YD4GZLD ENGINE TECHNICAL DATA SHEET

1. Engine Ratings for Generator app	YD4GZLD		
Engine Rated Speed	rpm	1500	1800
Generator set Frequency	Hz	50	60
Engine Standby Power (LTP)	kW	93	94,5
Engine Prime Power (PRP)	kW	90	100
Engine Continuous Power (COP)	kW	90	100
Cooling Fan Power Consumption (kW)	kW	3	3,5
Engine Net Standby Output (LTP)	kW	88	98
Engine Net Prime Output (PRP)	kW	85	94
Engine Net Continuous Output (COP)	kW	85	94

2. Genearal Specification		
Length	mm	892
Width	mm	618
Height	mm	740
Engine Dry Weight w/o Cooling System	kg	370
Aspiration Type		Turbocharged
Injection Type		Direct
Configuration		Vetical
No. of Cylinders		4
Displacement	liters	4,3
Bore	mm	110
Stroke	mm	118
Compression Ratio		18
Piston Speed	m/s	5.9/7.08
Rotation Direction (from flywheel)		Anti-clockwise
Number of Flywheel Teeth		119
Flywheel House Size		SAE3

3. Lubrication System		
Lube Oil Specification		CF 15W-40
Oil Capacity	liters	17
Max. Permissible Oil Temperature	°C	130
Low Oil Pressure Warning	kPa	100
Low Oil Pressure Shutdown	kPa	80
Oil consumption (as % of fuel consumption)		0,82

4. Cooling System			
Coolant Capacity for Engine	Liters	7,2	
Max. Permissible Temperature	°C	90	
Max. Coolant Warning Temperature	°C	95	
Max. Coolant Shutdown Temperature	°C	98	
Thermostat Open Temperature	°C	76	
Radiator Cooling Flow	m³/min	⩾160	⩾188
Flow of Coolant pump	m³/h	⩾11.7	⩾14.1
Heat dissipation (engine radiator)	kW	60	67,5
Heat dissipation (convection)	kW	50	56,25
5. Fuel System			
Governor Type		Electronic	
Fuel Consumption at 25% of generator set p	l/h	8,3	8,90
Fuel Consumption at 50% of generator set pr	l/h	14,2	45,8
Fuel Consumption at 75% of generator set pr	l/h	18,9	21,3
Fuel Consumption at 100% of generator set p	l/h	22,1	25,9
Lowest Fuel Consumption Ratio	g/kW.hr	218	218
6. Intake & Exhaust System (On Standby Output)			
Combustion Air Consumption	m³/min	5,31	6,37
Max. Intake Restriction	kPa	4,9	
Max. Exhaust Temperature (Before Turbo)	°C	650	650
Max. Exhaust Temperature (After Turbo)	°C	550	550
Max. Exhaust Back Pressure	kPa	10	
Exhaust Gas Flow	m³/min	13,53	16,24
Exhaust Flange Diameter	mm	84	
7. Electrical System			
Charging Alternator Voltage	V	14or28	
Charging Alternator Capacity	A	53.6or26.8	
Starting Voltage	V	12or24	
Starting Motor Capacity	KW	4.5or5	
Minimum Battery Capacity	Ah	120	
Minimum Ambient Temperature for Unaided	°C	-10	
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			
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This datasheet has been prepared by Gucbir Generator / Istanbul for Yang Dong engines.