

GENERAL ENGINE DATA

Type	-----	4-Cycle, Water Cooled	
Aspiration	-----	Turbo-Charged, Inter Cooler (Fresh water to Cooler)	
Cylinder Arrangement	-----	Inline	
No.of Cylinders	-----	6	
Bore mm(in.)	-----	135	(5.31)
Stroke mm(in.)	-----	170	(6.69)
Displacement Liter(in. ³)	-----	14.60	(891)
Compression Ratio	-----	15.0:1	
Dry Weight - Engine only - kg(lb)	-----	1310	(2889)
Wet Weight - Engine only - kg(lb)	-----	1407	(3102)

PERFORMANCE DATA

Idling Speed -rpm	-----	600~650	
Maximum Overspeed Capacity - rpm	-----	2086	
Moment of Inertia of Rotating Components J- kg·m ² (lbf·ft ²)	-----	4.20	(399)
(Includes 14 inch Flywheel)			

ENGINE MOUNTING

Maximum Bending Moment at Rear Face of Flywheel Housing - N·m(lbf·ft)	-----	1373	(1013)
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AIR INLET SYSTEM

Maximum Intake Air Restriction (Includes piping)- kPa (in.H ₂ O)	-----	3.92	(15.7)
Maximum Allowable Intake Air Temperature- °C (°F)	-----	45	(113)

EXHAUST SYSTEM

Maximum Allowable Back Pressure - kPa (in.H ₂ O)	-----	4.41	(17.7)
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LUBRICATION SYSTEM

Oil Pressure at Idle - MPa (psi)	-----	0.2~0.3	(29~43)
at Rate Speed - MPa (psi)	-----	0.5~0.6	(71~86)
Maximum Oil Temperature of Oil pan - °C (°F)	-----	110	(230)
Oil Capacity of Marine Oil pan High - liter (U.S.gal)	-----	70	(18.5)
Low - liter (U.S.gal)	-----	52	(13.7)
Total System Capacity (Includes Oil Filter) - liter (U.S.gal)	-----	80	(21.1)
Maximum Installation Angle	Front Up	-----	22°
	Front Down	-----	12.5°
	Side to Side	-----	15°
Maximum Instantaneous Operating Angle	Front Up	-----	35°
(Engine Level)	Front Down	-----	12.5°
	Side to Side	-----	22.5°

COOLING SYSTEM

Coolant Capacity of Jacket(Engine only) - liter (U.S.gal)	-----	30	(7.9)
Coolant Capacity of Air cooler(Engine only) - liter (U.S.gal)	-----	3	(0.8)
Maximum External Friction Head at Engine Outlet-MPa(psi)	-----	0.034	(5.0)
Recommended Static Head of Coolant above Crankshaft Center - m(ft)			
	MAX.	-----	10 (32.8)
	MIN.	-----	7 (23.0)
Standard Thermostat (Modulating)Range- °C (°F)	-----	71~85	(160~185)
Maximum Coolant Temperature at Engine Outlet- °C (°F)	-----	95	(203)
Recommended Coolant Temperature at Engine outlet- °C (°F)	-----	80	(176)
Minimum Coolant Expansion Space-% of System Capacity	-----	10	
Maximum Coolant Temperature at Inter Cooler Inlet, PTAW type- °C (°F)	-----	see page 4/4	

In a cold district, water heater installation is recommended to jacket water for starting stability and white smoke control.

The specifications are subject to change without notice.

FUEL SYSTEM

Fuel Injection Pump	-----	Bosch S7S Type x 1
Maximum Suction Head of Feed Pump - kPa (in. Hg)	-----	14.7 (4.3)
Maximum Level of Fuel Tank - m	-----	2.0
Minimum Fuel Oil Supply Pipe Inner Diameter - mm(in.)	-----	16 (0.63)
Minimum Fuel Oil Leak Pipe Inner Diameter - mm(in.)	-----	12 (0.47)

STARTING SYSTEM

Battery Charging Alternator - V-Ah	-----	24-35
Starting Motor Capacity - V -kW	-----	24-6.0
Maximum Allowable Resistance of Cranking Circuit - m Ω	-----	2.5
Recommended Minimum Battery Capacity (Reference)		
At 5°C(41°F) and above - Ah	-----	200
Below 5°C(41°F) through - 5°C(23°F)	-----	400
Cranking Ampere of Starter at 5°C (41°F) / -5°C (23°F)		
Static Ampere -A		300 / 330
Momentary Ampere -A		525 / 585

ACCESSORY EQUIPMENT

Air Cleaner	Silencer Type
Exhaust Manifold	Air Cooled
Turbocharger	Air Cooled
Air Cooler	Fresh Water Cooled
Breather	Conduction Type
Governor	Hydraulic PSG Type
Fuel Injection Pump	
Fuel Feed Pump	
Fuel Injection Pipe	Standard Type
Fuel Injection Nozzle	
Fuel Filter	Paper Element Type
Lubricating Oil Pump	
Lubricating Oil Cooler	
Lubricating Oil Filter(Full-Flow)	Paper Element Type
Lubricating Oil Filter(By-Pass Flow)	Paper Element Type
Oil Pan	Large Capacity,aluminium
Cooling Water Pump	
Cooling Water Thermostat	
Starter	Earth Float Type
Alternator	Earth Float Type
Stop Solenoid	DC24V-15A
Engine Support	Marine Type
Accessory Drive	Front Drive Pulley

ACCESSORY EQUIPMENT(LOOSE SUPPLY)

Relay Safety	For Starter
Jack Bolt	
Companion Flange	
Standard Tools	
Standard Spare Parts	

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