

Y4110D ENGINE TECHNICAL DATA SHEET

1.Engine Ratings 50KVA

| PARAMETER | UNIT | VALUE (1500 RPM) | VALUE (1800 RPM) |
|------------------------------------|------|------------------|------------------|
| Generator set Frequency | Hz | 50 | 60 |
| Engine Standby Power (LTP) | kW | 47.3 | 52.8 |
| Engine Prime Power (PRP) | kW | 43 | 48 |
| Engine Continuous Power (COP) | kW | 43 | 48 |
| Cooling Fan Power Consumption (KW) | kW | 1.5 | 2 |
| Engine Net Standby Output (LTP) | kW | 45.5 | 50.5 |
| Engine Net Prime Output (PRP) | kW | 41.2 | 45.7 |
| Engine Net Continuous Output (COP) | kW | 41.2 | 45.7 |

ISUZU ENGINE DATA

MODEL: Y4110D (50Hz) / Y4110D (60Hz)
ENGINE PRIME POWER: 43 kW (1500rpm) / 48 kW (1800rpm)

RADIATOR & COOLING

COOLANT CAPACITY: 7.2 L
HEAT DISSIPATION: 32.25 kW (50Hz) / 36 kW (60Hz)

MAJOR COMPONENTS

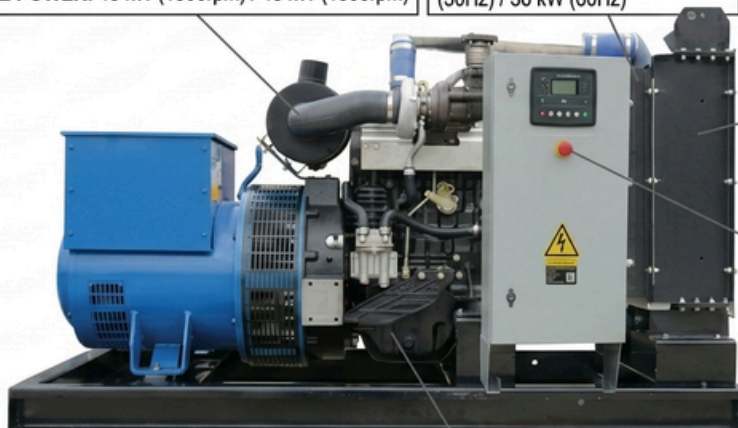
A comprehensive listing of engine and generator specifications.

GENERAL SPECIFICATION

L/W/H: 892/618/740 mm
ENGINE DRY WEIGHT: 330 kg
ASPIRATION: Natural

CONTROL PANEL

(DSE)
DSE DISPLAY PARAMETERS:
LUBE OIL SPEC: CD 15W-40
OIL CAPACITY: 13 Liters
LOW OIL PRESSURE SHUTDOWN: 80 kPa



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 | 330 |
| Aspiration Type / Injection Type | — | Nature /Direct |
| Configuration / No. of Cylinders | — | Vertical / 4 |
| Displacement | liters | 4.484 |
| Bore /Stroke | mm | 110 / 118 |
| Compression Ratio | — | 18 |
| Piston Speed | m/s | 5.9/7.08 |
| Rotation Direction (from flywheel) | — | Anti-clock |
| Number of Flywheel Teeth / House Size | — | 119/ SAE3 |

3. Lubrication System

| PARAMETER | UNIT | VALUE |
|---|--------|----------------------------|
| Lube Oil Specification | — | CD 15W-40 |
| Oil Capacity | liters | 13 |
| Max. Permissible Oil Temperature | °C | 120 |
| Low Oil Pressure Warning /Shutdown | kPa | 100 /80 |
| Oil Consumption | % | 0.77% 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 | ≥10.4 |
| Heat dissipation (engine radiator) | kW | 32.25 / 36 |
| Heat dissipation (convection) | kW | 26.88 / 30 |

5. Fuel System

| PARAMETER | UNIT | 1500 RPM (50HZ) | 1800 RPM (60HZ) |
|--------------------------------------|---------|-----------------|-----------------|
| Governor Type | — | Mechanical | Mechanical |
| Fuel Consumption at 25% PRM | l/h | 5.09 | 5.65 |
| Fuel Consumption at 50% PRM | l/h | 6.91 | 7.68 |
| Fuel Consumption at 75% PRM | l/h | 9.15 | 10.18 |
| Fuel Consumption at 100% PRM | l/h | 12.03 | 13.44 |
| Lowest Fuel Consumption Ratio | g/kW.hr | 235 | 235 |

6. Intake & Exhaust System

| PARAMETER | UNIT | 1500 RPM | 1800 RPM |
|---|---------------------|----------|----------|
| Combustion Air Consumption | m ³ /min | 2.5 | 3 |
| Max. Intake Restriction | kPa | 4 | 4 |
| Max. Exhaust Temperature (After Turbo) | °C | 500 | 500 |
| Max. Exhaust Back Pressure | kPa | 6 | 6 |
| Exhaust Flange Diameter | mm | 84 | 84 |

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 |