

Ratings @ 0.8 PF			Prime	Stand
Alternator	Voltage* <sup>1</sup>	Frequency* <sup>2</sup>	IMG425* <sup>3</sup>	IMG460S* <sup>4</sup>
TAL473A (6S)	All voltages	60 Hz	425.1 kVA 340 Kw	460.8 kVA 368.7 Kw
TAL46H (8S)	220/380 V	60 Hz	400 kVA 320 Kw	440 kVA 352 Kw
TAL46H (6)	127/220 V	60 Hz	400 kVA 320 Kw	440 kVA 352 Kw
TAL46H (6S)	277/480 V	60 Hz	425 kVA 340 Kw	460 kVA 368 Kw

Dimensions	
Length	3200 mm
Width	1100 mm
Height	2000 mm
Weight	2820 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 380V to 480V for 60Hz applications. For other voltages, please consult factory.

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

3. IMG425 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. IMG460S 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 TAL0473A - [TAL46H] OR Stamford		
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]

