

YTO Engine Technical Data

Diesel Engine Model – LR4B3Z-D

Basic technical data

Number of cylinders	4
Cylinder arrangement	In-line
Combustion Cycle	Four stroke, compression ignition
Cooling medium	Liquid
Method of air aspiration	Turbocharger
Compression ratio	17:1
Bore	108mm
Stroke	125mm
Cubic capacity	4.58litres
Direction of rotation	Anti-clockwise viewed on flywheel
Firing order	1-3-4-2 (1cyl furthest from flywheel)
Total weight (engine only)	(dry) 420±20 kg

Overall dimensions

Height	1050mm
Length	1050mm
Width	720 mm

Ratings

Steady state speed stability at constant load	± 0.25%
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Operating point

Engine speed	1500 rev/min
Engine power(gross)	68kw (standby)
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	100kPa
Relative humidity	30%
Air inlet Restriction at maximum power (nominal)	≤ 5kPa
Exhaust back pressure (nominal)	≤ 6 kPa

Cooling system

Total coolant capacity: (engine only)	6litres
Maximum top tank temperature	99 °C
Thermostat operating range	76~95 °C
Coolant intake size	Φ46mm
Coolant outlet size	Φ46mm

Lubrication system

Lubricating oil type	L-ECD 15W/40
Lubricating oil capacity	14 litres
Lubricating oil temperature maximum to bearings	115°C
Oil Pressure @ Idle Speed	≥98kPa
@ Governed Speed	294~490kPa
Maximum engine operating angles	
Front up, front down/right side or left side	20° /15°

Fuel system

Fuel oil type	0# or 10#
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Type of injection system ... Direct injection
Fuel injection pump ... 4BB pump
Governor type ... Mechanical

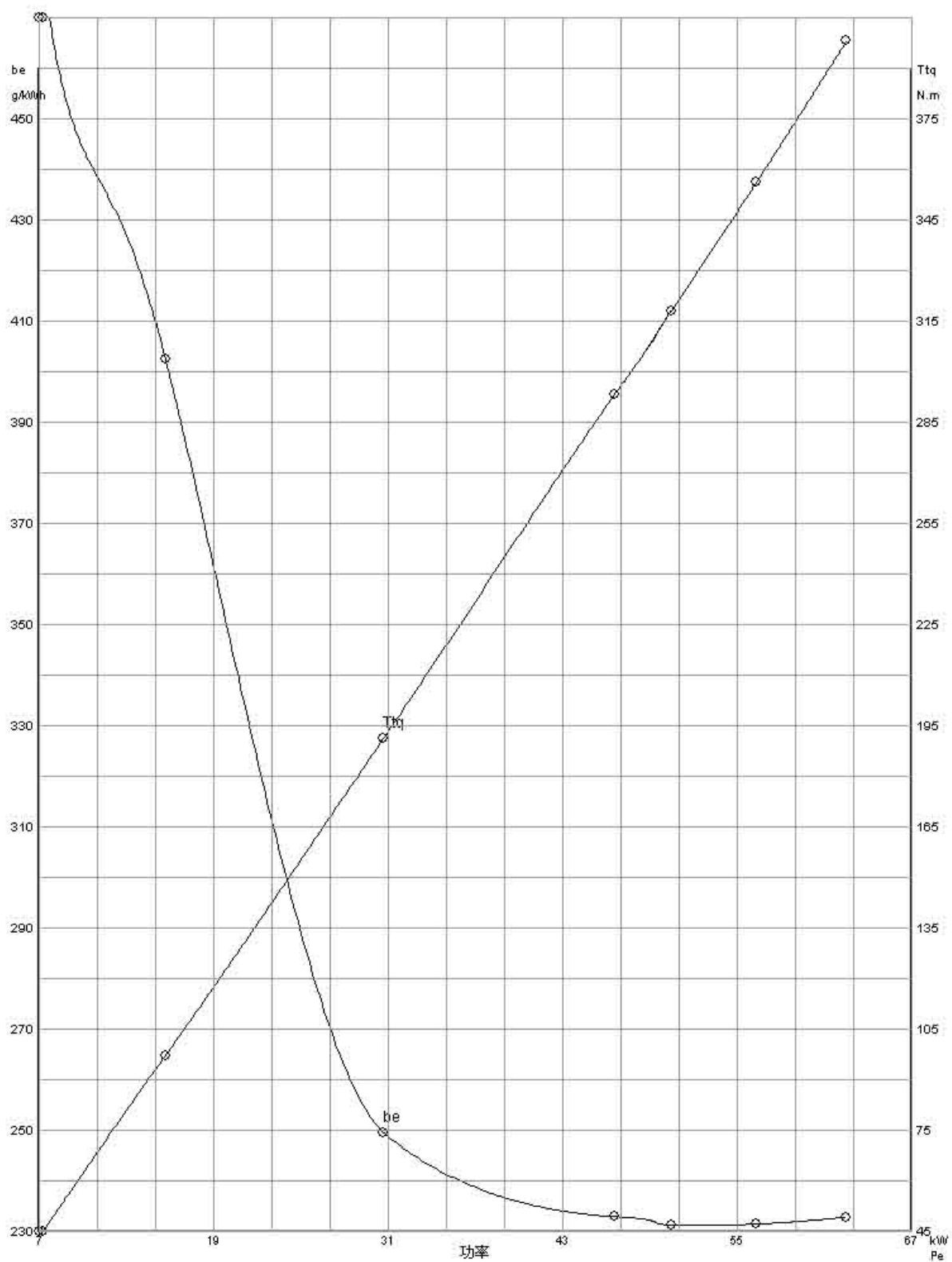
Electrical system

Alternator. ... 12volts with integral regulator
Starter motor ... 12volts
Recommended Battery Capacity..... 190A

Energy balance

Energy in fuel..... 9432btu/min
Gross heat to power..... 3523btu/min
Energy to coolant and oil..... 2638btu/min
Energy to exhaust..... 3042btu/min
Heat to radiation..... 222btu/min

油耗率



转矩