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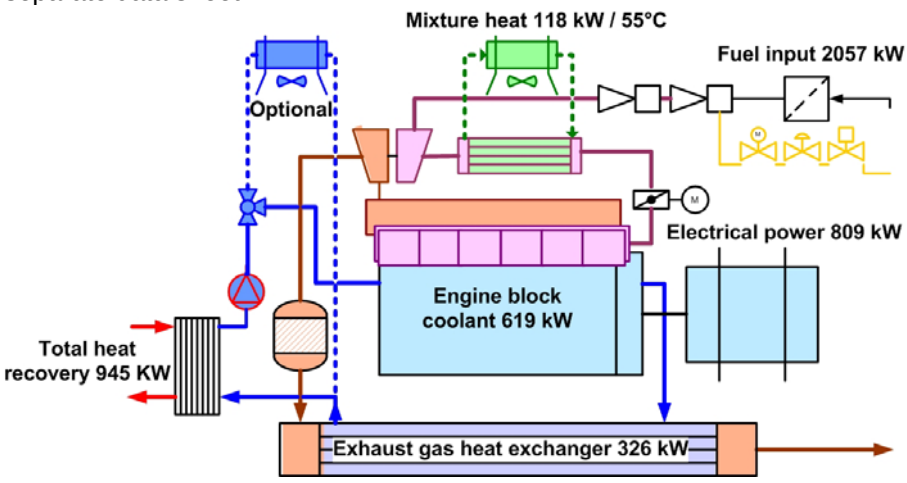
Specifications — Natural gas CHP — FMB-1000-GSMK

Issue: 06.2010_001 data sheet

Engine specification				
Manufacturer				SCHMITT ENERTEC
Type				SFGLD 480/55
Speed		min^{-1}		1500
Displacement		Liter		47,9
Number of cylinders				16 / V
Aspiration		Lean burn engine turbo charged and external mixture cooling		
Generator				400V ~ / 50Hz / synchronous

Performance data		100 %	75 %	50 %
Electrical power)[1]	kW	809	607	405
Total heat recovery)[2]	+/- 8% kW	945	765	565
-Exhaust gas heat	+/- 8% kW	326	259	185
-Coolant heat	+/- 8% kW	619	506	380
-Mixture heat	+/- 8% kW	118	67	18
Fuel input	+/- 5% kW	2.057	1.583	1.090
Consumption natural gas (Hu 10,02 kWh / Nm^3)	+/- 5% Nm^3 / h	205,2	157,9	108,8
Electrical efficiency	%	39,3	38,3	37,1
Thermal efficiency	%	46	48,3	51,8
Total efficiency	%	85,3	86,6	88,9
CHP coefficient		0,85	0,79	0,72

System parameters				
Flow temperature	max. °C			90
Return temperature	max. °C			70
Gas connection	DN / PN			On request
Heating water connection	DN / PN		2 x	"
Exhaust gas connection	DN / PN			"
Mixture cooling connection	DN / PN			"
Air requirement combustion + ventilation	Nm^3 / h			15.211
Noise level with housing	1m distance			70 dB(A)
Main dimensions (approx.)	L x W x H [m]	5,7 x 2,20 x 3,0		
Weight (approx.)	kg			13.500
Gas composition	separate data sheet			



)[1] at 50 Hz, U=0,4 KV, pf = 1)[2] at exhaust gas temperature 120°
NOx < 500 mg/Nm^3 (Engine adjustment for 250 mg/Nm^3 possible with deviating efficiency), CO < 300 mg/Nm^3
Reference conditions: Combustion air / ambient temperature >+5°C / <+27 °C; Altitude at site <300 m