Natural Gas Generator Set

ENERGIN® M08 GEN G260

Datasheet, 250 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 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

TECHNICAE DATA		
Manufacturer		R Schmitt Enertec
ENERGIN® Type		M08 GEN G260
Electrical power ¹	kW	260
Gas consumption ² (LHV)	kW	651
Self consumption ³	kW	6,7

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	490

EXHAUST EMISSIONS⁵ WITHOUT CATALYST

NO _x	mg/Nm³	250
СО	mg/Nm³	1500
Formaldehyde	mg/Nm³	100

ENGINE

Manufacturer		R Schmitt Enertec
ENERGIN® Type		M08-GTID41
Working principle		4-stroke
Cylinder configuration		8 in V / 90°
Valves per cylinder		4
Aspiration		turbocharged
Mixture cooling		internal
Displacement	ltr	15,1

LUBE OIL

Lube oil volume	ltr	162
Make up tank volume	ltr	170
Consumption	ltr/OH	0,08

ALTERNATOR

Manufacturer		Leroy Somer
Туре		LSA 47.2 M8
Voltage	V / Hz	400 / 50
Speed	1/min	1.500
Efficiency	%	96,2



PERFORMANCE⁶

Load		100 %	75 %	50 %
Electrical power	kW	260	195	130
Fuel consumption	kW	651	499	357
Gas flow at LHV	Nm³/h	65	50	36
Electrical efficiency	%	39,9	39,1	36,4
Exhaust gas flow ⁷	m³/h	2.675	1.967	1.341
Air requirement	m³/h	6.263	5.238	4.281
Exhaust air ⁸	m³/h	5.167	4.455	3.762

DIMENSIONS AND WEIGHTS WITH SOUND ENCLOSURE

Length	mm	4.040
Height	mm	2.030
Height with 90° elbow	mm	2.990
Width	mm	1.440
Dry weight	kg	4.090
Operational weight	kg	4.420

CONNECTIONS

Exhaust	DN / PN	150 / 10
Fuel gas	DN / PN	50 / 16
Cooling water HT	DN / PN	65 / 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

 $^{^{6}}$ at standard conditions according to ISO 3046-1; $\cos \varphi = 1$

⁷ wet exhaust gas at 490 °C

⁸ ΔT = 15 K



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