

## KC650-KC720S (60 Hz)

Ratings @ 0	.8 PF	Prime Rating	Stand by Rating
Voltage*1	Frequency*2	KC650*3	KC720S*4
220/380 V	60 Hz	650 kVA	720 kVA
127/220 V	60 Hz	677 kVA	740 kVA
277/480 V	60 Hz	677 kVA	740 kVA

4200 mm
1500 mm
2100 mm
5300 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.KC650 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.KC720S 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 TAL047F

Engine Technical Data						
Make & Model	CUMMINS VTA28-G5					
Cylinders & Arrangement	12; 40° Vee					
Bore & Stroke (mm)	140 x 152					
Induction system	Turbo Charged & Aftercooled					
Combustion	Direct injection					
Cycle	4 stroke					
Compression ratio	13.1:1					
Cooling System	Water cooled					
Displacement	28 liters					
Lube oil capacity	83 liters Max					
Coolant capacity	80 liters					
Standard governor (Optional)	Electronic					
Engine Speed	1800 rpm					
Fuel Consumption (L/H) @ 100% Load	154 @ 50% Load 84					
Fuel Consumption (L/H) @ 75% Load	118 @ 25% Load 50					
Radiator Cooling Air Flow (m <sup>3</sup> /s)	17.2					
Emissions regulations	For non-regulated territories					
Exhaust temperature °C (max)	507					
Max exhaust gas flow (m³/min)	122.9					
Max. allowed back pressure (kPa)	10.0					

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 TAL047E / Leroy Somer TAL047F OR Stanford								
Frequency / No. of poles	60Hz / 4P	60Hz / 4P	Winding pitch	2/3	2/3			
Ingress protection	IP23	IP23	AVR model	R150	R150			
Insulation class	Н	Н	Overspeed	2250 R.P.M.	2250 R.P.M.			
Terminals (Optional)	6 (12)	6 (12)	Voltage regulation	±1%	±1%			
Excitation system	SHUNT	SHUNT	Coolant air flow	1.1 m <sup>3</sup> /s	1.1 m <sup>3</sup> /s			