

# Riello RDB BX Burners on Grant Boilers

Low NOx Settings

Please ensure all burners are commissioned as below

Boiler model (burner type)	Heat output		Nozzle	Oil pressure (bar)	Smoke No.	Burner head type	Burner Head setting	Diffuser setting dist. A mm (see figure 1 below)	Diffuser setting dist. D mm (see figure 2 below)	Air Disc setting	Flue gas temperature (°C)	CO2 (%)	Burner Code
	KW	Bitu/h											
Vortex 15-21 Utility, & Module.	15	51,200	0.45 80°EH	7.5	0-1	BX 500	N/A	N/A	11	B	65-70	12.5	20147321
	18	63,400	0.55 60°ES	7	0-1	BX 500	N/A	N/A	11.5	C	70-75	12.5	20147321
	21	71,600*	0.60 60°ES	8	0-1	BX 500	N/A	N/A	13	C	75-80	12.5	20147321
Vortex 15-26 Utility, Boilerhouse, System & Module <i>NB. Fitted With Recirculator Tube</i>	15	51,200	0.45 80°EH	8.0	0-1	BX 500	N/A	N/A	11.5	B	60-65	12.5	20094977
	21	71,600*	0.60 60°ES	10.0	0-1	BX 500	N/A	N/A	13	C	65-70	12.5	20094977
	26	88,700	0.75 60°ES	8.5	0-1	BX 500	N/A	N/A	15	N/A	75-80	12.5	20094977
Vortex Combi 26e & Outdoor Vortex Combi 26e	26	88,700*	0.75 60°ES	8.5	0-1	BX 500	N/A	N/A	15	N/A	75-80	12.5	20147322
	26	88,700	0.75 60°ES	8.0	0-1	BX 700	N/A	N/A	15	N/A	65-70	12.5	20109931
	31	105,700*	0.85 60°ES	9.0	0-1	BX 700	N/A	N/A	16	N/A	70-75	12.5	20109931
Vortex 26-36 Utility, Boilerhouse, System & Module	36	122,800	1.00 60°ES	9.0	0-1	BX 700	N/A	N/A	17.5	N/A	75-80	12.5	20109931
	36	122,800*	1.00 60°ES	9.0	0-1	BX 700	N/A	N/A	17.5	N/A	75-80	12.5	20147350
	36	122,800	1.00 60°ES	9.0	0-1	BX 700	N/A	N/A	17.5	N/A	75-80	12.5	20110334
Vortex 36-46 Utility, Boiler house, System & Module	41	140,000*	1.10 60°ES	10.0	0-1	BX 700	N/A	N/A	17.5	N/A	80-85	12.5	20110334
	46	157,000	1.25 60°S	8.0	0-1	BX 700	N/A	N/A	20	N/A	85-90	12.5	20110334
	46	157,000	1.25 80°S	8.0	0-1	GIB	0	N/A	N/A	N/A	75-80	12.5	3748920
Vortex 46-58 Utility, Module & Boiler house	52	177,500*	1.35 80°S	9.5	0-1	GIB	0	N/A	N/A	N/A	75-80	12.5	3748920
	58	197,900	1.65 80°S	8.0	0-1	GIB	0	N/A	N/A	N/A	75-80	12.5	3748920
	58	197,900	1.65 80°S	8.0	0-1	GIB	0	N/A	N/A	N/A	75-80	12.5	3748921
Vortex 58-70 Utility, Module & Boiler house	64	218,300*	1.65 80°S	9.5	0-1	GIB	0	N/A	N/A	N/A	75-80	12.5	3748921
	70	238,800	1.75 80°S	9.5	0-1	GIB	4	7 to 8	N/A	N/A	75-80	12.5	3748921
	15	51,200	0.45 80°EH	7.5	0-1	BX 500	N/A	N/A	11	B	70-75	12.5	20147321
Euroflame 50-70 (Vortex ECO) Condensing Utility, System, Module, Module System & Boiler house	18	61,400	0.55 60°ES	7	0-1	BX 500	N/A	N/A	11.5	C	75-80	12.5	20147321
	21	71,600*	0.60 60°ES	8	0-1	BX 500	N/A	N/A	13	C	80-85	12.5	20147321
	21	71,600	0.60 60°ES	8.0	0-1	BX 500	N/A	N/A	13	C	85-90	12.5	20147346
Euroflame 70-90 (Vortex ECO) Condensing Utility, System, Module, Module System & Boiler house	23.5	80,200*	0.65 60°ES	10.0	0-1	BX 500	N/A	N/A	13	C	85-90	12.5	20147346
	26	88,700	0.75 60°ES	8.5	0-1	BX 500	N/A	N/A	15	N/A	90-95	12.5	20147346
	26	88,700	0.75 60°ES	8.5	0-1	BX 700	N/A	N/A	15	N/A	75-80	12.5	20109931
Euroflame 90-120 (Vortex ECO) Condensing Utility, System, Module, Module System & Boiler house	31	105,700*	0.85 60°ES	9.0	0-1	BX 700	N/A	N/A	16	N/A	85-90	12.5	20109931
	35	119,400	1.00 60°ES	8.5	0-1	BX 700	N/A	N/A	17.5	N/A	90-95	12.5	20109931
	15	51,200	0.45 80°EH	7.5	0-1	BX 500	N/A	N/A	11	C	65-70	12.5	20147321
VortexAir (Yellow flame) 15-21 (IRL)	18.5	63,100	0.55 60°ES	7	0-1	BX 500	N/A	N/A	11.5	C	70-75	12.5	20147321
	21	71,600*	0.60 60°ES	8	0-1	BX 500	N/A	N/A	13	C	75-80	12.5	20147321
	21	71,600	0.60 60°ES	8.0	0-1	BX 500	N/A	N/A	13	C	75-80	12.5	20147322
VortexAir (Yellow flame) 21-26 (IRL)	23	78,500	0.65 60°ES	10.0	0-1	BX-500	N/A	N/A	13	C	75-80	12.5	20147322
	26	88,700*	0.75 60°ES	8.5	0-1	BX 500	N/A	N/A	15	N/A	75-80	12.5	20147322



EFFICIENT HEATING SOLUTIONS

# Burner Settings for Grant oil boilers, Kerosene

**YELLOW FLAME**

## Grant Vortex

model and burner type	heat output (kW)	heat output (Btu/h)	nozzle	oil press.	smoke no.	burner head type	air disc setting	flue temp.(°C)	CO <sub>2</sub> (%)
50/70	15	51200	.50/80°EH	7	0 - 1	T1	Disc setting B		12%
Reillo RDB2.2	18.3	62400	.55/80°EH	7.5	0 - 1	T1	Disc setting C		12%
	*21.0	71650	.60/80°EH	9	0 - 1	T1	Disc setting C		12%
50/90	15	51180	.50/80°EH	7	0 - 1	T1	Fixed	60 - 65	12%
Reillo RDB1	20	68240	.60/80°EH	8	0 - 1	T1	Fixed	65 - 70	12%
	*23.0	78475	.65/80°EH	8.5	0 - 1	T2	Fixed	70 - 75	12%
	26	88700	.75/80°EH	8	0 - 1	T2	Fixed	75 - 80	12%
90/120	26	88700	.75/80°EH	8	0 - 1	T3	Fixed	65 - 70	12%
Reillo RDB2	31.5	107500	.85/80°EH	9	0 - 1	T3	Fixed	70 - 75	12%
	36	123000	1.00/80°EH	9.1	0 - 1	T3	Fixed	75 - 80	12%
120/155	36	1213000	1.00/80°EH	9	0 - 1	T5	Fixed	75 - 80	12%
Reillo RDB2.2	41.5	142000	1.20/80°S	8	0 - 1	T5	Fixed	80 - 85	12%
	46	157000	1.25/80°S	8	0 - 1	T5	Fixed	85 - 90	12%
155/200	46	156952	1.25/80°S	8	0 - 1	GIB	Head setting 0	75 - 80	12%
Reillo RDB3.2	*52	177424	1.35/80°S	9.5	0 - 1	GIB	Head setting 0	75 - 80	12%
	58	197896	1.65/80°S	8	0 - 1	GIB	Head setting 0	75 - 80	12%
200/240	58	197896	1.65/80°S	8	0 - 1	GIB	Head setting 0	75 - 80	12%
Reillo RDB3.2	*64	218368	1.65/80°S	9.5	0 - 1	GIB	Head setting 0	75 - 80	12%
	70	238840	1.75/80°S	9.5	0 - 1	GIB	Head setting 4	75 - 80	12%

## Grant Euroflame Condensing

model and burner type	heat output (kW)	heat output (Btu/h)	nozzle	oil press.	smoke no.	burner head type	disc setting	flue temp.(°C)	CO <sub>2</sub> (%)
50/70	15.1	51500	0.50/80°EH	7	0 - 1	T1	B	70-75	11 - 12%
Reillo RDB2.2	*18.1	61750	0.55/80°EH	7.5	0 - 1	T1	C	75-80	11 - 12%
	20.7	70600	0.60/80°EH	8.5	0 - 1	T1	C	80-85	11 - 12%
70/90	20.7	70600	0.60/80°EH	8.5	0 - 1	T1	N/A	85-90	11 - 12%
Reillo RDB2.2	*22.7	77500	0.65/80°EH	8.5	0 - 1	T2	N/A	85-90	11 - 12%
	25.6	87350	0.75/80°EH	8	0 - 1	T2	N/A	90-95	11 - 12%
90/120	25.6	87350	0.75/80°EH	8	0 - 1	T2	N/A	75-80	11 - 12%
Reillo RDB2.2	*30.8	105100	0.85/80°EH	9.1	0 - 1	T3	N/A	85-90	11 - 12%
	34.7	118400	1.00/80°EH	8	0 - 1	T3	N/A	90-95	11 - 12%

## Grant Vortex Wall hung

model and burner type	heat output (kW)	heat output (Btu/h)	nozzle	oil press.	smoke no.	burner head type	disc setting	flue temp.(°C)	CO <sub>2</sub> (%)
12/16	13	43300	0.35/80°EH	7	0	No. 1 Fixed	No. 1 Fixed	60-65	11 - 12%
	*14.5	47770	0.40/80°EH	10	0	No. 1 Fixed	No. 1 Fixed	65-69	11 - 12%
	17	56300	0.50/80°EH	7	0	No. 1 Fixed	No. 1 Fixed	65-69	11 - 12%
	17	56300	0.50/80°EH	7	0	No. 1 Fixed	No. 1 Fixed	65-69	11 - 12%
16/21	*19.3	63800	0.50/80°EH	10	0	No. 1 Fixed	No. 1 Fixed	70-75	11 - 12%
	21	69270	0.60/80°EH	8	0	No. 1 Fixed	No. 1 Fixed	75-79	11 - 12%

## Grant Vortex Combi

model and burner type	heat output (kW)	heat output (Btu/h)	nozzle	oil press.	smoke no.	burner head type	disc setting	flue temp.(°C)	CO <sub>2</sub> (%)
26									
Riello RDB1	26	88700	.75/80°EH	8	0-1	T2	N/A	75-80	12%
36									
Riello RDB2.2	36	123000	1.00/80°EH	9.1	0-1	T5	N/A	78	12%

## Euroflame standard efficiency boilers

model and burner type	heat output (kW)	heat output (Btu/h)	nozzle	oil press.	smoke no.	burner head type	disc setting	flue temp.(°C)	CO <sub>2</sub> (%)
50/70	14.7	50000	0.50/60°EH	7	0-1	LD2SX short	N/A	211	11.50%
Reillo RDB1	*17.6	60000	0.60/60°EH	7	0-1	LD2SX short	N/A	211	11.50%
	20.5	70000	0.60/60°EH	8.5	0-1	LD2SX short	N/A	211	11.50%
50/90	14.7	50000	0.50/60°S	7	0-1	LD2	N/A	180	11.50%
Reillo RDB1	17.6	60000	0.60/60°S	7	0-1	LD2	N/A	180	11.50%
	*20.5	70000	0.60/60°S	9	0-1	LD3	N/A	180	11.50%
	23.5	80000	0.75/60°S	7	0-1	LD3	N/A	180	11.50%
	26.4	90000	0.75/60°S	9.5	0-1	LD3	N/A	180	11.50%
90/120	26.4	90000	0.75/80°S	9.5	0-1	LD3A	N/A	190	12%
Reillo RDB2	*32.2	110000	1.00/80°S	8	0-1	LD3A	N/A	220	12%
	35.2	120000	1.00/80°S	8.6	0-1	LD3A	N/A	250	12%

## Multi Pass standard efficiency boilers

model and burner type	heat output (kW)	heat output (Btu/h)	nozzle	oil press.	smoke no.	burner head type	disc setting	flue temp.(°C)	CO <sub>2</sub> (%)
70/90	20.5	70000	0.60/60°EH	8.5	0-1	LD3	N/A	167	12%
Reillo RDB1	*23.5	80000	0.75/60°EH	7	0-1	LD3	N/A	166	12%
	26.4	90000	0.75/60°EH	9.5	0-1	LD3	N/A	168	12%
90/140	32.2	110000	1.00/60°ES	8	0-1	LD3A	N/A	180	12%
Reillo RDB2	*36.7	125000	1.10/80°EH	8.5	0-1	LD3A	N/A	185	12%
	41	140000	1.25/60°S	8.25	0-1	LD3A	N/A	184	12%
110/140	32.2	110000	1.00/60°ES	8	0-1	LD3A	N/A	180	12%
Reillo RDB2	*36.7	125000	1.10/80°EH	8.5	0-1	LD3A	N/A	185	12%
	41	140000	1.25/60°S	8.25	0-1	LD3A	N/A	184	12%
140/160	*41	140000	1.25/60°S	7.5	0-1	K/KA	N/A	185	12%
Reillo RDB3.2*	47	160000	1.35/60°S	8.25	0-1	K/KA	N/A	195	12%
160/200	47	160000	1.35/60°S	8.25	0-1	C/KA	N/A	195	12%
Reillo RDB3.2*	*52.8	180000	1.50/60°S	8	0-1	C/KA	N/A	195	12%
	58.6	200000	1.65/60°S	9.25	0-1	C/KA	N/A	195	12%
140/160	41	140000	1.25/60°S	9	0-1	G7	2	185	12.5%
Reillo G7	46.6	160000	1.35/60°S	8.5	0-1	G7	3	195	12.5%
160/200	46.6	160000	1.35/60°S	8.5	0-1	G7	3	195	12.5%
Reillo G7	52.75	180000	1.50/60°S	8.5	0-1	G7	6(Full open)	195	12.5%
	59	200000	1.65/60°S	10	0-1	G7	6(Full open)	195	12.5%