# YUNNEI POWER ENGINE DATA SHEET

| 1. Engine Ratings ( GDRIVE ) | | YN38DTJ50 |
|---|---|---|
| Engine Rated Speed | rpm | 1500 |
| Generator set Frequency | Hz | 50 |
| **Engine Prime Power (PRP)** | kW | 50 |
| **Engine Standby Power (COP)** | kW | 55 |
| Cooling Fan Power Consumption (kW) | kW | 1 |
| Engine Net Prime Output (PRP) | kW | 48,5 |
| Engine Net Continuous Output (COP) | kW | 48,5 |
| | | |
| **2. Genearal Specification** | | |
| Length | mm | 980 |
| Width | mm | 670 |
| Height | mm | 800 |
| Engine Dry Weight w/o Cooling System | kg | 330 |
| Aspiration Type | | TurboCharged |
| Injection Type | | Direct |
| Configuration | | Vertical |
| No. of Cylinders | | 4 |
| Displacement | liters | 3,76 |
| Bore | mm | 102 |
| Stroke | mm | 115 |
| Compression Ratio | | 17.5 |
| Piston Speed | m/s | 6,52/7,82 |
| Rotation Direction (from flywheel) | | Anti-clockwise |
| Number of Flywheel Teeth | | 130 |
| Flywheel House Size | | SAE3 |
| | | |
| **3. Lubrication System** | | |
| Lube Oil Specification | | CD 15W-40 |
| Oil Capacity | liters | 6.8 |
| Max. Permissible Oil Temperature | ℃ | 120 |
| Low Oil Pressure Warning | kPa | 105 |
| Low Oil Pressure Shutdown | kPa | - |
| Oil consumption (as % of fuel consumption) | | - |

| 4. Cooling System | | |
|---|---|---|
| Coolant Capacity for Engine | Liters | 6,8 |
| Max. Permissible Temperature | °C | 120 |
| Max. Coolant Warning Temperature | °C | 98 |
| Max. Coolant Shutdown Temperature | °C | 105 |
| Thermostat Open Temperature | °C | 72 |
| Flow of Coolant pump | m³/h | ⩾8. 44 |
| | | |
| **5. Fuel System** | | |
| Governor Type | | Mec. & Elec. |
| Fuel Consumption at 25% of generator set prime output | l/h | 4,4 |
| Fuel Consumption at 50% of generator set prime output | l/h | 6,9 |
| Fuel Consumption at 75% of generator set prime output | l/h | 9,88 |
| Fuel Consumption at 100% of generator set prime output | l/h | 12,14 |
| Lowest Fuel Consumption Ratio | g/kW.hr | 220 |
| | | |
| **6. Intake & Exhaust System ( On Standby Output** | | |
| Combustion Air Consumption | m³/min | |
| Max. Intake Restriction | kPa | 6 |
| Max. Exhaust Temperature ( Before Turbo ) | °C | / |
| Max. Exhaust Temperature ( After Turbo ) | °C | 620 |
| Max. Exhaust Back Pressure | kPa | 10 |
| Exhaust Gas Flow | m³/min | |
| Exhaust Flange Diameter | mm | 73*40 |
| | | |
| **7. Electrical System** | | |
| Charging Alternator Voltage | V | 14 |
| Charging Alternator Capacity | A | 35 |
| Starting Voltage | V | 12 |
| Starting Motor Capacity | KW | 3.5 |
| Minimum Battery Capacity | Ah | 110 |
| Minimum Ambient Temperature for Unaided Cold Start | °C | -20 |
| | | |
| Note | | |
| 1. All engine parameters are in accordance with ISO3046, ISO8528 | | |
| 2. All engine parameters are based on 25°C / 100kPa environment condition | | |
| 3. No power decrease with below 40ºC environment temperature and 1500 meter altitude | | |
| 4. More than 40ºC and 1500m above sea level , decrease 0.5% per 1ºC , and 4% per 300m. | | |
| 5. At calorific value 42700 kJ/kg + 5%, density 0,835 kg/dm3 , temperature 280 K | | |
| 6. Above data is only the testing data in our laboratory, it can't used to be the data on all contract | | |