

Full and Part Load Efficiency plus Seasonal Efficiency Data of MHS Boilers



The information contained in this data sheet may be of assistance to heating system designers when considering the suitability of Commercial Boiler Plant for heating and hot water service systems in compliance with The Building Regulations 2000, Approved Documents L2A and L2B 2010 Editions.

The above mentioned Approved Documents state that fixed building services must meet certain efficiency criteria as set out in the Non-Domestic Building Services Compliance Guide 2010 Edition (with 2011 Amendments).

The efficiencies of the MHS Boiler Products listed here are calculated using the formula given in the Compliance Guide (detailed below), and reference must be made to the Compliance Guide for guidance on the control systems that may also be required to meet the minimum requirements for the type of appliance and heat distribution system to be employed.

Attention is drawn to the need to refer to the relevant ADL and the Non-Domestic Building Services Compliance Guide.

These documents may be downloaded from the web site of The Department for Communities and Local Government.

<http://www.planningportal.gov.uk/buildingregulations/approveddocuments/partl/approved>

http://www.planningportal.gov.uk/uploads/br/nondomestic_building_compliance_guide_2010.pdf

Seasonal Boiler Efficiency for single boilers and multiple boiler systems using identical boilers is calculated using the following formula: $0.81_{30\%} + 0.19_{100\%}$
(Equation 2 in Compliance Guide)

The Boiler Efficiencies, measured at 100% load and at 30% load, are used in Equation 2 to calculate the boiler seasonal efficiency. The weighting factors in Equation 2 reflect typical operating conditions for a boiler.

It is possible that Heating Efficiency Credits may be necessary with certain boiler models in order to meet the required "Effective boiler seasonal efficiency" for replacement boilers in existing buildings.

See Non-Domestic Building Services Compliance Guide - Tables 4 to 8 for details of Required Efficiencies, Minimum Controls Packages and Heating Efficiency Credits.

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
ADI-NOx HT							
105	104	Nat Gas	85.5	87.40	87.04	✓	✓
130	130	Nat Gas	84.87	86.62	86.63	✓	✓
150	150	Nat Gas	85.97	87.30	87.05	✓	✓
200	190	Nat Gas	85.59	87.36	87.41	✓	✓
250	230	Nat Gas	85.52	87.12	86.82	✓	✓
275	262	Nat Gas	87.43	89.08	88.77	✓	✓
325	322	Nat Gas	86.86	88.47	88.17	✓	✓
400	380	Nat Gas	86.45	87.96	87.68	✓	✓
475	464	Nat Gas	86.5	87.98	87.70	✓	✓
550	545	Nat Gas	86.26	87.78	87.50	✓	✓
650	616	Nat Gas	86.26	87.78	87.50	✓	✓
750	695	Nat Gas	86.61	87.79	87.57	✓	✓
850	804	Nat Gas	86.26	87.78	87.50	✓	✓
950	905	Nat Gas	86.26	87.78	87.50	✓	✓
ADI-NOx LT							
105	104	Nat Gas	85.5	94.20	92.59	✓	✓
130	130	Nat Gas	84.87	94.22	92.45	✓	✓
150	149.3	Nat Gas	85.57	94.27	92.62	✓	✓
200	190	Nat Gas	85.52	94.30	92.64	✓	✓
250	230	Nat Gas	87.43	93.75	92.55	✓	✓
275	262	Nat Gas	86.86	94.29	92.88	✓	✓
325	322	Nat Gas	86.45	94.41	92.90	✓	✓
400	380	Nat Gas	86.5	94.32	92.84	✓	✓
475	464	Nat Gas	86.26	94.38	92.84	✓	✓
550	545	Nat Gas	86.26	94.25	92.74	✓	✓
650	616	Nat Gas	86.61	94.17	92.74	✓	✓
750	695	Nat Gas	86.61	94.26	92.81	✓	✓
850	804	Nat Gas	87.38	94.07	92.8	✓	✓
950	905	Nat Gas	86.49	94.09	92.65	✓	✓
ADI-NOx CD							
70	68	Nat Gas	87.52	94.38	93.08	✓	✓
85	85	Nat Gas	87.32	94.15	92.86	✓	✓
105	104	Nat Gas	87.49	94.48	93.16	✓	✓
120	120	Nat Gas	87.61	94.65	93.32	✓	✓
175	161.8	Nat Gas	87.82	93.7	92.59	✓	✓
200	197.5	Nat Gas	88.00	93.71	92.63	✓	✓
250	241	Nat Gas	88.08	94.28	93.11	✓	✓
325	294	Nat Gas	88.15	94.33	93.16	✓	✓
375	354	Nat Gas	88.3	94.44	93.28	✓	✓
450	440	Nat Gas	88.45	94.40	93.27	✓	✓
550	530	Nat Gas	87.12	94.25	92.90	✓	✓
650	598	Nat Gas	87.04	94.24	92.88	✓	✓
750	675	Nat Gas	87.4	94.25	92.95	✓	✓
850	792.7	Nat Gas	87.25	94.28	92.95	✓	✓
950	892.3	Nat Gas	86.96	94.35	92.95	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Euron							
HG 24	23.6	Nat Gas	88.64	97.11	95.50	✓	✓
HG 30	29.2	Nat Gas	88.10	96.75	95.10	✓	✓
HSG 30	29.2	Nat Gas	88.10	96.75	95.10	✓	✓
HG 24	23.6	LPG	90.61	99.27	97.62	✓	✓
HG 30	29.2	LPG	90.06	98.90	97.22	✓	✓
HSG 30	29.2	LPG	90.06	98.90	97.22	✓	✓
Ultramax Thision L							
TH-L 50	48	Nat Gas	87.95	96.49	94.86	✓	✓
TH-L 65	63.9	Nat Gas	87.86	96.49	94.85	✓	✓
TH-L 85	85.3	Nat Gas	87.77	96.49	94.83	✓	✓
TH-L 100	100	Nat Gas	87.97	96.49	94.87	✓	✓
TH-L 120	120	Nat Gas	88.01	96.49	94.87	✓	✓
TH-L 145	142.3	Nat Gas	87.95	96.49	94.86	✓	✓
Ultramax PB							
65	65	Nat Gas	87.80	97.30	95.49	✓	✓
85	85	Nat Gas	87.50	96.94	95.15	✓	✓
100	96.3	Nat Gas	87.50	96.94	95.15	✓	✓
120	120	Nat Gas	87.50	96.94	95.15	✓	✓
65	65	LPG	89.79	99.46	97.63	✓	✓
85	85	LPG	89.52	99.09	97.27	✓	✓
100	96.3	LPG	89.52	99.09	97.27	✓	✓
120	120	LPG	89.52	99.09	97.27	✓	✓
Ultramax R3600SB							
3600SB	601	Nat Gas	88.11	97.66	95.84	✓	✓
3601SB	671	Nat Gas	88.11	97.66	95.84	✓	✓
3602SB	784	Nat Gas	88.11	97.66	95.84	✓	✓
3603SB	888	Nat Gas	88.11	97.66	95.84	✓	✓
3604SB	992	Nat Gas	88.11	97.66	95.84	✓	✓
3605SB	1095	Nat Gas	88.11	97.66	95.84	✓	✓
3600SB	601	LPG	90.07	99.84	97.98	✓	✓
3601SB	671	LPG	90.07	99.84	97.98	✓	✓
3602SB	784	LPG	90.07	99.84	97.98	✓	✓
3603SB	888	LPG	90.07	99.84	97.98	✓	✓
3604SB	992	LPG	90.07	99.84	97.98	✓	✓
3605SB	1095	LPG	90.07	99.84	97.98	✓	✓
Ultramax R3400							
R3401	662	Nat Gas	84.24	92.53	90.95	✓	✓
R3402	739	Nat Gas	84.24	92.53	90.95	✓	✓
R3403	864	Nat Gas	84.24	92.53	90.95	✓	✓
R3404	978	Nat Gas	84.24	92.53	90.95	✓	✓
R3405	1083	Nat Gas	84.24	92.53	90.95	✓	✓
R3406	1206	Nat Gas	84.24	92.53	90.95	✓	✓
R3407	1327	Nat Gas	84.24	92.53	90.95	✓	✓
R3408	1516	Nat Gas	84.24	92.53	90.95	✓	✓
R3409	1706	Nat Gas	84.24	92.53	90.95	✓	✓
R3410	1896	Nat Gas	84.24	92.53	90.95	✓	✓
R3401	662	LPG	86.11	94.58	92.97	✓	✓
R3402	739	LPG	86.11	94.58	92.97	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Ultramax R3400							
R3403	864	LPG	86.11	94.58	92.97	✓	✓
R3404	978	LPG	86.11	94.58	92.97	✓	✓
R3405	1093	LPG	86.11	94.58	92.97	✓	✓
R3406	1206	LPG	86.11	94.58	92.97	✓	✓
R3407	1327	LPG	86.11	94.58	92.97	✓	✓
R3408	1516	LPG	86.11	94.58	92.97	✓	✓
R3409	1706	LPG	86.11	94.58	92.97	✓	✓
R3410	1896	LPG	86.11	94.58	92.97	✓	✓
Ultramax R600							
R601	150.7	Nat Gas	88.28	97.65	95.86	✓	✓
R602	201.6	Nat Gas	88.28	97.65	95.86	✓	✓
R603	251.4	Nat Gas	88.28	97.65	95.86	✓	✓
R604	302.3	Nat Gas	88.28	97.65	95.86	✓	✓
R605	403.1	Nat Gas	88.28	97.65	95.86	✓	✓
R606	503.9	Nat Gas	88.28	97.65	95.86	✓	✓
R607	571.5	Nat Gas	88.28	97.65	95.86	✓	✓
R601	150.7	LPG	90.23	99.80	97.97	✓	✓
R602	201.6	LPG	90.23	99.80	97.97	✓	✓
R603	251.4	LPG	90.23	99.80	97.97	✓	✓
R604	302.3	LPG	90.23	99.80	97.97	✓	✓
R605	403.1	LPG	90.23	99.80	97.97	✓	✓
R606	503.9	LPG	90.23	99.80	97.97	✓	✓
R607	571.5	LPG	90.23	99.80	97.97	✓	✓
Ecocond							
110	110	Nat Gas	87.48	94.15	92.88	✓	✓
150	148	Nat Gas	87.75	93.16	92.13	✓	✓
190	185	Nat Gas	87.93	93.25	92.23	✓	✓
230	227	Nat Gas	88.02	93.07	92.62	✓	✓
290	286	Nat Gas	88.2	93.52	92.50	✓	✓
345	345	Nat Gas	88.38	93.88	92.83	✓	✓
405	400	Nat Gas	88.47	93.61	92.63	✓	✓
440	436.7	Nat Gas	85.77	93.70	92.19	✓	✓
520	518.9	Nat Gas	85.77	93.88	92.33	✓	✓
580	570.4	Nat Gas	85.77	94.06	92.48	✓	✓
640	641.3	Nat Gas	85.77	94.15	92.55	✓	✓
110	110	Oil	90.52	97.19	95.92	✓	✓
150	148	Oil	90.79	96.20	95.17	✓	✓
190	185	Oil	90.97	96.29	95.27	✓	✓
230	227	Oil	91.06	96.74	95.66	✓	✓
290	286	Oil	91.24	96.56	95.54	✓	✓
345	345	Oil	91.42	96.92	95.87	✓	✓
405	400	Oil	91.51	96.65	95.67	✓	✓
440	436.7	Oil	88.81	96.74	95.23	✓	✓
520	518.9	Oil	88.81	96.92	95.37	✓	✓
580	570.4	Oil	88.81	97.10	95.52	✓	✓
640	641.3	Oil	88.81	97.19	95.59	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Alpha Tryon							
MD4	105	Nat Gas	82.32	83.04	82.90	***	✓**
MD5	144	Nat Gas	82.32	83.04	82.90	***	✓**
MD6	184	Nat Gas	82.32	83.04	82.90	***	✓**
MD7	223	Nat Gas	82.32	83.04	82.90	***	✓**
MD8	262	Nat Gas	82.32	83.04	82.90	***	✓**
MD9	300	Nat Gas	82.32	83.04	82.90	***	✓**
MD4	105	Oil	85.36	86.08	85.94	✓	✓
MD5	144	Oil	85.36	86.08	85.94	✓	✓
MD6	184	Oil	85.36	86.08	85.94	✓	✓
MD7	223	Oil	85.36	86.08	85.94	✓	✓
MD8	262	Oil	85.36	86.08	85.94	✓	✓
MD9	300	Oil	85.36	86.08	85.94	✓	✓
MK8	320	Nat Gas	82.47	83.34	83.17	***	✓**
MK9	376	Nat Gas	82.47	83.34	83.17	***	✓**
MK10	436	Nat Gas	82.47	83.34	83.17	***	✓**
MK11	494	Nat Gas	82.47	83.34	83.17	***	✓**
MK12	552	Nat Gas	82.47	83.34	83.17	***	✓**
MK13	611	Nat Gas	82.47	83.34	83.17	***	✓**
MK14	669	Nat Gas	82.47	83.34	83.17	***	✓**
MK15	727	Nat Gas	82.47	83.34	83.17	***	✓**
MK16	785	Nat Gas	82.47	83.34	83.17	***	✓**
MK17	843	Nat Gas	82.47	83.34	83.17	***	✓**
MK18	901	Nat Gas	82.47	83.34	83.17	***	✓**
MK19	959	Nat Gas	82.47	83.34	83.17	***	✓**
MK20	1017	Nat Gas	82.47	83.34	83.17	***	✓**
MK8	320	Oil	85.51	86.38	86.21	✓	✓
MK9	376	Oil	85.51	86.38	86.21	✓	✓
MK10	436	Oil	85.51	86.38	86.21	✓	✓
MK11	494	Oil	85.51	86.38	86.21	✓	✓
MK12	552	Oil	85.51	86.38	86.21	✓	✓
MK13	611	Oil	85.51	86.38	86.21	✓	✓
MK14	669	Oil	85.51	86.38	86.21	✓	✓
MK15	727	Oil	85.51	86.38	86.21	✓	✓
MK16	785	Oil	85.51	86.38	86.21	✓	✓
MK17	843	Oil	85.51	86.38	86.21	✓	✓
MK18	901	Oil	85.51	86.38	86.21	✓	✓
MK19	959	Oil	85.51	86.38	86.21	✓	✓
MK20	1017	Oil	85.51	86.38	86.21	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
SuperaC						New Build	Exist'g Build
93	93	Nat Gas	81.36	82.71	82.45	***	✓**
105	104.7	Nat Gas	81.63	82.89	82.65	***	✓**
150	151.2	Nat Gas	81.54	82.89	82.63	***	✓**
190	192	Nat Gas	81.99	83.25	83.01	***	✓**
230	233	Nat Gas	81.72	82.98	82.74	***	✓**
290	291	Nat Gas	81.90	83.16	82.92	***	✓**
345	349	Nat Gas	81.90	83.16	82.92	***	✓**
405	407	Nat Gas	81.63	82.98	82.72	***	✓**
465	465	Nat Gas	81.99	83.25	83.01	***	✓**
520	523	Nat Gas	81.63	82.89	82.65	***	✓**
580	581	Nat Gas	82.17	83.34	83.11	***	✓**
695	700	Nat Gas	81.81	82.89	82.68	***	✓**
810	820	Nat Gas	82.17	82.71	82.60	***	✓**
930	940	Nat Gas	82.44	82.89	82.80	***	✓**
1045	1060	Nat Gas	82.62	83.07	82.98	***	✓**
1220	1240	Nat Gas	82.80	82.80	82.80	***	✓**
1450	1480	Nat Gas	83.07	83.16	83.14	***	✓**
1860	1890	Nat Gas	82.80	82.71	82.72	***	✓**
2100	2100	Nat Gas	82.89	83.25	83.18	***	✓**
2330	2360	Nat Gas	82.71	83.07	83.00	***	✓**
2910	2960	Nat Gas	82.98	82.89	82.9	***	✓**
3490	3550	Nat Gas	82.98	83.07	83.05	***	✓**
4070	4150	Nat Gas	83.16	83.16	83.16	***	✓**
93	93	Oil	84.4	85.75	85.49	✓	✓**
105	104.7	Oil	84.67	85.93	85.69	✓	✓**
150	151.2	Oil	84.58	85.93	85.67	✓	✓**
190	192	Oil	85.03	86.29	86.05	✓	✓
230	233	Oil	84.76	86.02	85.78	✓	✓**
290	291	Oil	84.94	86.20	85.96	✓	✓**
345	349	Oil	84.94	86.20	85.96	✓	✓**
405	407	Oil	84.67	86.02	85.76	✓	✓**
465	465	Oil	85.03	86.29	86.05	✓	✓
520	523	Oil	84.67	85.93	85.69	✓	✓**
580	581	Oil	85.21	86.38	86.15	✓	✓
695	700	Oil	84.85	85.93	85.72	✓	✓**
810	820	Oil	85.21	85.75	85.64	✓	✓**
930	940	Oil	85.48	85.93	85.84	✓	✓**
1045	1060	Oil	85.66	86.11	86.02	✓	✓
1220	1240	Oil	85.84	85.84	85.84	✓	✓**
1450	1480	Oil	86.11	86.20	86.18	✓	✓
1860	1890	Oil	85.84	85.75	85.76	✓	✓**
2100	2100	Oil	85.93	86.65	86.22	✓	✓
2330	2360	Oil	85.75	86.11	86.04	✓	✓
2910	2960	Oil	86.02	85.93	85.94	✓	✓
3490	3550	Oil	86.02	86.11	86.09	✓	✓
4070	4150	Oil	86.2	86.20	86.20	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
SuperaC AR							
80	81	Nat Gas	84.69	87.21	86.73	✓	✓
90	91	Nat Gas	84.78	87.30	86.82	✓	✓
130	132	Nat Gas	84.96	87.48	87.00	✓	✓
170	170	Nat Gas	85.32	87.84	87.36	✓	✓
200	203	Nat Gas	85.5	88.02	87.54	✓	✓
250	253	Nat Gas	85.68	88.20	87.72	✓	✓
300	304	Nat Gas	85.59	88.11	87.63	✓	✓
350	354	Nat Gas	85.77	88.29	87.81	✓	✓
400	398	Nat Gas	85.77	88.29	87.81	✓	✓
450	455	Nat Gas	85.95	88.29	87.84	✓	✓
500	505	Nat Gas	85.86	88.20	87.75	✓	✓
600	610	Nat Gas	85.86	88.20	87.75	✓	✓
700	715	Nat Gas	85.86	88.20	87.75	✓	✓
800	820	Nat Gas	85.86	88.20	87.75	✓	✓
900	920	Nat Gas	85.77	88.20	87.73	✓	✓
1100	1100	Nat Gas	85.77	88.20	87.73	✓	✓
1300	1300	Nat Gas	85.86	88.20	87.75	✓	✓
1640	1645	Nat Gas	85.77	88.20	87.73	✓	✓
1850	1850	Nat Gas	85.77	88.11	87.66	✓	✓
2050	2050	Nat Gas	85.77	88.11	87.66	✓	✓
2580	2580	Nat Gas	85.77	88.11	87.66	✓	✓
3100	3100	Nat Gas	85.77	88.11	87.66	✓	✓
3600	3610	Nat Gas	85.77	88.11	87.66	✓	✓
80	81	Oil	89.98	90.25	89.77	✓	✓
90	91	Oil	87.82	90.34	89.86	✓	✓
130	132	Oil	88.00	90.52	90.04	✓	✓
170	170	Oil	88.36	90.88	90.4	✓	✓
200	203	Oil	88.54	91.06	90.58	✓	✓
250	253	Oil	88.72	91.24	90.76	✓	✓
300	304	Oil	88.63	91.15	90.67	✓	✓
350	354	Oil	88.81	91.33	90.85	✓	✓
400	398	Oil	88.81	91.33	90.85	✓	✓
450	455	Oil	88.99	91.33	90.88	✓	✓
500	505	Oil	88.90	91.24	90.79	✓	✓
600	610	Oil	88.90	91.24	90.79	✓	✓
700	715	Oil	88.90	91.24	90.79	✓	✓
800	820	Oil	88.90	91.24	90.79	✓	✓
900	920	Oil	88.81	91.24	90.77	✓	✓
1100	1100	Oil	88.81	91.24	90.77	✓	✓
1300	1300	Oil	88.90	91.24	90.79	✓	✓
1640	1645	Oil	88.81	91.24	90.77	✓	✓
1850	1850	Oil	88.81	91.15	90.70	✓	✓
2050	2050	Oil	88.81	91.15	90.70	✓	✓
2580	2580	Oil	88.81	91.15	90.70	✓	✓
3100	3100	Oil	88.81	91.15	90.70	✓	✓
3600	3610	Oil	88.81	91.15	90.70	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
SuperaC AR 2F							
93	186	Nat Gas	81.36	82.71	82.45	***	✓**
105	209.4	Nat Gas	81.63	82.89	82.65	***	✓**
150	302.4	Nat Gas	81.54	82.89	82.63	***	✓**
190	384	Nat Gas	81.99	83.25	83.01	***	✓**
230	466	Nat Gas	81.72	82.98	82.74	***	✓**
290	582	Nat Gas	81.90	83.16	82.92	***	✓**
345	698	Nat Gas	81.90	83.16	82.92	***	✓**
405	814	Nat Gas	81.63	82.98	82.72	***	✓**
93	186	Oil	84.40	85.75	85.49	✓	✓**
105	209.4	Oil	84.67	85.93	85.69	✓	✓**
150	302.4	Oil	84.58	85.93	85.67	✓	✓**
190	384	Oil	85.03	86.29	86.05	✓	✓
230	466	Oil	84.76	86.02	85.78	✓	✓**
290	582	Oil	84.94	86.2	85.96	✓	✓**
345	698	Oil	84.94	86.2	85.96	✓	✓**
405	814	Oil	84.67	86.02	85.76	✓	✓**
Trispace AR							
60	60	Nat Gas	84.33	87.21	86.66	✓	✓
90	90	Nat Gas	84.60	87.30	86.78	✓	✓
135	135	Nat Gas	84.96	87.48	87.00	✓	✓
160	161.4	Nat Gas	85.50	87.84	87.39	✓	✓
180	180	Nat Gas	85.14	87.84	87.32	✓	✓
240	241.7	Nat Gas	85.41	88.20	87.66	✓	✓
280	281	Nat Gas	85.5	88.11	87.61	✓	✓
315	315	Nat Gas	85.59	88.11	87.63	✓	✓
360	367	Nat Gas	86.31	88.29	87.91	✓	✓
400	400	Nat Gas	85.77	88.29	87.81	✓	✓
460	465.6	Nat Gas	85.77	88.29	87.81	✓	✓
650	650	Nat Gas	85.86	88.20	87.75	✓	✓
800	800	Nat Gas	85.77	88.20	87.73	✓	✓
60	60	Oil	87.37	90.25	89.70	✓	✓
90	90	Oil	87.64	90.34	89.82	✓	✓
135	135	Oil	88.00	90.52	90.04	✓	✓
160	161.4	Oil	88.54	90.88	90.43	✓	✓
180	180	Oil	88.18	90.88	90.36	✓	✓
240	241.7	Oil	88.45	91.24	90.70	✓	✓
280	281	Oil	88.54	91.15	90.65	✓	✓
315	315	Oil	88.63	91.15	90.67	✓	✓
360	367	Oil	89.35	91.33	90.95	✓	✓
400	400	Oil	88.81	91.33	90.85	✓	✓
460	465.6	Oil	88.81	91.33	90.85	✓	✓
650	650	Oil	88.90	91.24	90.79	✓	✓
800	800	Oil	88.81	91.24	90.77	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
TRINOx						New Build	Exist'g Build
1000	1165	Nat Gas	83.34	83.79	83.7	***	✓**
1200	1410	Nat Gas	83.52	83.97	83.88	***	✓**
1500	1760	Nat Gas	83.43	83.88	83.79	***	✓**
1750	2040	Nat Gas	83.25	83.7	83.61	***	✓**
2150	2510	Nat Gas	83.43	84.15	84.01	***	✓**
2580	3020	Nat Gas	83.52	83.88	83.81	***	✓**
3000	3520	Nat Gas	83.25	83.61	83.54	***	✓**
3500	4090	Nat Gas	83.34	83.97	83.85	***	✓**
4000	4680	Nat Gas	83.52	84.06	83.95	***	✓**
4300	5030	Nat Gas	83.25	83.61	83.54	***	✓**
5000	5830	Nat Gas	83.25	83.79	83.68	***	✓**
6000	7020	Nat Gas	83.34	83.88	83.77	***	✓**
7500	8760	Nat Gas	83.43	83.97	83.86	***	✓**
9000	10560	Nat Gas	83.43	83.97	83.86	***	✓**
1000	1165	Oil	86.38	86.83	86.74	✓	✓
1200	1410	Oil	86.52	87.01	86.92	✓	✓
1500	1760	Oil	86.47	86.92	86.83	✓	✓
1750	2040	Oil	86.29	86.74	86.65	✓	✓
2150	2510	Oil	86.47	87.19	87.05	✓	✓
2580	3020	Oil	86.56	86.92	86.85	✓	✓
3000	3520	Oil	86.29	86.65	86.58	✓	✓
3500	4090	Oil	86.38	87.01	86.89	✓	✓
4000	4680	Oil	86.56	87.1	86.99	✓	✓
4300	5030	Oil	86.29	86.65	86.58	✓	✓
5000	5830	Oil	86.29	86.83	86.72	✓	✓
6000	7020	Oil	86.38	86.92	86.81	✓	✓
7500	8760	Oil	86.47	87.01	86.9	✓	✓
9000	10560	Oil	86.47	87.01	86.9	✓	✓

** Heating Efficiency Credits are necessary to meet the minimum Effective Heat Generating Seasonal Efficiency; See the Non-Domestic Heating, Cooling and Ventilation Compliance Guide.

*** Meets the minimum efficiency requirement for a individual boiler within a Multiple-boiler system in a new build situation, but the overall required efficiency of the Multi-boiler installation must not be less than 86% (0.86), and would require a mix of boiler types to achieve the final efficiency requirement; e.g. a combination of condensing and non-condensing appliances - See the "Three Step Method" in Section 2 of the Non-Domestic Building Services Compliance Guide.

To convert "Gross" figures to "Net" multiply by 1.11.

To convert "Net" figures to "Gross" multiply by 0.901.