91.04	91.35	91.04	91.35	91.04	91.35	91.04	91.35
At rated heat output and high temperature regime	η_4	%	93.1	90.8	93.1	90.8	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	96.7	96.9	96.7	96.9
Other items										
Standby heat loss	P_{stby}	kW	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Ignition burner power consumption	P_{ign}	kW	0	0	0	0	0	0	0	0
Annual energy consumption	Q_{HE}	kWh	-	-	-	-	-	-	-	-
Sound power level, indoors	L_{WA}	dB	55	55	55	55	55	55	55	55
Emissions of nitrogen oxides	NO_x	mg/kWh	147	149	147	149	147	149	147	149
Daily fuel consumption	Q_{fuel}	kWh	-	-	-	-	-	-	-	-
Annual fuel consumption	AFC	GJ	-	-	-	-	-	-	-	-

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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.

