

Technical sheet

Generating set QLS32T

Engine characteristics

Engine base	Kubota V3300BG
Number of cylinders	4 in line
Displacement (cm ³)	3318
Bore & Stroke (mm)	98 x 110
Combustion system	Indirect
Rated rpm (rpm)	1500
Max power at rated rpm (kW/hp)	24.6 / 33.5
Intake	Natural
Compression ratio	21.8:1
Injection order	1-3-4-2
Max pressure difference between cyl.	10 %
Rotation	Counter clockwise (flywheel)

Injection

Injection pump	Type Bosch 4M mini
Fuel feed pump	Spherical type
Injection pressure (MPa)	13.7
Governor	Mechanical
Injection Timing before TDC (°)	16

Lubrication

Oil type	API-CD mini 15W40
Capacity (l)	13
Pressure at rated rpm (bar)	3.4
Lubrication system	Forced
Oil pump type	Trochoid
Relief valves - Opening pressure (bar)	9.8 ±1.5
Oil filter type	Full flow - cartridge

Cooling system

Seawater pump	Bronze, Neoprene rotor
Seawater pump flow (l/h)	130
Fresh water pump type	Coaxial alternator driven
Fresh water capacity (l)	12
Exhaust manifold	Fresh water cooled
Max allowable back pressure (bar)	0.127
Max exhaust gas temperature (°C)	550

Valve train

Cold - Valve clearance intake (mm)	0,25
Cold - Valve clearance exhaust (mm)	0,25
Valve retraction (mm)	<0,4

Piston rings

Firing piston ring (mm)	0.3 to 1.25
Compression Ring (mm)	0.3 to 1.25
Oil ring (mm)	0.3 to 1.25

Cylinder head

Surface flatness (mm)	< 0.05
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Installation

Exhaust connexion (mm-in)	80 - 3.15
Fuel connexion (mm-in)	8 - 0.31
Fuel pump - Max suction height (m)	0.5 (standard pump) 1.8 (with add. electrical pump)
Sea Water connexion (mm-in)	32 - 1.25
Engine Operating Angle	15° continuous (30° maxi)

Air requirements

Combustion air at 25°C (m ³ /h)	130
Flow for the evacuation of radiant heat (m ³ /h)	417

Engine Electrical System

Engine alternator (V-A)	12 - 60
Battery recommended (Ah)	180
Starter motor (V-kW)	12 - 2.5

Generator characteristics

Brand	Leroy Somer
Model	LSAM 43.2 S1
Insulation class	H
Phase	3
Winding pitch	2/3 (wdg 6)
Protection	IP 23
Cos Ø	0.8
Rated voltage (V)	400
Frequency (Hz)	50
Max power (kW)	25.7
Continuous power (kW)	23.4
Maximum current per phase (A)	46.4
Continuous current per phase(A)	42.2
Air flow (m ³ /h)	16.2
Excitation system	AREP
AVR typ	R438
Voltage regulatio	± 0.5%
Weight of the generator (kg)	220