

YD4GZLD ENGINE TECHNICAL DATA SHEET

1.Engine Ratings 100KVA

PARAMETER	UNIT	VALUE (1500 RPM)	VALUE (1800 RPM)
Generator set Frequency	Hz	50	60
Engine Standby Power (LTP)	kW	93	94.5
Engine Prime Power (PRP)	kW	90	100
Engine Continuous Power (COP)	kW	90	100
Cooling Fan Power Consumption (KW)	kW	3	3.5
Engine Net Standby Output (LTP)	kW	88	98
Engine Net Prime Output (PRP)	kW	85	94
Engine Net Continuous Output (COP)	kW	85	94

ISUZU

ENGINE MODEL & TYPE

Engine Model: YD4GZLD
Induction: Turbocharged

MAJOR COMPONENTS

A comprehensive listing of engine and generator specifications.

PERFORMANCE DATA

Speed Rate: 1500 RPM
Prime Power: 90 kW
Standby Power: 93 kW

FUEL & OIL SYSTEM / RADIATOR & COOLING

- Fuel System: Direct Injection
- Fuel Consumption: 19.3 L/h
- Lube Oil Capacity: 13 Liters
- Coolant Capacity: 6.0 Liters (Engine only)
- Radiator: Coolant system with radiator
- Fan: Belt-driven cooling fan

DSE

STAMFORD ALTERNATOR DATA

MODEL: TAL-042-C
RATING (PRP @ 1500rpm): 43 kW (COP)



2. General Specification

PARAMETER	UNIT	VALUE
Length /Width/ Height	mm	892 / 618 / 740
Engine Dry Weight (w/o Cooling System)	kg	370
Aspiration Type / Injection Type	—	Turbocharged / Direct
Configuration / No. of Cylinders	—	Vertical / 4
Displacement	liters	4.3
Bore /Stroke	mm	110 / 118
Compression Ratio	—	18
Piston Speed	m/s	5.9/7.08
Rotation Direction (from flywheel)	—	Anti-clockwise
Number of Flywheel Teeth / House Size	—	119/ SAE3

3. Lubrication System

PARAMETER	UNIT	VALUE
Lube Oil Specification	—	CF 15W-40
Oil Capacity	liters	17
Max. Permissible Oil Temperature	°C	130
Low Oil Pressure Warning /Shutdown	kPa	100 / 80
Oil Consumption	%	0.82% of fuel consumption)

4. Cooling System

PARAMETER	UNIT	VALUE
Coolant Capacity for Engine	Liters	7.2
Max. Permissible / Warning Temperature	°C	90 / 95
Max. Coolant Shutdown Temperature	°C	98
Thermostat Open Temperature	°C	76
Flow of Coolant pump	m ³ /h	≥11.7 / ≥14.1
Heat dissipation (engine radiator)	kW	60 / 67.5
Heat dissipation (convection)	kW	50 / 56.25

5. Fuel System

PARAMETER	UNIT	1500 RPM (50HZ)	1800 RPM (60HZ)
Governor Type	—	Electronic	Electronic
Fuel Consumption at 25% PRM	l/h	8.3	8.90
Fuel Consumption at 50% PRM	l/h	14.2	45.8
Fuel Consumption at 75% PRM	l/h	18.9	21.3
Fuel Consumption at 100% PRM	l/h	22.1	25.9
Lowest Fuel Consumption Ratio	g/kW.hr	218	218

6. Intake & Exhaust System

PARAMETER	UNIT	1500 RPM	1800 RPM
Combustion Air Consumption	m ³ /min	5.31	6.37
Max. Intake Restriction	kPa	4.9	4.9
Max. Exhaust Temperature (After Turbo)	°C	650	650
Max. Exhaust Back Pressure	kPa	550	500
Exhaust Flange Diameter	mm	13.53	13.53

7. Electrical System

PARAMETER	UNIT	VALUE
Charging Alternator Voltage / Capacity	V / A	14or28 / 53.6or26.8
Starting Voltage / Motor Capacity	V / KW	12or24 / 4.5or5
Minimum Battery Capacity	Ah	120
Min. Ambient Temp (Unaided Cold Start)	°C	-10