YUNNEI POWER ENGINE DATA SHEET

1. Engine Ratings (GDRIVE)		YN48ECD90
Engine Rated Speed	rpm	1500
Generator set Frequency	Hz	50
Engine Prime Power (PRP)	kW	90
Engine Standby Power (COP)	kW	99
Cooling Fan Power Consumption (kW)	kW	2
Engine Net Prime Output (PRP)	kW	88
Engine Net Continuous Output (COP)	kW	88
2. Genearal Specification		
Length	mm	1130
Width	mm	730
Height	mm	960
Engine Dry Weight w/o Cooling System	kg	500
Aspiration Type		TurboCharged / Intercooler
Injection Type		Direct
Configuration		Vertical
No. of Cylinders		4
Displacement	liters	4,8
Bore	mm	108
Stroke	mm	132
Compression Ratio		16.5
Piston Speed	m/s	7,92
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	13
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	15
Max. Permissible Temperature	°C	95
Max. Coolant Warning Temperature	°C	98
Max. Coolant Shutdown Temperature	°C	105
Thermostat Open Temperature	°C	72
Flow of Coolant pump	m³/h	⩾5, 67
5. Fuel System		
Governor Type		Mec. & Elec.
Fuel Consumption at 25% of generator set prime output	l/h	7,26
Fuel Consumption at 50% of generator set prime output	l/h	11,42
Fuel Consumption at 75% of generator set prime output	l/h	14,64
Fuel Consumption at 100% of generator set prime output	l/h	19,76
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	88,5
7. Electrical System		
Charging Alternator Voltage	V	28
Charging Alternator Capacity	A	35
Starting Voltage	V	14
Starting Motor Capacity	KW	4,5
Minimum Battery Capacity	Ah	120
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		