



Specification Date	Fuel Type	Model
01 June 2010	Natural Gas	Alfagy N500

Engine Specifications	Metric	Type
Manufacturer		SCHMITT ENERTEC
Name		SE-MB-2312-GTA45
Speed	min ⁻¹	1,500
Displacement	litres	22.6
Cylinders		V12
Air intake		Turbo
Generator		400V~/50Hz/Synchronous

Performance Data	Metric	100% Load	75% Load	50% Load
Electrical power ¹	kWe	500	375	250
Total heat recovery ²	+/- 8% kWt	608	490	367
Exhaust heat	+/- 8% kWt	327	254	178
Coolant heat	+/- 8% kWt	206	188	164
Mixture heat	+/- 8% kWt	75	47	25
Fuel input	+/- 5% kWt	1,273	994	712
Natural gas use ³	+/- 5% Nm ³	127.0	99.1	71.0
Electrical efficiency	%	39.3	37.7	35.1
Thermal efficiency	%	47.7	49.3	51.5
Total efficiency	%	87.0	87.0	86.6

System Parameters	Metric	Dimensions	Number	Result
Flow temperature	max °C			90
Return temperature	max °C			70
Gas connection	RP		x 1	DN50 PN16
Heating water connection	DN/PN		x 2	DN65 PN16
Exhaust gas connection	DN/PN			DN 250 PN6
Mixture cooling connection	DN/PN			DN 40 / PN6
Air requirement	Nm ³ / hour			17,200
Noise level with housing	dB(A) at 1 meter			70
Main dimensions	L x W x H in meters			4.6 x 1.45 x 2.45
Weight	kg			7,500
Gas composition	Separate data sheet			

¹ At 50Hz; U=0.4 KV; pf = 1; NO x < 500 mg/Nm³ & CO < 300 mg/Nm³

² Exhaust temperature at 120°C

³ Hu 10.02 kWh/Nm³

Note: Reference conditions are combustion air / ambient temperature 27°C & site altitude max. 300 meters above sea level; methane = 76%