



Diesel Generating Sets Y-I25

Model	Prime Power	Standby Power
50Hz Diesel Spec Sheets		
Y-I25	25kVA / 20kW	27kVA / 22kW

Notice:

- a) Prime Power(PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqv ISO8528) ; A 10% overload capacity is available for a period of 1 hours within a 12-hours period of operation.
- b) Standby Power(ESP): The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capacity is available at this rating.
- c) Ambient reference conditions: 1,000mbar, 27°C, 30% relative humidity.

Generator Rating					
Voltage	Frequency	Phase	Power Factor	PRP	ESP
380/220 V	50Hz	3-Phase	0.8	25kVA / 20kW	27kVA / 22kW
400/230 V	50Hz	3-Phase	0.8	25kVA / 20kW	27kVA / 22kW
415/240 V	50Hz	3-Phase	0.8	25kVA / 20kW	27kVA / 22kW
440/254 V	50Hz	3-Phase	0.8	25kVA / 20kW	27kVA / 22kW

Standard Features
Engine Isuzu 4JB1
Alternator YDSF.1184F
Radiator 50°C max, fans are driven by belt with safety guard
24V charge alternator
Alternator: Single bearing alternator IP23, insulation class H
Anti-shock system
Dry type air filter, fuel filter, oil filter
Main line fuse breaker
Standard control panel
Two 12V batteries, rack and cable
Ripple flex exhaust pipe, exhaust siphon, flange, muffler
User manual book



Photo for reference only



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ENGINE DATA

Manufacturer / Model : ISUZU 4JB1 , 4-cycle

Air Intake System : Air natural cooled

Fuel System : A model fuel pump

Cylinder Arrangement : 4 in line

Displacement : 2.771L

Bore and Stroke : 93*102 (mm)

Compression Ratio : 18.2:1

Rated RPM : 1500rpm

Max.Standby Power at Rated RPM : 27kW / 36.7HP

Governor Type : Mechanical Speed Control System

Frequency Regulation, Steady State : $\leq 0.8\%$

Exhaust System

Exhaust Gas Flow : 5.24CBM/min

Exhaust Temperature : 500°C

Max Back Pressure : 15kPA

Air Intake System

Max Intake Restriction : 7.5kPA

Burning Capacity : 2.08CBM/min

Intake Flow : 136CBM/min

Fuel System

110%(Standby Power) Load : 5.8Kg/h

100%(Prime Power) Load : 5.6Kg/h

Total Fuel Flow :

Oil System

Total Oil Capacity : 5.0L

Oil Consumption : $\leq 4\text{g/kwh}$

Engine Oil Tank Capacity : 4.5L

Oil Pressure at Rated RPM : 350kPa

Cooling System

Total Coolant Capacity : 20L

Thermostat : 83-95°C

Max Water Temperature : 100°C



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ALTERNATOR STANDARD

Compliance as following standard:

GB755, Third part of BS5000, VDE0530, NEMA MG1-22, IEC34, CSA C22.2-100 and ASB59

ALTERNATOR DATA

Model : YDSF.1184F

Exciter Type : Brushless , Self-exciter

Alternator Capacity : 27.5kVA

Number of Phase : 3-phase, 4-wires, Y type connecting

Connecting Type : Reconnectable

Number of Bearing : Single bearing

Power Factor : 0.8

Protection Grade : IP23

Altitude : $\leq 1000\text{m}$

Insulation Class , Temperature Rise : Class H

Pitch : 2/3

Amortisseur Winding : Full

Voltage Regulator : SX440

Voltage Regulation NL - FL : $\pm 1.0\%$

Telephone Influence Factor (TIF) : < 50

THF : $< 2\%$

Alternator Efficiencies : 84.3%

Air Cooling Flow : 0.15CBM/s

Cooling Fan : Cast alloy aluminium

Sudden Voltage Warp (100% Sudden Reduce) : $< +25\%$

Sudden Voltage Warp (Sudden Increase) : $< -20\%$

Voltage Stable Time (100% Sudden Reduce) : $< 6\text{s}$

Voltage Stable Time (Sudden Increase) : $< 6\text{s}$

Frequency Reduce : 0-5% adjustable

Frequency Regulation, Stead State : $< 1.5\%$

Frequency Waving : $< 0.8\%$

Sudden Frequency Warp (100% Sudden Reduce) : $< +12\%$

Sudden Frequency Warp (Sudden Increase) : $< -10\%$

Frequency Recovery Time (100% Sudden Reduce) : $< 5\text{s}$

Frequency Recovery Time (Sudden Increase) : $< 5\text{s}$