

YTO Engine Technical Data

Diesel Engine Model - YM6H4L-D (213kw/1500rpm)

Basic technical data

Number of cylinders	6
Cylinder arrangement	In-line
Combustion Cycle	Four stroke, compression ignition
Cooling medium	Liquid
Method of air aspiration	Air to air intercooled
Compression ratio	17.5:1
Bore	126 mm
Stroke	130 mm
Cubic capacity	11.596 litres
Direction of rotation	Anti-clockwise viewed on flywheel
Firing order	1-5-3-6-2-4 (1cyl furthest from flywheel)
Total weight (engine only)	(dry) 1000±20 kg

Overall dimensions

Height	2200 mm
Length	1805 mm
Width	950 mm

Ratings

Steady state speed stability at constant load	≤ 3%
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Operating point

Engine speed	1500 rev/min
Engine power(gross)	213 kw (standby) / 186 kw (prime)
Static injection timing	15~20°C A before the TDC

Sound level

Sound pressure level 1500 rev/min)	≤ 113 dBA
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Test Conditions

Air temperature	25 °C
Barometric pressure	100 kPa
Relative humidity	30%
Air inlet Restriction at maximum power (nominal)	≤ 5 kPa
Exhaust back pressure (nominal)	≤ 6 kPa

Cooling system

Total coolant capacity: (engine only)	23 litres
Maximum top tank temperature	99 °C
Thermostat operating range	71~82 °C
Coolant intake size	Φ 45 mm
Coolant outlet size	Φ 45 mm

Lubrication system

Lubricating oil type	CF-4
Lubricating oil capacity	23 litres
Lubricating oil temperature maximum to bearings	115 °C
Oil Pressure @ Idle Speed	≥ 98 kPa
@ Governed Speed	294~490 kPa

Maximum engine operating angles

Front up, front down/right side or left side.	20° / 15°
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Fuel system

Fuel oil type	0# or 10# or 20# or 35# or 50#
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Type of injection systemDirect injection
Fuel injection pumpP7100 pump
Governor type Electronic

Electrical system

Alternator28 volts with integral regulator
Starter motor24 volts
Recommended Battery Capacity2x165 A.h

Energy balance

Energy in fuel26679 btu/min
Gross heat to power.....9970 btu/min
Energy to coolant and oil7469 btu/min
Energy to exhaust.8615 btu/min
Heart to radiation626 btu/min

All data is based on:

--Engine operating with fuel corresponding to grade No.2-D per ASTM D975
--ISO 3046,Part1,Standard Reference Conditions of:Barometric Pressure:100kPa(29.5in.Hg);
Altitude:110m(361ft.);Air Temperature:25°C (77°F);Relative Humidity:30%.
N.A.-Not Applicable to this Engine
TBD - To Be Determined