



## Specifications Biogas / Sewage gas CHP FMB-285-BSM / KSM

Issue: 08\_2009\_001 data sheet

### Engine specifications

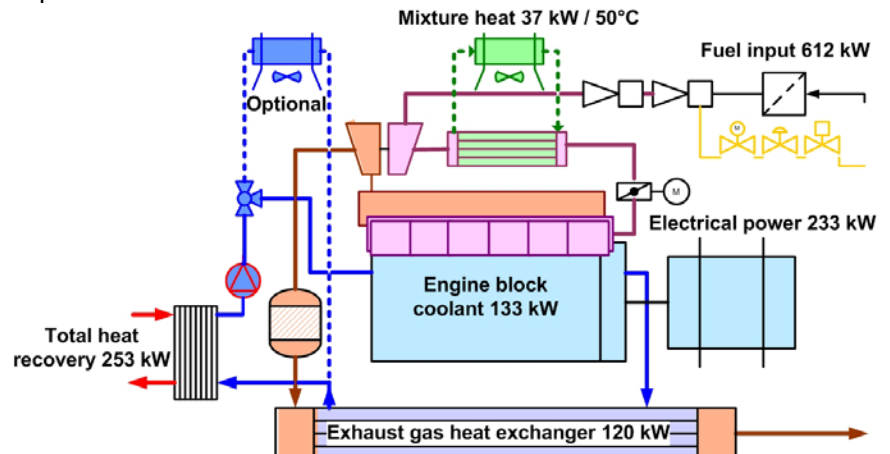
Manufacturer	SCHMITT ENERTEC		
Type	SE-MB-1508-KTA50		
Speed	min <sup>-1</sup>	1500	
Displacement	Liter	15,08	
Number of cylinders	8 / V		
Intake	Leanburn engine turbocharged and external mixture cooling		
Generator	400V~ / 50Hz / synchronous		

### Performance data

		100 %	75 %	50 %
Electrical power ) <sup>1</sup>	kW	233	175	117
Total heat recovery	+/- 8% kW	253	209	154
-Exhaust gas heat ) <sup>2</sup>	+/- 8% kW	120	93	69
-Coolant heat	+/- 8% kW	133	116	85
-Mixture heat	+/- 8% kW	37	25	15
Fuel input	+/- 5% kW	612	478	336
Consumption biogas (Hu 5,48)	+/- 5% Nm <sup>3</sup> / h	111	86,9	61,1
Electrical efficiency	%	38,1	36,6	34,8
Thermal efficiency	%	41,3	43,8	45,9
Total efficiency	%	79,4	80,4	80,7

### 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	150 / 6	
Mixture cooling connection	DN / PN	2x	40 / 16
Air requirement combustion + ventilation	Nm <sup>3</sup> / h	8.520	
Noise level with housing	1m distance	70 dB(A)	
Main dimensions	L x W x H [m]	3,6 x 1,45 x 2,45	
Weight, dry (approx.)	kg	4.300	
Gas composition	separate data sheet		



)<sup>1</sup> at 50 Hz, U=0,4 KV, pf=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