

The ENERGIN® GEN generator set produces electricity either parallel with the public network or with an isolated load. As an option, automatic emergency operation and/or island-parallel operation with other generators is possible.

The unit is supplied as a compact, fully functional unit, with or without a sound attenuating enclosure. The engine, generator, and the control and power panel are mounted, ready for operation on the vibration-decoupled base frame. A lubrication oil system, which allows operation of up to 2000 hours without manual lube oil refilling, is integrated on the unit.

The electrical control system provides protection and control functions for automatic or manual operation. A 12" touch panel informs about operating conditions and allows the operation and parameterization of the system. Various interfaces are available for communication with other power generators and an overhead control system. An Ethernet interface allows connection to the Internet for remote monitoring and remote maintenance.

The entire system is certified according to the BDEW medium voltage directive (Grid code).

TECHNICAL DATA

Manufacturer		R Schmitt Enertec
ENERGIN® Type		M06 GEN B140
Electrical power ¹	kW	140
Gas consumption ² (LHV)	kW	356
Self consumption ³	kW	3,6

DESIGN

Fuel type		Biogas
Lower heating value LHV	kWh/Nm ³	5,0
Gas flow pressure ⁴	kPa	2,2 - 5,0
Inlet air temperature	°C	20
Exhaust temperature	°C	491

EXHAUST EMISSIONS⁵ WITHOUT CATALYST

NO _x ⁶	mg/Nm ³	500
CO	mg/Nm ³	1000
Formaldehyde	mg/Nm ³	100

ENGINE

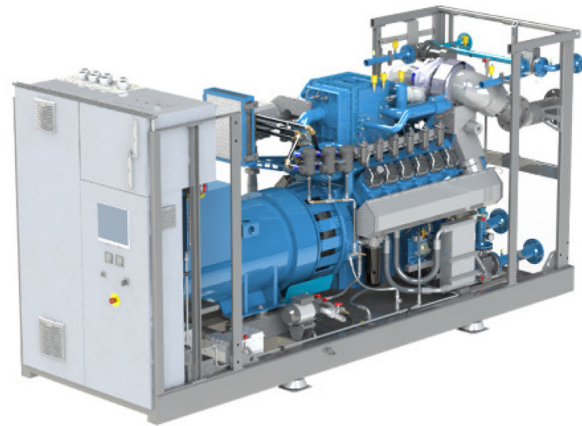
Manufacturer		R Schmitt Enertec
ENERGIN® Type		M06-BT0D41
Working principle		4-stroke
Cylinder configuration		6 in V / 90°
Valves per cylinder		4
Aspiration		turbocharged
Mixture cooling		without
Displacement	ltr	11,3

LUBE OIL

Lube oil volume	ltr	255
Consumption	ltr/OH	0,05

ALTERNATOR

Manufacturer		Leroy Somer
Type		LSA 46.3 S4
Voltage	V / Hz	400 / 50
Speed	1/min	1.500
Efficiency	%	95,2



PERFORMANCE⁷

Load		100 %	75 %	50 %
Electrical power	kW	140	105	70
Fuel consumption	kW	356	273	195
Gas flow at LHV	Nm ³ /h	71	55	39
Electrical efficiency	%	39,3	38,5	35,9
Exhaust gas flow ⁸	m ³ /h	1.374	1.060	763
Air requirement	m ³ /h	4.477	3.733	3.120
Exhaust air ⁹	m ³ /h	3.951	3.341	2.847

DIMENSIONS AND WEIGHTS WITH SOUND ENCLOSURE

Length	mm	3.200
Height	mm	2.250
Height with 90° elbow	mm	3.250
Width	mm	1.340
Dry weight	kg	2.920
Operational weight	kg	3.180

CONNECTIONS

Exhaust	DN / PN	150 / 10
Fuel gas	DN / PN	50 / 16
Cooling water HT	DN / PN	50 / 16

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