

| Ratings @ 0.8 PF      |                         | Prime Rating        | Stand by Rating      | Dimensions |         |
|-----------------------|-------------------------|---------------------|----------------------|------------|---------|
| Voltage* <sup>1</sup> | Frequency* <sup>2</sup> | KC500* <sup>3</sup> | KC550S* <sup>4</sup> | Length     | 3700 mm |
| 230/400 V             | 50 Hz                   | 500 kVA<br>400 Kw   | 550 kVA<br>440 Kw    | Width      | 1400 mm |
|                       |                         |                     |                      | Height     | 2100 mm |
|                       |                         |                     |                      | Weight     | 4000 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

- The applicable voltage range is 380V to 415V for 50Hz applications. For other voltages, please consult factory.
- This generating set is of switchable speed of 1500/1800 rpm.
- KC500 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.
- KC550S 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 KTA19-G4            |            |    |
|---|-----------------------------|------------|----|
| Cylinders & Arrangement                       | 6; Vertical in-line         |            |    |
| Bore & Stroke (mm)                            | 159 x 159                   |            |    |
| Induction system                              | Turbo charged & Aftercooled |            |    |
| Combustion                                    | Direct injection            |            |    |
| Cycle   | 4 stroke                    |            |    |
| Compression ratio                             | 13.9:1                      |            |    |
| Cooling System                                | Water cooled                |            |    |
| Displacement                                  | 18.9 liters                 |            |    |
| Lube oil capacity                             | 50 liters Max               |            |    |
| Coolant capacity                              | 93 liters                   |            |    |
| Standard governor                             | Electronic; Cummins EFC     |            |    |
| Engine Speed                                  | 1500 rpm                    |            |    |
| Fuel Consumption (L/H) @ 100% Load            | 107                         | @ 50% Load | 57 |
| Fuel Consumption (L/H) @ 75% Load             | 82                          | @ 25% Load | 30 |
| Radiator Cooling Air Flow (m <sup>3</sup> /s) | 9.91                        |            |    |
| Emissions regulations                         | Fuel optimized              |            |    |
| Exhaust temperature °C (max)                  | 557                         |            |    |
| Max exhaust gas flow (m <sup>3</sup> /min)    | 96.3                        |            |    |
| 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 TAL0473C |                    |                       |
|------------------------------|----------------------------------|--------------------|-----------------------|
| Frequency / No. of poles     | 50Hz / 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   | 0.9 m <sup>3</sup> /s |