

Basic Line Marine Gen Set Data Sheet

BLUE LINE

MBGI 135KC275



Unit	Value
kVA	343,75
kW	275
r.p.m.	1500
V	400
Hz	50
	3
	kVA kW r.p.m. V

Engine Equipment

- Basis engine with SCR for IMO Tier III
- Air filter(s), marine type
- Duplex change-over lube oil filter with dip tray
- Lube oil cooler
- Freshwater cooling pump with thermostats (HT circuit)
- Raw/Seawater pump LT circuit(Optional)
- Duplex change-over fuel oil filter with dip tray
- Fuel oil pressure gauge, mounted on the engine

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- Flameproof flexible fuel oil hoses
- Flywheel and -housing
- Unit injectors, PDE
- Fuel lift pump and pre-filter
- Turbocharger
- Intercooler water-cooled
- Exhaust manifold(s) water-cooled
- Lube oil sump
- Hand pump for lube oil draining
- Centrifugal oil cleaner
- Scania Engine Management System,EMS
'- Radiator cooler

Specific Fuel and Oil Consumption			
100% Load	[g/kWh]	192	
75% Load	[g/kWh]	194	
50% Load	[g/kWh]	198	
Lube oil consumption (max)	[g/h]	62,339	
Urea consumption @ 32,5% Urea	[g/kWh]	21	

Alternator Options:

- Anti-condensation heater(s)
- Droop kit for parallel operation

Engine and I	Alternator
Engine	Scania DI13 091M (04-74C)
Alternator	LIAG Standrad Alternator

Diesel Engine Data		
Engine Power	kW	311,695
Number of Cylinders	Pcs.	6
Arrangement of Cylinders		In-line
Bore/Stroke	mm	130/160
Piston displacement	litres	12,7
Intake Air Volume Flow	m³/h	1207
Exhaust gas heat	kW	198
Exhaust gas temp.	°C	494
Exhaust gas mass flow	kg/h	1380
Exhaust gas volume flow	m³/h	3043
Exhaust gas back press. max	hPa	20/180
Cooling water heat	kW	177
Intercooler heat rate	kW	32
Radiation heat	kW	15
Cooling Air Flow @ 125 Pa external pressure drop	m3/s	8,9

Classification Optional

Alternator Data		
Voltage	V	400
Frequency	Hz	50
Speed	r.p.m.	1500
Insulation Stator/Rotor	CI.	Н
Temperature Rise	CI.	Н
Enclosure	ΙP	IP 23
Power	kW	275
Power	kVA	343,75

Alternator Equipment

The alternator is a 2-bearings, brushless, self-exciting, self-regulating with revolving field, inventilated, drip-proof design and with damper windings included.

The voltage regulation is maintained within limits of +/- 0,5 % from no load to full load at any power factor between 0,8 and 1,0.

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LIAG Marine Power Systems



Alarm Equipment

Indication for individual alarm at following failures:

- Low cooling water pressure LT
- Low cooling water level LT
- Low cooling water pressure HT
- Low cooling water level HT
- High cooling water temperature HT
- Low fuel oil pressure
- Low lube oil pressure
- High lube oil temperature
- Over speed
- Options to customized as per clients requirements

Shut-D	OWD	Eaui	nmant
Ollut-P	OWIL	Equi	DILICIT

- Overspeed
- Too high cooling water temperature HT
- Too low lube oil pressure

Control System

The Engine Control Panel is flexible mounted on right side of the set and equipped alarm, monitoring and control system according to the rules of classification society.

Marine Engine Controller (MEC 24) with Graphic display 5,7". Redundant microprocessor based control and supervision system.

- (Optional) Provision of remote control MEC24 panel
- (Optional) Provision of Modbus RTU communcation

Construction

The diesel engine and alternator are connected through a flexible coupling and mounted on a common marine bed frame, manufactured of electro welded steel profiles. Vibration dampers are mounted between the set and the bed frame.

Cooling System

Mounted fan-cooled pressure type radiator for 45°C ambient temperature with flange connection for air duct, finger protection guard for fan.

Fuel oilSystem

The fuel consumption stated below refers to a net calorific value of 43,000 kJ/kg (11,800 kWh/kg) for fuel acc. To DIN EN 590 or ASTM D975 or DMX/DMA as ISO8217, sulphur max. 0,005% (50 ppm) You will get more information in the engine supplier manual.

Dimensions		
Height	mm	2170
Width	mm	1620
Length	mm	3310
Weight	kg	4160

Painting

The set will be painted in colour RAL 2002, base frame RAL 9005 (black)

The instrument panel will be painted in colour RAL 7035

Signs

All signs on the set will be in English

Certificates & Test run

The equipment will be tested according to LIAG rules in our workshop in Germany in the presence of our QS Team

- 1 No. LIAG test report
- 1 No. technical files for parts according to MARPOL ANNEX VI The parts which have influence on the NOx Emission will be according to the requirement for obtaining Certificate E(I)APP
- 1 No IMO Tier III (NOx) E(I)APP Certificate by DNV according to flag state

Main starting system

- Electric 24V, 5,4 kW, 2-pole

Warranty

12 months after commissioning, max. 24 months after announcement of readiness to dispatch from LIAG, whichever comes first.

Electronical Final Documentation (per ship)

- 1x CD / USB`s of Technical data's, descriptions, service instructions and drawings for the delivered equipment in English language

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Specifications are subjected to change without prior notice

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