



Specifications Biogas / Sewage gas CHP FMB-95-BSM / KSM

Issue: 02.2009 data sheet

Engine specifications

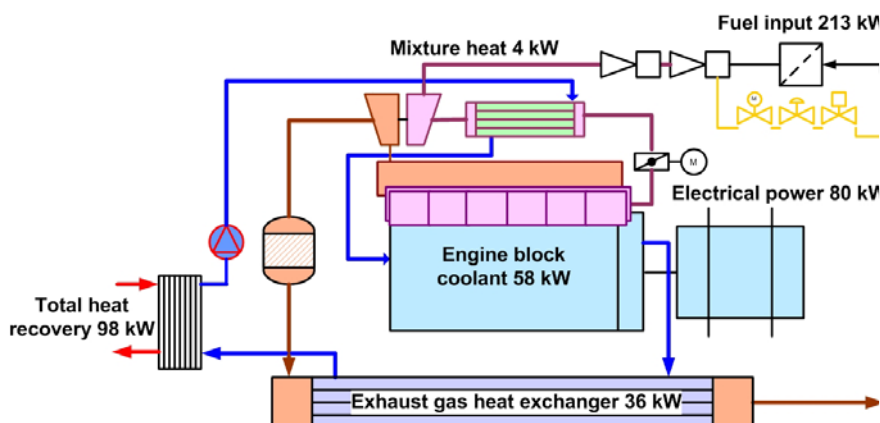
Manufacturer		MAN
Type		E0836 LE202
Speed	min ⁻¹	1500
Displacement	Liter	6,9
Number of cylinders		6 / in line
Intake	Leanburn engine turbocharged and internal mixture cooling	
Generator	400V~ / 50Hz / synchronous	

Performance data

		100 %	75 %	50 %
Electrical power) ¹	kW	80	60	40
Total heat recovery	+/- 8% kW	98	82	61
-Exhaust gas heat) ²	+/- 8% kW	36	30	21
-Coolant heat	+/- 8% kW	58	51	39
-Mixture heat	+/- 8% kW	4	1	0
Fuel input	+/- 5% kW	213	169	119
Consumption biogas (Hu 5,48)	+/- 5% Nm ³ / h	38,6	30,8	21,8
Electrical efficiency	%	37,8	35,6	33,5
Thermal efficiency	%	46,3	48,8	50,8
Total efficiency	%	84,1	84,4	84,3

System parameters

Flow temperature	max. °C		90
Return temperature	max. °C		70
Gas connection	DN / PN		On request
Heating water connection	DN / PN	2x	50 / 16
Exhaust gas connection	DN / PN		100 / 6
Air requirement combustion+ventilation	Nm ³ / h		4.700
Noise level with housing	1m distance		70 dB(A)
Main dimensions	L x W x H [m]	3,6 x 1,05 x 2,05	
Weight, dry (approx.)	kg		3.200
Gas composition	separate data sheet		



)¹ at 50 Hz, U=0,4 KV, pf=1)² at exhaust gas temperature 180 °C
 NOx < 500 mg/Nm³ / CO < 650 mg/Nm³
 Reference conditions: Combustion air/ ambient temperature <27 °C; Altitude at site <300 m