

**TATA MOTORS**  
**GENSETS**



More Than  
**ENERGY &**  
**ENGINEERING**

## GENERATOR SET SPECIFICATIONS

|                                         |             |             |
|-----------------------------------------|-------------|-------------|
| Model                                   | TMG100      | TMG125      |
| Duty                                    | Prime       | Prime       |
| Power Rating kVA / kW <sub>e</sub>      | 100/80      | 125/100     |
| No. of Phases                           | 3 Ph        | 3 Ph        |
| Output Voltage and Frequency (V and Hz) | 415V - 50Hz | 415V - 50Hz |
| Power Factor                            | 0.8         | 0.8         |
| Current (3 phase) (A)                   | 137         | 174         |
| RPM                                     | 1500        | 1500        |
| Wet Weight (kg) (approx.)               | 2050        | 2100        |

## ENGINE SPECIFICATIONS

|                                    |                          |                          |
|------------------------------------|--------------------------|--------------------------|
| Make                               | TATA MOTORS LMTIED       |                          |
| Model                              | 697TC60                  | 697TC60                  |
| Certified Power for Rated kVA (hp) | 160                      | 160                      |
| Cooling                            | Liquid Cooled            | Liquid Cooled            |
| Aspiration                         | Turbocharged Intercooled | Turbocharged Intercooled |
| No. of cylinders                   | 6                        | 6                        |
| Bore (mm) x Stroke (mm)            | 97 x 127                 | 97 x 127                 |
| Compression ratio                  | 17.5:1                   | 17.5:1                   |
| Displacement (litre)               | 5.7                      | 5.7                      |
| Fuel                               | High Speed Diesel        | High Speed Diesel        |
| Fuel System                        | CRDi                     | CRDi                     |
| Governing                          | Electronic - G3          | Electronic - G3          |
| Starting system                    | 12V                      | 12V                      |
| Lube oil specification             | CK4 15W40                | CK4 15W40                |
| Lube oil sump capacity (litre)     | 16                       | 16                       |
| Total coolant capacity (litre)     | 23                       | 23                       |
| Exhaust pipe diameter (mm)         | 90                       | 90                       |

## ALTERNATOR SPECIFICATIONS

|                            |                                   |                      |
|----------------------------|-----------------------------------|----------------------|
| Make                       | STAMFORD / MECC ALTE / EQUIVALENT |                      |
| SAE Size                   | 3/10                              | 3/10                 |
| Enclosure                  | IP 23                             | IP 23                |
| Voltage regulation (Max.)  | +/- 1%                            | +/- 1%               |
| Class of Insulation        | Class H                           | Class H              |
| Winding Pitch              | 2/3                               | 2/3                  |
| Stator Winding             | Double Layer Lap                  | Double Layer Lap     |
| Rotor                      | Dynamically Balanced              | Dynamically Balanced |
| Maximum Unbalanced Load    | Upto 25%                          | Upto 25%             |
| Telephonic Harmonic factor | < 2%                              | < 2%                 |

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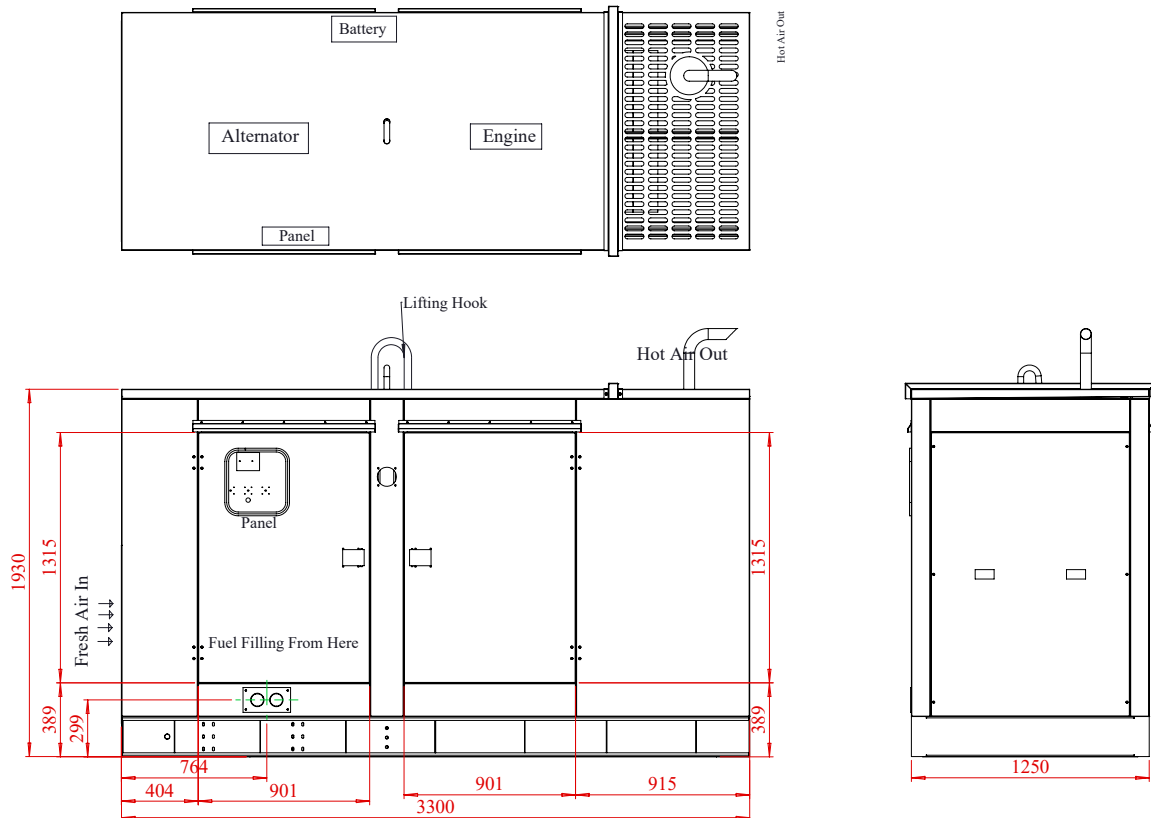
| Genset Model | Rating (kVA) | Length (mm) | Width (mm) | Height (mm) | Def Tank Capacity (litre) | Standard Fuel Tank Capacity (litre) |
|--------------|--------------|-------------|------------|-------------|---------------------------|-------------------------------------|
| TMG100       | 100          | 3300        | 1250       | 1930        | 25                        | 250                                 |
| TMG125       | 125          | 3300        | 1250       | 1930        | 25                        | 250                                 |

**Note:** Product improvement is a continuous process hence data given is subject to change without any prior notice.

### LATEST TECHNOLOGY AND UNMATCHED PERFORMANCE

- 1) TATA 697 series is a CPCB IV+ approved engine having bore and stroke of 97mm x 128mm. This 5.7 litre engine and world class Stamford/Mecc alte or equivalent alternator makes an outstanding diesel genset.
- 2) Advanced inline-cylinder technology to meet latest emission norms without any after-treatment device.
- 3) Best in class performance and lowest after sales service cost
- 4) High altitude capabilities. No derration from -10 degree celcius to +50 degree celcius
- 5) Compact size, Smart aesthetic and superior finish
- 6) Improved fuel efficiency over CPCB II range of gensets

GA Drawing



## CPCB IV+ BENEFITS

- 1) All engines are equipped with Bosch CRDi Fuel Pumps for high precision, better engine response, better cold start response and for delivering a smooth and smoke free performance
- 2) Addition of Diesel Oxidation Catalyst (DOC) and Exhaust Gas Recirculation (EGR) Technology
- 3) Addition of Selective Catalyst Reduction (SCR) device which is designed to reduce Nitrogen Oxide (Nox) emission and emits Nitrogen + Water in to the environment
- 4) 25 Litre DEF tank with first fill is provided
- 5) 90% reduction in Particulate Matter (PM)
- 6) 87% reduction in Hydrocarbons (HC) & Nitrogen Oxide (Nox)
- 7) Electronic interface with Engine control unit (ECU) which maps data and diagnoses faults in real time and displays all faults over the Deepsea controller via pre programmed fault codes.
- 8) Top in class G3 electronic governing across all range of TATA engines
- 9) Genset can be plugged with TATA Diagnostic Software via a tool to re-flash or trouble shoot any error in real time

## ENVIRONMENT FRIENDLY

- 1) Approved by Central Pollution Control Board of India latest emission norms; CPCB IV+
- 2) Class defining technology engine is designed to meet stringent exhaust emission tests as per revised MoEF norms, thus offering environment friendly power.

## GENSET BRIEF

- 1) Best in class jerk loading capacity
- 2) Alternator is compliance to BS & IS standards with single bearing & brushless type technology and H class insulation and IP23 protection.
- 3) Engine and alternator are mounted on a common MS fabricated base frame with AVM pads. Base frame with integral fuel tank is provided with drain plug, air vent, inlet and outlet connection, level indicator and provision for cleaning.
- 4) Acoustic is specially designed to meet stringent MoEF/ CPCB norms of 75 dBA @ 1mtr at 75% load under free field conditions.
- 5) All the major components – the engine, alternator, control panel, canopy and accessories are designed, manufactured or sourced and tested at per high-quality standard.
- 6) PAN India service support network.
- 7) All these things put together, POWERLUX offers you SINGLE WINDOW SUPPORT.

## DEESEA CONTROLLER

DeeSEA (DSE) controller is Microprocessor based having inbuilt Auto Logic Feature and has a graphical LCD display showing following parameters :

- 1) Phase, Voltage & Frequency
- 2) Ampere per phase
- 3) kVA, kW, kWh, Power Factor
- 4) Lube oil pressure & engine temperature
- 5) RMP, Run Hours, Fuel Level
- 6) Battery charge Condition
- 7) Over or under speed voltage/speed
- 8) Low Fuel Level
- 9) DEF Level
- 10) Fault codes signalling what fault ECU has diagnosed and need attention
- 11) A Fault Finding chart having all fault icons makes it easier to understand the breakdown for operator and help providing faster solution to the user.
- 12) The Control panel is equipped with hooter alarm to alert breakdowns

## TATA REMOTE MONITORING SYSTEM

- 1) With TATA RMS the genset will be at your fingertips
- 2) Real time visibility and check of parameters
- 3) Keep a check of your fuel level, DEF level
- 4) Track run time anywhere, anytime and get reports on performance and usage being done
- 5) Get notifications for due service and breakdowns
- 6) Check fuel consumption and past consumption trends
- 7) Give access to 10 different users with no extra cost for 1 genset and add more gensets under your fleet on same application

## OPTIONAL

- 1) Cold Start Kit