Natural Gas CHP Range Guide 2020 UK - Small Scale (≤E530kWe)

centrica Business Solutions

Product Reference	Electrical Output kW_e	Engine Manufacturer	Engine Type	Aspiration Type	Output Brake kW_b	Output Jacket Water kW_{th}	Output Exhaust Gas kW_{th}	Total Heat Output kW_{th}	Fuel Input (LHV) kW	Fuel Input (HHV) kW	Max Return Operating Temp°C	Overall Unit Efficiency (LHV)%
ENER-G 35M	35	MAN	E 0834 E 302	Natural	38	40	22	62	113	125	80	85.9
ENER-G 35M (Low NOx)	35	MAN	E 0834 E 302	Natural	38	40	22	62	113	125	80	85.9
ENER-G 50M	50	MAN	E 0834 E 302	Natural	54	46	33	79	148	164	80	87.5
ENER-G 50M (Low NOx)	50	MAN	E 0834 E 302	Natural	54	46	33	79	148	164	80	87.5
ENER-G 70M	71	MAN	E 0836 E 302	Natural	75	63	46	109	204	226	80	88.2
ENER-G 70M (Low NOx)	71	MAN	E 0836 E 302	Natural	75	63	46	109	204	226	80	88.2
ENER-G 70U	71	MAN	E 0836 E 302	Natural	75	63	46	109	204	226	80	88.2
ENER-G 70U (Low NOx)	71	MAN	E 0836 E 302	Natural	75	63	46	109	204	226	80	88.2
ENER-G 90	90	ENER-G	EGE-06L	Natural	95	109	54	163	280	309	80	90.4
ENER-G 90 (Low NOx)	90	ENER-G	EGE-06L	Natural	95	109	54	163	280	309	80	90.4
ENER-G 100	100	ENER-G	EGE-06L	Natural	105	116	59	175	304	336	80	90.3
ENER-G 100 (Low NOx)	100	ENER-G	EGE-06L	Natural	105	116	59	175	304	336	80	90.3
ENER-G 110	110	ENER-G	EGE-06L	Natural	116	123	63	186	328	363	80	90.1
ENER-G 110 (Low NOx)	110	ENER-G	EGE-06L	Natural	116	123	63	186	328	363	80	90.1
ENER-G 125	123	ENER-G	EGE-06L	Natural	129	130	69	199	358	396	80	89.8
ENER-G 125 (Low NOx)	123	ENER-G	EGE-06L	Natural	129	130	69	199	358	396	80	89.8
ENER-G 135	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC
ENER-G 135 (Low NOx)	135	ENER-G	EGE-08V	Natural	143	147	72	218	395	437	80	89.4
ENER-G 135C	135	ENER-G	EGE-06L+	Natural	142	132	74	206	446	493	80	76.6
ENER-G 135C (Low NOx)	135	ENER-G	EGE-06L+	Natural	142	132	74	206	446	493	80	76.6
ENER-G 140C	143	ENER-G	EGE-06L+	Natural	150	138	78	216	464	513	80	77.3
ENER-G 140C (Low NOx)	143	ENER-G	EGE-06L+	Natural	150	138	78	216	464	513	80	77.3
ENER-G 150	151	ENER-G	EGE-08V	Natural	159	155	79	235	429	475	80	89.8
ENER-G 150 (Low NOx)	151	ENER-G	EGE-08V	Natural	159	155	79	235	429	475	80	89.8
ENER-G 165	165	ENER-G	EGE-12V	Natural	173	196	89	284	504	558	80	89.2
ENER-G 165 (Low NOx)	165	ENER-G	EGE-12V	Natural	173	196	89	284	504	558	80	89.2
ENER-G 185	185	ENER-G	EGE-12V	Natural	194	210	98	309	550	608	80	89.8
ENER-G 185 (Low NOx)	185	ENER-G	EGE-12V	Natural	194	210	98	309	550	608	80	89.8
ENER-G 210	210	ENER-G	EGE-12V	Natural	220	226	111	337	606	671	80	90.3
ENER-G 210 (Low NOx)	210	ENER-G	EGE-12V	Natural	220	226	111	337	606	671	80	90.3
ENER-G 200M	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC
ENER-G 230	229	ENER-G	EGE-12V	Natural	239	237	121	357	648	716	80	90.6
ENER-G 230 (Low NOx)	229	ENER-G	EGE-12V	Natural	239	237	121	357	648	716	80	90.6
ENER-G 250M	255	MAN	E 2848 LE 322	Turbocharged	265	150	145	321	680	752	80	84.7
ENER-G 310	310	Perkins	4006-23 TRS1	Turbocharged	322	152	205	357	820	907	80	81.4
ENER-G 310 250NOx	310	Perkins	4006-23 TRS1	Turbocharged	322	150	212	362	861	952	80	78.1
ENER-G 375	376	Perkins	4006-23 TRS2	Turbocharged	390	162	237	399	971	1074	80	79.8
ENER-G 375 250NOx	376	Perkins	4006-23 TRS2	Turbocharged	390	165	253	418	1026	1135	80	77.4
ENER-G E400M	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC
ENER-G 425	426	Perkins	4008-30 TRS1	Turbocharged	442	188	277	465	1107	1224	80	80.5
ENER-G 425 250NOx	426	Perkins	4008-30 TRS1	Turbocharged	442	200	296	496	1159	1282	80	79.6
ENER-G 500	502	Perkins	4008-30 TRS2	Turbocharged	521	210	314	524	1286	1422	80	79.8
ENER-G 500 250NOx	507	Perkins	4008-30 TRS2	Turbocharged	521	218	336	554	1336	1478	78	79.4
ENER-G 530M	532	MAN	E 3262 LE 202	Turbocharged	550	278	251	603	1310	1449	80	86.6
ENER-G 530M 250NOx	532	MAN	E 3262 LE 202	Turbocharged	550	282	265	630	1348	1491	80	86.1

NB: Output figures are based on operation at ISO 3046 conditions with the exception of exhaust output, which is quoted to 180°C, figures are stated from manufacturer's declared performance figures subject to the manufacturer's tolerances and subject to change without notice. Output figures may vary under different operating regimes and site-specific characteristics. As such figures are shown for guidance only. Units built for 400V, 50Hz, 3 Phase operation. Overall unit efficiencies are based on the net fuel input (LHV) and generator efficiency at 1.0 power factor. Values for de-rated units are estimates only. Generator efficiencies are taken from the manufacturer's graph at 0.95 power factor, electrical outputs are based on these efficiencies. Please refer to ENER-G for performance at other return operating temperatures.

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ENER-G 770 250NOX L33	776	MTU	AoE 8V4000L33	Turbocharged	800	416	443	859	1883	2083	78	86.9
ENER-G 770 500NOX L33	776	MTU	AoE 8V4000L33	Turbocharged	800	401	422	823	1832	2026	78	87.3
ENER-G 850 250NOx L33	855	MTU	AoE 8V4000L33	Turbocharged	880	462	469	931	2053	2271	78	87.0
ENER-G 850 500NOx L33	855	MTU	AoE 8V4000L33	Turbocharged	880	443	448	891	1993	2204	78	87.6
ENER-G 1010 250NOx L64	1013	MTU	8V4000L64	Turbocharged	1040	505	504	1009	2396	2650	78	84.4
ENER-G 1010 500NOx L64	1010	-	8V4000L64	-	TBC	TBC	TBC	TBC	TBC	TBC	78	TBC
ENER-G 1150C	1154	Caterpillar	G3516B LE	Turbocharged	1208	586	842	1428	2966	3280	80	87.0
ENER-G 1165 250NOx L33	1169	MTU	AoE 12V4000L33	Turbocharged	1200	622	652	1274	2795	3091	78	87.4
ENER-G 1165 500NOx L33	1169	MTU	AoE 12V4000L33	Turbocharged	1200	600	628	1228	2731	3020	78	87.8
ENER-G 1280 250NOx L33	1286	MTU	AoE 12V4000L33	Turbocharged	1320	690	687	1377	3054	3378	78	87.2
ENER-G 1280 500NOx L33	1286	MTU	AoE 12V4000L33	Turbocharged	1320	664	659	1323	2974	3289	78	87.7
ENER-G 1520 250NOx L64	1522	MTU	AoE 12V4000L64	Turbocharged	1560	743	713	1456	3551	3927	78	83.9
ENER-G 1520 500NOx L64	1522	MTU	AoE 12V4000L64	Turbocharged	1560	712	691	1403	3438	3802	78	85.1
ENER-G 1560 250NOx L33	1562	MTU	AoE 16V4000L33	Turbocharged	1600	884	844	1728	3723	4118	78	88.4
ENER-G 1560 500NOx L33	1562	MTU	AoE 16V4000L33	Turbocharged	1600	885	777	1662	3649	4036	78	88.3
ENER-G 1600C	1600	Caterpillar	G3516E	Turbocharged	1658	-	TBC	TBC	TBC	TBC	80	TBC
ENER-G 1710 250NOx L33	1717	MTU	AoE 16V4000L33	Turbocharged	1760	1047	863	1910	4100	4535	77	88.5
ENER-G 1710 500NOx L33	1717	MTU	AoE 16V4000L33	Turbocharged	1760	1005	821	1826	3991	4414	78	88.8
ENER-G 1950 250NOx L33	1948	MTU	AoE 20V4000L33	Turbocharged	2000	1096	1063	2159	4677	5173	78	87.8
ENER-G 1950 500NOx L33	1948	MTU	AoE 20V4000L33	Turbocharged	2000	1050	1017	2067	4560	5043	78	88.1
ENER-G 2000C	2000	Caterpillar	G3520E	Turbocharged	2070	1017	1033	2050	4761	5266	80	85.1
ENER-G 2020 250NOx L64	2026	MTU	AoE 16V4000L64	Turbocharged	2080	1010	969	1979	4748	5251	N/A	84.4
ENER-G 2150 250NOx L33	2145	MTU	AoE 20V4000L33	Turbocharged	2200	1213	1122	2335	5121	5664	78	87.5
ENER-G 2150 500NOx L33	2145	MTU	AoE 20V4000L33	Turbocharged	2200	1161	1078	2239	4990	5519	78	87.9
ENER-G 2535 250NOx L64	2533	MTU	AoE 20V4000L64	Turbocharged	2600	1275	1220	2495	5965	6597	78	84.3
ENER-G 2535 500NOx L64	2531	MTU	AoE 20V4000L64	Turbocharged	2600	1186	1212	2398	5751	6361	78	85.7

NB: Output figures are based on operation at ISO 3046 conditions with the exception of exhaust output, which is quoted to 120°C, figures are stated from manufacturer's declared performance figures subject to the manufacturer's tolerances and subject to change without notice. Output figures may vary under different operating regimes and site-specific characteristics. As such figures are shown for guidance only. Units built for 400V, 50Hz, 3 Phase operation. Overall unit efficiencies are based on the net fuel input (LHV) and generator efficiency at 1.0 power factor. Values for de-rated units are estimates only. Generator efficiencies are taken from the manufacturer's graph at 0.95 power factor, electrical outputs are based on these efficiencies. Please refer to ENER-G for performance at other return operating temperatures.

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