Natural Gas Generator Set

ENERGIN® M06 GEN G140

Datasheet, 500 mg NO_x



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 2500 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

	R Schmitt Enertec
	M06 GEN G140
kW	140
kW	363
kW	3,6
	kW

DESIGN

Fuel type		Natural Gas
Lower heating value LHV	kWh/Nm³	10,0
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/Nm³	500
СО	mg/Nm³	1000
Formaldehyde	mg/Nm³	100

ENGINE

Manufacturer		R Schmitt Enertec
ENERGIN® Type		M06-GT0D41
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

ΔITERNATOR

ALILINATON		
Manufacturer		Leroy Somer
Туре		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	363	278	199
Gas flow at LHV	Nm³/h	36	28	20
Electrical efficiency	%	38,6	37,8	35,2
Exhaust gas flow ⁸	m³/h	1.310	979	681
Air requirement	m³/h	4.490	3.732	3.111
Exhaust air ⁹	m³/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

^{1+0 %} tolerance on electrical power output

² +5 % tolerance on fuel consumption

³ average self consumption with emergency cooling

⁴ maximum variation of 10 % for set value

⁵ Exhaust emissions related to 5 % oxygen in dry exhaust

⁶ Setup for 250 mg/Nm³ NO_x possible (changed performance data)

 $^{^{7}}$ at standard conditions according to ISO 3046-1; cos ϕ = 1

³ wet exhaust gas at 491 °C

 $^{9 \}Delta T = 15 K$



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