# #37224

Marine Data Sheet

#### **Engine Equipment**

- Basis engine
- Air filter(s), marine type
- Lube oil cooler
- Cooling pump (HT circuit)
- Cooling pump (LT circuit)
- Duplex change-over fuel oil filter with dip tray
- Fuel oil pressure gauge, mounted on the engine
- Flameproof flexible fuel oil hoses
- Fuel lift pump and pre-filter
- Turbocharger water cooled
- Intercooler water-cooled
- Exhaust manifold(s) water-cooled
- Hand pump for lube oil draining

- Unit injectors PDE technology and EDC control

Specific Fuel and Oil Consumption			
100% Load	[g/kWh]	196	
50% Load	[g/kWh]	200	
Lube oil consumption (max)	[g/h]	54	

#### Alternator Equipment

The alternator is a 2-bearings, brushless, self-exciting, selfregulating with revolving field, in-ventilated, 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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Service	Unit	Value
Power	kVA	270
Power	kW	216
Speed	r.p.m.	1500
Standard Voltage	V	400
Frequency	Hz	50
Phases		3

#### Engine and Alternator

Engine	Scania	DI09 074M (04-23)
Alternator	Cummins-Newage	S4L1M-E42

Diesel Engine Data		
Engine Power	kW	269
Number of Cylinders	Pcs.	5
Arrangement of Cylinders		inliner
Bore/Stroke	mm	130/160
Piston displacement	litres	9,3
Intake Air Volume Flow	m³/h	1042
Exhaust gas heat	kW	164
Exhaust gas temp.	°C	483
Exhaust gas mass flow	kg/h	1140
Exhaust gas volume flow	m³/h	2477
Exhaust gas back press. max	hPa	20/80
Cooling water heat	kW	188
Intercooler heat rate	kW	34
Radiation heat	kW	13

#### Classification

ΒV

Alternator Data		
Voltage	V	400
Frequency	Hz	50
Speed	r.p.m.	1500
Insulation Stator/Rotor	CI.	H/H
Temperature Rise	CI.	F
Enclosure	IP	23
Power	kW	216
Power	kVA	270

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#### Alternator Options:

- Anti condensation heater
- 2x3 PT100 for winding temperature
- Droop kit for parallel running
- Air inlet filter



#### Painting

The set will be painted in light green colour RAL 6019 The control panel will be painted in grey colour RAL 7035

#### Signs

All signs on the set will be in English

#### **Shut-Down Equipment**

- automatic shut down for following failures
- Over speed
- To high cooling water temperature
- To low lube oil pressure

#### Equipment Delivered Loose (per ship)

Exhaust silencer 25dB and spark arrester

1 Pcs flexible exhaust expansion joint(s) with flanges, counter flanges and mounting kits.

#### **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.

Ind	ication for individual alarm at following failures:
•	Low lube oil pressure
•	High lube oil temperature
•	High cooling water temperature
•	Low fuel oil pressure
•	Low cooling water level
•	Low cooling water pressure HT circuit
•	Low cooling water pressure LT circuit
•	Over speed
•	Options to customized as per clients requirements
•	High exhaust gas temperature
•	
•	
•	

Dimensions		
Height	mm	1700
Width	mm	1310
Length	mm	2380
Weight	kg	3050

#### **Certificates and Test run**

Alarm Equipment

The equipment will be tested according to classification rules in our workshop in Germany in the presence of the classification society (where applicable)

Delivery of certificate and test running certificate per ship: 1 No LIAG test report

1 No original classification certificate

1 Pcs technical files

#### Spare Parts / Maintenance Books (per ship)

3 Sets of spare parts books for the engine in English. 3 Sets of spare parts- and maintenance books for the alternator in English.

3 Sets of specifications and drawings for the delivered equipment in English.

#### Warranty

12 months after hand over to the owner, max. 24 months after readiness of dispatch from LIAG, whichever comes first.

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#### 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

Prepared for box / keel cooling

#### Starting System

Electrical starter with one set batteries for 3 consecutive starts including battery charger and battery box.

#### Notes

- 1) Generator specificaitons are subjected to change without prior notice
- 2) Fuel type for engine MGO(DMX or DIN EN590)