



Specifications Biogas / Sewage gas CHP FMB-43-BSM / KSM

Issue: 02.2009 data sheet

Engine specifications

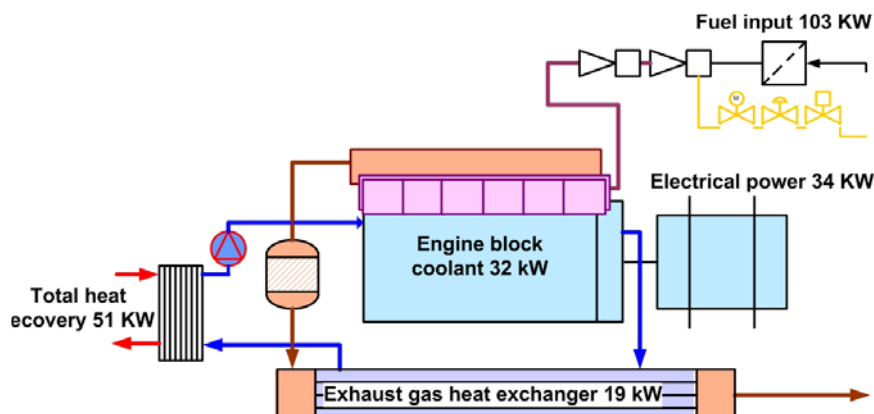
Manufacturer			MAN
Type			E0834-LE312
Speed	min ⁻¹		1500
Displacement	Liter		4,6
Number of cylinders			4 / in line
Intake	Naturally aspirated, lean burn gas engine		
Generator	400V~ / 50Hz / synchronous		

Performance data

		100 %	75 %	50 %
Electrical power) ¹	kW	34	26	17
Total heat recovery	+/- 8% kW	51	39	30
-Exhaust gas heat) ²	+/- 8% kW	19	13	10
-Coolant heat	+/- 8% kW	32	25	20
-Mixture heat	+/- 8% kW	-	-	-
Fuel input	+/- 5% kW	103	78	59
Consumption biogas (Hu 5,48)	+/- 5% Nm ³ / h	18,9	14,3	10,7
Electrical efficiency	%	32,9	32,6	29,0
Thermal efficiency	%	49,4	49,3	50,7
Total efficiency	%	82,3	81,9	79,7

System parameters

Flow temperature	max. °C		90
Return temperature	max. °C		70
Gas connection	DN / PN		1 ¼ "
Heating water connection	DN / PN		2x 40 / 6
Exhaust gas connection	DN / PN		65 / 6
Air requirement combustion + ventilation	Nm ³ / h		2.054
Noise level with housing	1m distance		70 dB(A)
Main dimensions	L x W x H [m]	2,8 x 0,85 x 1,5	
Weight, dry (approx.)	kg		2.200
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