

Ratings @ 0.8 PF			Prime	Stand	Dimensions	
Alternator	Voltage* <sup>1</sup>	Frequency* <sup>2</sup>	KC425* <sup>3</sup>	KC460S* <sup>4</sup>	Length	3200 mm
TAL473A (6S)	All voltages	60 Hz	425.1 kVA 340 Kw	460.8 kVA 368.7 Kw	Width	1100 mm
TAL46H (8S)	220/380 V	60 Hz	400 kVA 320 Kw	440 kVA 352 Kw	Height	2000 mm
TAL46H (6)	127/220 V	60 Hz	400 kVA 320 Kw	440 kVA 352 Kw	Weight	2820 Kg
TAL46H (6S)	277/480 V	60 Hz	425 kVA 340 Kw	460 kVA 368 Kw		

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 380V to 480V for 60Hz applications. For other voltages, please consult factory.

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

3. KC425 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. KC460S 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.

### Engine Technical Data

Make & Model	CUMMINS QSG12-G3		
Cylinders & Arrangement	6; Vertical in-line		
Bore & Stroke (mm)	132 x 144		
Induction system	Turbo charged & Aftercooled		
Combustion	Direct injection		
Cycle	4 stroke		
Compression ratio	17.0:1		
Cooling System	Water cooled		
Displacement	11.8 liters		
Lube oil capacity	34 liters Max		
Coolant capacity	48 liters		
Standard governor	Electronic; Cummins CM2880		
Engine Speed	1800 rpm		
Fuel Consumption (L/H) @ 100% Load	85	@ 50% Load	43
Fuel Consumption (L/H) @ 75% Load	62	@ 25% Load	24
Radiator Cooling Air Flow (m <sup>3</sup> /s)	8.4		
Emissions regulations	Fuel optimized		
Exhaust temperature °C (max)	530		
Max exhaust gas flow (m <sup>3</sup> /min)	65		
Max. allowed back pressure (kPa)	10.2		

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 TAL0473A - [TAL46H]		
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 (Optional)	SHUNT (AREP +or PMG)	Coolant air flow	1.1 m <sup>3</sup> /s - [0.58 m <sup>3</sup> /s]