

Ratings @ 0.8 PF		Prime Rating	Stand by Rating
Voltage* ¹	Frequency* ²	KC450* ³	KC500S* ⁴
220/380 V	60 Hz	450 kVA	500 kVA
127/220 V	60 Hz	476 kVA	542 kVA
277/480 V	60 Hz	476 kVA	542 kVA

Dimensions	
Length	3500 mm
Width	1400 mm
Height	2100 mm
Weight	3000 Kg

The above ratings represent the generating set capability guaranteed within $\pm 3\%$ at the reference conditions equivalent to those specified in ISO 8528/1 standard.

Notes

1. The applicable voltage range is 220V, 380V to 480V for 60Hz applications. For other voltages, please consult factory.

2. This generating set is of fixed speed of 1800 rpm.

3. KC450 is the prime power rating of the generating set is where a variable load and unlimited hour usage are applied with an average load factor of 80% of the prime rating over each 24-hour period. Noting that a 10% overload is permitted for 1 hour in every 12-hour operation.

4. KC500S is the standby power rating of the generating set is where a variable load limited to an annual usage up to 500 hours is applied, with 300 hours of which may be continuous running. Noting that no overload is permitted.

5. This rating level at voltage 220/380 is achieved when upsizing alternator to TAL047E

Engine Technical Data

Make & Model	CUMMINS QSZ13-G7		
Cylinders & Arrangement	6; in-line		
Bore & Stroke (mm)	130 x 163		
Induction system	Turbo Charged & Aftercooled		
Combustion	Direct injection		
Cycle	4 stroke		
Compression ratio	17.0:1		
Cooling System	Water cooled		
Displacement	13 liters		
Lube oil capacity	75.3 liters Max		
Coolant capacity	23.1 liters		
Standard governor (Optional)	Electronic		
Engine Speed	1800 rpm		
Fuel Consumption (L/H) @ 100% Load	101.3	@ 50% Load	59.4
Fuel Consumption (L/H) @ 75% Load	82.4	@ 25% Load	35.9
Radiator Cooling Air Flow (m ³ /s)	10.3		
Emissions regulations	For non-regulated territories		
Exhaust temperature °C (max)	454		
Max exhaust gas flow (m ³ /min)	81.7		
Max. allowed back pressure (kPa)	13.0		

The above performance data are valid as per the following specs:

- Diesel Fuel is accorg to BS2869 Class A2 or equivalent.
- Lubricating oil is according to Grade SAE 15W-40 API CI4.
- The coolant should be 50% antifreeze and 50% fresh water.

Alternator Technical Data

Make & Model	Leroy Somer OR Stanford TAL047A		
Frequency / No. of poles	60Hz / 4P	Winding pitch	2/3
Ingress protection	IP23	AVR model	R150
Insulation class	H	Overspeed	2250 R.P.M.
Terminals (Optional)	6 (12)	Voltage regulation	$\pm 1\%$
Excitation system	SHUNT	Coolant air flow	0.9 m ³ /s