



Specifications Biogas / Sewage gas CHP FMB-130-BSM / KSM

Issue: 08_2009_001 data sheet

Engine specifications

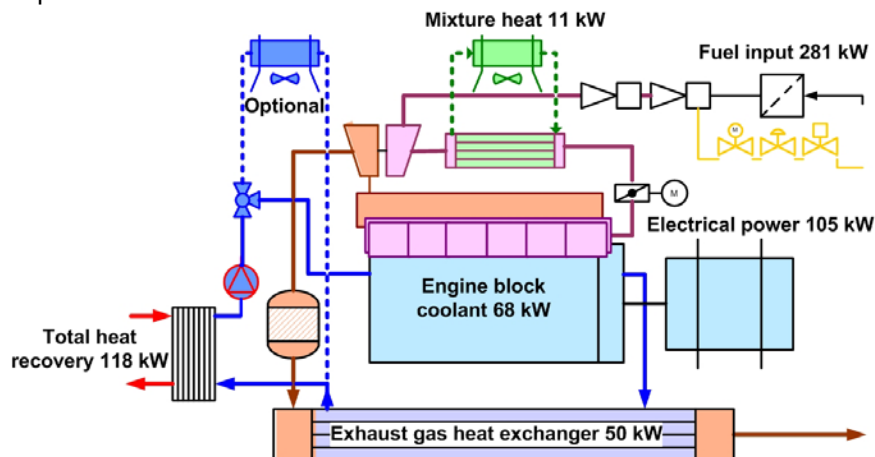
Manufacturer			MAN
Type			E0836-LE202
Speed	min ⁻¹	1500	
Displacement	Liter	6,9	
Number of cylinders			6 / in line
Intake	Leanburn engine turbocharged and external mixture cooling		
Generator	400V~ / 50Hz / synchronous		

Performance data

		100 %	75 %	50 %
Electrical power) ¹	kW	105	79	53
Total heat recovery	+/- 8% kW	118	98	70
-Exhaust gas heat) ²	+/- 8% kW	50	41	28
-Coolant heat	+/- 8% kW	68	58	41
-Mixture heat	+/- 8% kW	11	7	5
Fuel input	+/- 5% kW	281	223	156
Consumption biogas (Hu 5,48)	+/- 5% Nm ³ / h	51,2	40,7	28,4
Electrical efficiency	%	37,4	35,3	33,7
Thermal efficiency	%	41,9	44,1	44,7
Total efficiency	%	79,3	79,4	78,4

System parameters

Flow temperature	max. °C			90
Return temperature	max. °C			70
Gas connection	DN / PN			50 / 16
Heating water connection	DN / PN		2x	65 / 16
Exhaust gas connection	DN / PN			125 / 6
Mixture cooling connection	DN / PN		2x	40 / 16
Air requirement combustion + ventilation	Nm ³ / h			4.226
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