



Configuration and Quotation on Biogas Generator Sets, Man Engines & Leroy Somer Alternators, 400/230V, 50Hz, 3P4W)

ISO standard power		64	105	124	210	210	250	400	494	520	
Spec.	Model	MM64B	MM105B	MM124B	MM210B	MM210B	MM250B	MM400B	MM494B	MM520B	
	COP Power	kVA/kW	80/64	131/105	155/124	263/210	263/210	313/250	500/400	618/494	650/520
	frequency	Hz	50	50	50	50	50	50	50	50	50
	rated voltage	V	400	400	400	400	400	400	400	400	400
	rated current	A	115.5	189.4	223.7	378.9	378.9	451.1	721.7	891.3	938.2
power factor	COSΦ	0.8-1.0	0.8-1.0	0.8-1.0	0.8-1.0	0.8-1.0	0.8-1.0	0.8-1.0	0.8-1.0	0.8-1.0	
Engine	Secure Supplies										
	model	—	E0834 LE302	E0836 LE202	E2876 TE302	E2876 LE202	E2676 LE212	E2848 LE322	E2842 LE202	E3262 LE212	E3262 LE202
	displacement	L	4.6	6.9	12.8	12.8	12.4	14.6	21.9	25.8	25.8
	speed	RPM	1500	1500	1500	1500	1500	1500	1500	1500	1500
	compression ratio	—	11:1	11:1	12:1	11:1	12:1	12:1	12:1	14:1	14:1
	bore*stroke	mm*mm	108*125	108*125	128*166	128*166	126*166	128*142	128*142	132*157	132*157
	cooling method	—	water cooled	water cooled	water cooled	water cooled	water cooled	water cooled	water cooled	water cooled	water cooled
	oil cooler	—	with	with	with	with	with	with	with	with	with
	mixer	—	Motortech series 200-100							TBD	TBD
	ignition system	—	Motortech	Motortech	Motortech	Motortech	Motortech	Motortech	Motortech	Motortech	Motortech
	speed governor	—	Motortech	Motortech	Motortech	Motortech	Motortech	Motortech	Motortech	Motortech	Motortech
Gas Train	biogas filter	—	DUNGS, Germany								
	Solenoid Valva	—	DUNGS, Germany, 24V								
	zero-pres. regulator	—	DUNGS, Germany								
Alternator	brand	—	Leroy Somer	Leroy Somer	Leroy Somer	Leroy Somer	Leroy Somer	Leroy Somer	Leroy Somer	Leroy Somer	
	model	—	LSA 43.2 L8	LSA 44.2 S75	LSA 44.2 L12	LSA 46.2 L9	LSA 46.2 L9	LSA 46.2 VL12	LSA 47.2 M7	LSA 49.1 S4A	LSA 49.1 S4
	phase	—	3 phases, 4 wires	3 phases, 4 wires	3 phases, 4 wires	3 phases, 4 wires	3 phases, 4 wires	3 phases, 4 wires	3 phases, 4 wires	3 phases, 4 wires	3 phases, 4 wires
	connecting method	—	SAE standard	SAE standard	SAE standard	SAE standard	SAE standard	SAE standard	SAE standard	SAE standard	SAE standard
	way of excitation	—	brushless, self-excitation	brushless, self-excitation	brushless, self-excitation	brushless, self-excitation	brushless, self-excitation	brushless, self-excitation	brushless, self-excitation	brushless, self-excitation	brushless, self-excitation
	insulation grade	—	H level	H level	H level	H level	H level	H level	H level	H level	H level
Generator Set	control cabinet	—	9902	9902	9902	9902	9902	9902	9902	9902	9902
	controllor type	—	DSE 7320	DSE 7320	DSE 7320	DSE 7320	DSE 7320	DSE 7320	DSE 7320	DSE 7320	DSE 7320
	display	—	LCD	LCD	LCD	LCD	LCD	LCD	LCD	LCD	LCD
	fuel	—	biogas	biogas	biogas	biogas	biogas	biogas	biogas	biogas	biogas
	gas inlet pressure	kPa	2-10kPa	2-10kPa	2-10kPa	2-10kPa	2-10kPa	2-10kPa	2-10kPa	2-10kPa	2-10kPa
	dimension (open type)	mm*mm*mm	2280*1170*1540	3090*1170*1550	3450*1200*1740	3650*1250*1850	3650*1250*1850	4050*1500*2320	4050*1500*2320	4250*1650*2450	4250*1650*2450
	net weight (open type)	kg	3000	3250	3450	4850	4850	4850	4850	4900	4900
	soundproof enclosure	—	optional	optional	optional	optional	optional	optional	optional	optional	optional
	protection level	—	IP23	IP23	IP23	IP23	IP23	IP23	IP23	IP23	IP23
	warranty period	hrs.	8000	8000	8000	8000	8000	8000	8000	8000	8000
	biogas consumption	m3/kW.h	0.46	0.41	0.44	0.41	0.4	0.41	0.42	0.4	0.41
Genset Electrical Efficiency	%	38.3	40.5	38	40.4	42.2	40.2	40	41.9	41	
Genset Thermal Efficiency	%	52	49.6	52.8	44.7	44.1	49.6	50.2	47	48.1	
Genset Total Efficiency	%	90.2	90.1	90.8	85.1	86.3	89.8	90.2	88.9	89.1	
FOB Price	US\$	\$63,377.00	\$81,596.00	\$98,299.00	\$132,550.00	\$134,550.00	\$145,420.00	\$220,353.00	\$241,350.00	\$245,650.00	
with heat recovery system (heat recovery from jacket water and exhaust gas)	add	\$7,520.00	\$9,250.00	\$11,230.00	\$20,800.00	\$20,800.00	\$24,100.00	\$ 29,500	\$33,250	\$33,250	
with soundproof enclosure(67dB(A)@7m)	add	\$4,250.00	\$5,250.00	\$6,942.00	\$10,850.00	\$10,850.00	\$11,500.00	\$14,000.00	\$ 19,550 (20ft container)	\$ 19,550 (20ft container)	
Grid Synch.Control Cabinet (with DSE controller 8620)	add	\$8,950.00	\$9,750.00	\$10,250.00	\$10,850.00	\$10,850.00	\$11,500.00	\$13,500.00	\$15,500.00	\$15,500.00	
Remote Radiator for CHP	add	\$3,322.00	\$3,903.00	\$5,065.00	\$6,806.00	\$6,806.00	\$7,775.00	\$8,935.00	\$11,315.00	\$11,315.00	

FOB Price / Silent CHP with Grid		\$73,419.00	\$95,749.00	\$117,786.00	\$181,856.00	\$183,856.00	\$200,295.00	\$256,788.00	\$296,965.00	\$301,265.00
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Notes:1.The above price is based on 0.8PF, 60Hz, 3P4W, 480V/277V, other voltage grade or single-phase alternator is available on request.

2. The above price is based on open type.

3. Discount is available according to gensets' model and quantity. 3% off for a 20ft container and 5% for a 40ft container.

4. Price of other brand of alternator (Stamford, Marathon, or etc) or controller (ComAp) is available on request.

5. Additional price for parallel control system system and maintenance-free storage battery is available on request.

6. Validity of the quotation; will be advised on your purchase order request to danieldonatelli1@gmail.com

7. Explanation to the MODEL: -(1) The Model #: the 1st M: MiracleGen, the 2nd M: MAN, Y: Y Serial Gas Engine, C: Cummins Gas Engine (2) COP: Continuous Power Rating (24-7-365) (3) N/A: Naturally Aspirated

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