

# CHP - Natural gas and Biogas Specifications

**TEDOM** Shenton Group range of CHP engines,  
The sole UK distributor for Tedom

CHP Engine	Elec output	Heat output	Fuel Input (Net)	Fuel Input (Gross)	Gas consumption	Elec Efficiency (Net)	Elec Efficiency (Gross)	Heat Efficiency (Net)	Heat Efficiency (Gross)	Nitrous Oxide (Nox) at 5% O <sub>2</sub>
	kWe	kWt	kW	kW	m <sup>3</sup> /hour	100%	100%	100%	100%	mg/Nm <sup>3</sup>
Micro 7 AP	6.5	16	24.1	26.70	2.55	27	24.34	66.3	59.92	250
Micro 20 AP	20	42	65.5	72.57	6.9	30.5	27.56	64.1	57.87	50
Micro 22 SP	22	45.2	70.5	78.11	7.5	31.2	28.16	64.1	57.86	50
Micro 25 SP	25	49.5	78.1	86.53	8.3	32.0	28.89	63.3	57.20	50
Micro 30 AP	30	59.4	93.8	103.93	9.9	32.0	28.87	63.3	57.15	50
Micro 33 SP	33	63.7	104.7	116.01	11.1	32.5	29.34	62.8	56.64	50
Micro 50 SP	50	88.5	146	161.77	15.5	34.2	30.91	60.6	54.71	50
Cento 70 ST	70	109	204	226.03	21.6	34.3	30.97	53.4	48.22	50
Cento 80 ST	85	141	252	279.22	26.7	33.7	30.44	56.0	50.50	50
Cento 80	81	120	231	255.95	24.4	35.1	31.65	51.9	46.88	500
Cento 100 ST	104	166	300	332.40	31.7	34.7	31.29	55.3	49.94	50
Cento 100	104	142	282	312.46	29.8	36.9	33.28	50.4	45.45	500
Cento 120 ST	124	182	357	395.56	37.8	36.6	33.01	53.7	48.45	50
Cento 120	125	177	343	380.04	36.3	36.4	32.89	51.6	46.57	500
Cento 130 ST	133	191	352	390.02	37	37.8	34.10	54.2	48.97	50
Cento 160	164	209	424	469.79	45.9	37.8	34.10	48.2	43.46	500
Cento 180	184	218	469	519.65	49.7	39.2	35.41	46.5	41.95	500
Cento 200	200	237	510	565.08	54	39.2	35.39	46.5	41.94	500
Cento 210	210	248	529	586.13	56	39.7	35.83	46.8	42.31	500
Cento 260 ST	260	371	688	762.30	72.9	37.8	34.16	54.0	48.74	50
Cento 350	355	425	887	982.80	93.3	40.0	36.12	47.9	43.24	500
Cento 430	430	577	1160	1285.28	123	37.0	33.46	49.7	44.89	250
Cento 530	528	627	1344	1489.15	142	39.3	35.46	46.7	42.10	250
Quanto 600	600	644	1418	1571.14	152	42.3	38.19	45.4	40.99	250
Quanto 800	800	856	1882	2085.26	201	42.5	38.36	45.5	41.05	250
Quanto 1000	999	1102	1102	1221.02	246	42.0	37.90	46.3	41.81	250
Quanto 1200	1200	1245	2815	3119.02	291	44.2	39.87	42.2	38.12	250
Quanto 1600	1560	1650	3696	4095.17	381	44.6	40.29	42.6	38.48	250
Quanto 2000	2000	2001	4613	5111.20	485	43.4	39.15	38.7	38.68	250
Micro 30 LB	25	47.5	79.1	87.64	12.3	31.6	28.52	60.0	54.20	500
Cento 80	83	121	237	262.60	36.5	35.0	31.61	50.9	46.08	500
Cento 100	106	143	291	322.43	44.7	36.4	32.88	49.2	44.35	500
Cento 120	124	165	336	372.29	51.7	36.9	33.31	49.2	44.32	500
Cento 160	166	206	439	486.41	67.5	37.8	34.13	46.9	42.35	500
Cento 180	182	211	465	515.22	71.5	39.1	35.32	45.3	40.95	500
Cento 200	200	230	510	565.08	78.4	39.2	35.39	45.2	40.70	500
Cento 210	210	222	519	575.05	80	40.4	36.52	42.8	38.61	500
Cento 350	355	397	885	980.58	147	40.1	36.20	44.9	40.49	500
Cento 430	430	497	1087	1204.40	181	39.5	35.70	45.7	41.27	500
Cento 530	528	577	1315	1457.02	219	40.2	36.24	43.9	39.60	500
Quanto 600	600	600	1400	1551.2	215	42.9	38.68	42.9	38.68	500
Quanto 800	800	792	1856	2056.45	286	43.1	38.90	42.7	38.51	500
Quanto 1000	999	1037	2345	2598.26	361	42.6	38.45	44.2	39.91	500
Quanto 1200	1200	1195	2790	3091.32	429	43	38.82	42.8	38.66	500
Quanto 1600	1560	1577	3654	4048.63	562	42.7	38.53	43.2	38.95	500
Quanto 2000	2000	2015	4651	5153.31	716	43	38.81	43.3	39.10	500

Standard Noise Rating (dBA) (Based on Indoor Canopy)			Dimensions (mm) L x W x H			Flange Connection Sizes			Buffer Vessel Size @ 1 hour
Enclosure	Ventilation	Exhaust	Open Unit	Indoor Canopy	Containerised	F&R	Gas	Exhaust	Litres
58	N/A	55	N/A	1315 x 1350 x 1480	N/A	1" BSP	½" BSP	1" BSP	700
60	N/A	57	N/A	1680 x 1500 x 1780	N/A	1¼" BSP	¾" BSP	D50	2000
60	N/A	57	N/A	1680 x 1500 x 1780	N/A	1¼" BSP	¾" BSP	D50	2000
60	N/A	57	N/A	1680 x 1500 x 1780	N/A	1¼" BSP	¾" BSP	D50	2000
60	N/A	57	N/A	1680 x 1500 x 1780	N/A	1¼" BSP	¾" BSP	D50	2500
62	N/A	60	N/A	1680 x 1500 x 1780	N/A	1¼" BSP	¾" BSP	D50	3000
65	N/A	62	N/A	2400 x 1780 x 1730	N/A	DN40 PN6	¾" BSP	DN65	4000
67	78	85	N/A	3650 x 1100 x 1900	N/A	DN40 PN16	¾" BSP	DN80 PN16	5000
76	83	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN50 PN16	DN100 PN16	6000
76	83	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN50 PN16	DN100 PN16	5000
76	84	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN50 PN16	DN100 PN16	7000
76	84	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN50 PN16	DN100 PN16	6000
77	84	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN50 PN16	DN100 PN16	8500
77	84	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN50 PN16	DN100 PN16	7500
77	86	65	4100 x 1280 x 2285	4450 x 1250 x 2205	5300 x 3550 x 6200	DN50 PN6	DN50 PN16	DN125 PN16	8000
77	86	65	3750 x 1250 x 2300	4395 x 1250 x 2225	5550 x 3000 x 6500	DN50 PN6	DN50 PN16	DN125 PN16	9000
78	88	65	3750 x 1250 x 2300	4395 x 1250 x 2225	5550 x 3000 x 6500	DN50 PN6	DN50 PN16	DN125 PN16	9500
78	89	65	3750 x 1250 x 2300	4395 x 1250 x 2225	5550 x 3000 x 6500	DN50 PN6	DN50 PN16	DN125 PN16	10000
78	89	65	4090 x 1280 x 2225	3535 x 1250 x 2155	5550 x 3000 x 6500	DN50 PN6	DN50 PN16	DN125 PN6	10500
76	92	65	4800 x 1700 x 2200	4950 x 1800 x 2350	6400 x 4500 x 6500	DN65 PN6	DN80 PN16	DN200 PN16	16000
76	92	65	4800 x 1700 x 2200	4950 x 1800 x 2350	6400 x 4500 x 6500	DN65 PN6	DN80 PN16	DN200 PN16	18500
78	94	65	4800 x 1750 x 2200	4950 x 1800 x 2350	6400 x 4500 x 6500	DN65 PN6	DN80 PN16	DN200 PN16	25000
78	94	65	4800 x 1750 x 2200	4950 x 1800 x 2350	6400 x 4500 x 6500	DN65 PN6	DN80 PN16	DN200 PN16	27000
79	80	80	5990 x 4456 x 2124★	6250 x 2500 x 3300★★	13000 x 3000 x 8000	DN80	DN50	DN300	28500
80	80	80	6437 x 4910 x 2169★	7200 x 2500 x 3300★★	13500 x 3000 x 8000	DN100	DN65	DN350	37000
80	80	80	8200 x 5436 x 2535★	7000 x 2500 x 4010★★	13500 x 6000 x 10000	DN100	DN65	DN400	45000
80	80	80	8200 x 5436 x 2535★	7000 x 2500 x 4010★★	13500 x 6000 x 10000	DN100	DN65	DN400	50000
84	80	80	8570 x 5436 x 2610★	8100 x 2650 x 4010★★	14800 x 6200 x 10000	DN125	DN65	DN500	70000
86	80	80	11010 x 6000 x 2530★	10000 x 2400 x 4250★★	20000 x 5500 x 10000	DN100	DN80	DN400	85000
60	N/A	57	N/A	1662 x 1492 x 1771	N/A	1¼" BSP	1" BSP	D50	2000
76	83	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN80 PN16	DN100 PN16	5000
76	84	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN80 PN16	DN100 PN16	6000
77	84	65	3140 x 1105 x 2090	3840 x 1050 x 2100	5400 x 2500 x 6800	DN50 PN6	DN80 PN16	DN100 PN16	7500
77	86	65	3750 x 1250 x 2300	4395 x 1250 x 2225	5550 x 3000 x 6500	DN50 PN6	DN80 PN16	DN125 PN16	9500
78	88	65	3750 x 1250 x 2300	4395 x 1250 x 2225	5550 x 3000 x 6500	DN50 PN6	DN80 PN16	DN125 PN16	9500
78	89	65	3750 x 1250 x 2300	4395 x 1250 x 2225	5550 x 3000 x 6500	DN50 PN6	DN80 PN16	DN125 PN16	10000
78	89	65	4090 x 1280 x 2225	3535 x 1250 x 2155	5550 x 3000 x 6500	DN50 PN6	DN80 PN16	DN125 PN6	9500
76	92	65	4800 x 1700 x 2200	4950 x 1800 x 2350	6400 x 4500 x 6500	DN65 PN6	DN80 PN16	DN200 PN16	17000
78	94	65	4800 x 1750 x 2200	4950 x 1800 x 2350	6400 x 4500 x 6500	DN65 PN6	DN80 PN16	DN200 PN16	22000
78	94	65	4800 x 1750 x 2200★	4950 x 1800 x 2350	6400 x 4500 x 6500	DN65 PN6	DN80 PN16	DN200 PN16	25000
79	80	80	5990 x 4456 x 2124★	6250 x 2500 x 3300★★	13000 x 3000 x 8000	DN80	DN50	DN300	25000
80	80	80	6437 x 4910 x 2169★	7200 x 2500 x 3300★★	13500 x 3000 x 8000	DN100	DN65	DN350	34000
80	80	80	8200 x 5436 x 2535★	7000 x 2500 x 4010★★	13500 x 6000 x 10000	DN100	DN65	DN400	45000
80	80	80	8200 x 5436 x 2535★	7000 x 2500 x 4010★★	13500 x 6000 x 10000	DN100	DN65	DN400	50000
84	80	80	8570 x 5436 x 2610★	8100 x 2650 x 4010★★	14800 x 6200 x 10000	DN125	DN65	DN500	70000
86	80	80	11010 x 6000 x 2530★	10000 x 2400 x 4250★★	20000 x 5500 x 10000	DN100	DN80	DN400	90000

■ Natural Gas ■ Biogas

**DATA IS SUBJECT TO CHANGE**

Updated 18/09/20

- ★ Open Unit - Allow extra space for 5no switchboards.
- ★★ Indoor Canopy - Allow extra space for exhaust gas heat exchanger module and 5no switchboards
- Technical data based on operating conditions of 100kPa air pressure, 25°C air temperature and at 30% relative humidity
- Gas consumption based on standard conditions of 15°C, 101.325kPa
- Calorific value of gas used in fuel input/consumption figures is 34MJ/m<sup>3</sup>
- Conversion factor used to calculate from Net to Gross is 1.108