

YSD490D ENGINE TECHNICAL DATA SHEET

1.Engine Ratings 22KVA

PARAMETER	UNIT	VALUE (1500 RPM)	VALUE (1800 RPM)
Generator set Frequency	Hz	50	60
Engine Standby Power (LTP)	kW	23.1	27.5
Engine Prime Power (PRP)	kW	21	25
Engine Continuous Power (COP)	kW	21	25
Cooling Fan Power Consumption (KW)	kW	1.5	2
Engine Net Standby Output (LTP)	kW	21.1	24.9
Engine Net Prime Output (PRP)	kW	19.2	22.7
Engine Net Continuous Output (COP)	kW	19.2	22.7

ENGINE SPECIFICATIONS

ISUZU

MODEL: YSD490D
 SPEED: 1500 rpm / 1800 rpm
 FREQUENCY: 50 Hz / 60 Hz
 STANDBY POWER (LTP): 23.1 kW / 27.5 kW
 PRIME POWER (PRP): 21 kW / 25 kW
 NET PRIME OUTPUT: 19.2 kW / 22.7 kW

STAMFORD

ALTERNATOR SPECIFICATIONS

(Information not in text; place holder)
 MODEL: TAL-042
 MODEL: [Insert Alternator Model if known from original, otherwise generic model]
 TYPE: Brushless

MAJOR COMPONENTS

CONTROL PANEL

CONTROLLER TYPE: DSE
 DISPLAY PARAMETERS:
 Voltage (V), Current (A),
 Frequency (Hz), Oil Pressure,
 Water Temp, Fuel Level.
 Full Protection.

COOLING SYSTEM

COOLANT CAPACITY: 10.7 Liters
 MAX TEMP: 85°C

BASE FRAME & GENERAL

FUEL TANK: Integrated 8-hour
 LENGTH x WIDTH: 716 mm x 530 mm
 ENGINE DRY WEIGHT: 230 kg



2. General Specification

PARAMETER	UNIT	VALUE
Length /Width/ Height	mm	716/ 530/ 670
Engine Dry Weight (w/o Cooling System)	kg	230
Aspiration Type / Injection Type	—	Nature /Direct
Configuration / No. of Cylinders	—	Vertical / 4
Displacement	liters	2.54
Bore /Stroke	mm	90 / 100
Compression Ratio	—	18
Piston Speed	m/s	5.0/6.0
Rotation Direction (from flywheel)	—	Anti-clockwise
Number of Flywheel Teeth / House Size	—	119/ SAE4

3. Lubrication System

PARAMETER	UNIT	VALUE
Lube Oil Specification	—	CD40
Oil Capacity	liters	7.6
Max. Permissible Oil Temperature	°C	110
Low Oil Pressure Warning /Shutdown	kPa	100 /100
Oil Consumption	%	0.75% of fuel consumption)

4. Cooling System

PARAMETER	UNIT	VALUE
Coolant Capacity for Engine	Liters	10.7
Max. Permissible / Warning Temperature	°C	85 / 85
Max. Coolant Shutdown Temperature	°C	95
Thermostat Open Temperature	°C	75
Flow of Coolant pump	m ³ /h	≥270
Heat dissipation (engine radiator)	kW	-
Heat dissipation (convection)	kw	-

5. Fuel System

PARAMETER	UNIT	1500 RPM (50HZ)	1800 RPM (60HZ)
Governor Type	—	Mechanical	Mechanical
Fuel Consumption at 25% PRM	l/h	3.1	3.10
Fuel Consumption at 50% PRM	l/h	4.71	4.71
Fuel Consumption at 75% PRM	l/h	5.64	5.62
Fuel Consumption at 100% PRM	l/h	6.36	6.76
Lowest Fuel Consumption Ratio	g/kW.hr	253	228

6. Intake & Exhaust System

PARAMETER	UNIT	1500 RPM	1800 RPM
Combustion Air Consumption	m ³ /min	1.38	1.48
Max. Intake Restriction	kPa	101	101
Max. Exhaust Temperature (After Turbo)	°C	500	500
Max. Exhaust Back Pressure	kPa	6	6
Exhaust Flange Diameter	mm	74	74

7. Electrical System

PARAMETER	UNIT	VALUE
Charging Alternator Voltage / Capacity	V / A	12 / -
Starting Voltage / Motor Capacity	V / KW	12 / 3.5
Minimum Battery Capacity	Ah	120
Min. Ambient Temp (Unaided Cold Start)	°C	-10