





## Compact CHP units driven by propane gas

CHP unit type	Specification engine producer MAN, engine type	Power data			Efficiency rates			power to heat ratio <sup>2)</sup>	primary energy factor (acc. to DIN V 18599-1)	Servicing		Dimensions			operating weight [kg]	noise level [dB(A) in 1m]
		electrical [kW] <sup>1)</sup>	thermal [kW]	gas input [kW H]	electrical [%]	thermal [%]	total [%]			servicing interval [hours of operation]	general overhaul after ca. [h]	length [mm] (base pan)	width [mm]	height [mm]		
 <b>50 kW class</b>																
GG 50 VR P <sup>3)</sup>	E0834 E302	34	66	113	30,1	58,4	88,5	0,50	0,483	1.500	60.000	2.200	900	1.830	1.950	62
		34	75	113	30,1	66,4	96,5	0,44	0,425							
GG 50 6VRS P <sup>4)</sup>	E0836 E302	48	88	155	31,0	56,8	87,8	0,52	0,474	2.000	60.000	2.500	900	1.830	2.330	61
		48	101	155	31,0	65,2	96,2	0,46	0,413							
GG 70 VRS P <sup>4)</sup>	E0836 E302	48	88	155	31,0	56,8	87,8	0,52	0,474	1.500	60.000	2.500	900	1.830	2.460	63
		48	101	155	31,0	65,2	96,2	0,46	0,413							
 <b>100 kW class</b>																
GG 140 P	E2876 E312	98	188	316	31,0	59,5	90,5	0,51	0,434	1.500	50.000	2.900	900	2.000	3.280	69
 <b>200 kW class</b>																
GG 180 P <sup>5)</sup>	E2876 LE302	143	228	423	33,8	53,9	87,7	0,60	0,371	1.500	50.000	3.600	1.500	2.340	6.750	74
GG 260 P	E3262 E302	185	315	552	33,5	57,1	90,6	0,57	0,345	1.500	50.000	3.600	1.500	2.340	6.750	74
 <b>500 kW class</b>																
GG 530 P <sup>5)</sup>	E3262 LE202	242	366	676	35,8	54,1	89,9	0,63	0,264	1.000	50.000	4.000	1.500	2.600	7.290	74

1) Value given as electric gross power at the connector block of the alternator.

2) Calculated with net electrical power.

3) Variable heating water pump and return increase integrated ready for operation. 2nd row: incl. external condensing heat recovery, values for 30 °C return temperature.

4) Variable heating water pump and return increase integrated ready for operation, system separation heating water. 2nd row: internal condensing heat recovery, values for 30 °C return temperature.

5) Power values apply to 40 °C mixture cooler return temperature. Heating power values include the mixture intercooler heat.

**For sufficient detonation resistance, a minimum methane number MZ ≥ 34 must be guaranteed, i.e. the propane content in the petroleum gas must be more than 98 %!**

Scope of delivery: CHP unit consisting of gas engine and alternator, connected by an elastic coupling and a rigid flange, cooling water and exhaust heat exchanger, cooling water pump, safety gas regulation unit, oil supply tank, oil refilling unit with level monitoring etc. with complete internal pipework, for operation in heating water systems at 90/70 °C flow/return temperatures (special equipment at 95/80 °C e.g. for operation with absorption chiller on request), mounted ready for installation in a sound-absorbing canopy. Integrated switchgear cabinet with control and power section for fully automatic operation including mains monitoring with protection devices according to German guideline VDE AR-N 4105:2018 (< 100 kWel.) resp. AR-N 4110:2018 (≥ 100 kWel.), fully wired. Pollutant reduction by catalyst and lambda-regulation according to the German BImSchG § 22, optional version for 44. BImSchV. Filled with lubricating oil and anticorrosive. Test run followed by first servicing is performed in factory prior to delivery. For further details see technical descriptions.

All specifications are standard values and subject to change.

Versions for natural gas application (also bivalent) on demand. Also see separate delivery chart for CHP units driven by sewage gas or biogas.