



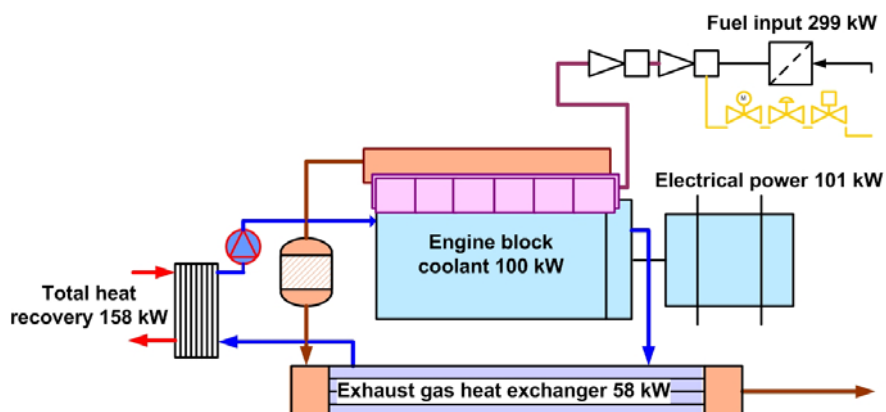
**Specifications** **Biogas / Sewage gas CHP** **FMB-125-BSM / KSM**

Issue: 02.2009 data sheet

Engine specifications		
Manufacturer		SCHMITT ENERTEC
Type		SE-MB 1508KNA
Speed	min <sup>-1</sup>	1500
Displacement	Liter	15,1
Number of cylinders		8 / V
Intake		Naturally aspirated, lean burn gas engine
Generator		400V~ / 50Hz / synchronous

Performance data		100 %	75 %	50 %
Electrical power ) <sup>1</sup>	kW	101	76	51
Total heat recovery	+/- 8% kW	158	137	109
-Exhaust gas heat ) <sup>2</sup>	+/- 8% kW	58	47	32
-Coolant heat	+/- 8% kW	100	89	77
Fuel input	+/- 5% kW	299	248	188
Consumption biogas (Hu 5,48)	+/- 5% Nm <sup>3</sup> / h	54,4	45,1	34,2
Electrical efficiency	%	33,8	30,6	27,1
Thermal efficiency	%	53,0	55,0	57,9
Total efficiency	%	86,8	85,6	85,0

System parameters		
Flow temperature	max. °C	90
Return temperature	max. °C	70
Gas connection	DN / PN	50 / 16
Heating water connection	DN / PN	65 / 16
Exhaust gas connection	DN / (PN	125 / 6
Air requirement combustion + ventilation	Nm <sup>3</sup> / h	3.779
Noise level with housing	1m distance	70 dB(A)
Main dimensions	L x W x H [m]	3,6 x 1,25 x 2,05
Weight, dry (approx.)	kg	3.400
Gas composition	separate data sheet	



)<sup>1</sup> at 50 Hz, U=0,4 KV, cos phi = 1 )<sup>2</sup> at exhaust gas temperature 180 °C

NOx < 500 mg/Nm<sup>3</sup> / CO < 650 mg/Nm<sup>3</sup>

Reference conditions: Combustion air / ambient temperature <27 °C; Altitude at site <300 m