

## 82.5 kVA - 200 kVA GENSETS

# Gensets powered by best-in-class Engine, Alternator & Controller

### Mahindra mPOWER Engine

- Higher block loading capacity
- Linear fuel consumption
- Low ownership cost
- Mechanical / Common rail fuel injection system
- Modular cylinder head for easy serviceability

#### **Genset Controller**

Premium controller that delivers accurate metering, best-in-class protection for optimum genset performance. With Genset controller, the genset is always protected against breakdowns from electrical or mechanical flaws and thereby ensures maximum uptime.

#### Key features

- Compatible with Auto Mains Failure facility
- 500 event log memory storage
- Comes with RS 485 port for modbus communication as standard scope
- Activation time delay for oil pressure, coolant temperature, voltage and frequency faults
- Routine maintenance & service alerts
- 5 configurable inputs
- Sleep mode
- Remote start & stop facility

#### Genset Monitoring (Key Parameters)

- Generator/load power (kW, kVA, kVAr, pf), generator/load current, battery voltage
- RPM, running hours, oil pressure, engine temperature and fuel level

### Genset Protection (Key Parameters)

- High engine temperature, low oil pressure, engine over/under speed
- Over current, over/under voltage, Charging alternator low voltage

#### **Alternator**

- Brushless type, screen protected, revolving field, self-excited alternator conforming to IS/IEC 60034-1
- 3 Phase reconnect type winding with 12 terminals brought out for connection
- Superior winding for harmonic reduction
- Epoxy coating for consistent performance in all weather conditions
- Better transient response capability

#### **Acoustic Enclosure**

- Aesthetically designed at Mahindra Research Valley
- Designed by using latest technology aids like Computer aided Engineering (CAE), Noise-Vibration Harshness Engineering (NVH) and Computational Fluid Dynamics Engineering (CFD) which resulted in lowest foot print & lowest noise levels

#### **Optional Accessories**

PMG alternator, RTD/BTD Space Heater, Coolant / Oil heater, Heavy duty air cleaner, synchronization. For more details kindly contact our authorised representative











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### **Genset Specification**



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|--|--|---|--|---|---|---|
| Genset Prime Rating (kVA)  | 82.5   | 100   | 125                                      | 160   | 180   | 200   |
| Genset Prime Rating (KW)   | 66   | 80  | 100                                      | 128   | 144   | 160   |
| Phase/Voltage (V)  | 3/415  |   |  |   |   |   |
| Power Factor (lagging)   | 0.8  |   |  |   |   |   |
| Current (A)  | 115  | 139   | 174                                      | 223   | 251   | 278   |
| Frequency (Hz) & RPM   | 50/1500  |   |  |   |   |   |
| Governing class  | G2 as par ISO 8528 Part V                          |   |  |   |   |   |
| Starting system  | 12 V DC Elec                                       | 12 V DC Elec                                    | 24 V DC Elec                             | 24 V DC Elec                                    | 24 V DC Elec                                    | 24 V DC Elec                                    |
| Fuel tank capacity in liters   | 200  | 200   | 219                                      | 300   | 400   | 400   |
| Canopy dimensions w/o Silence<br>(L x W x H*) (mm) approx  | er 3200 x 1200<br>x 1600 / 2233<br>(upto silencer) | 3200 x 1200<br>x 1600 / 2233<br>(upto silencer) | 3750 x 1030<br>x 2178<br>(upto silencer) | 3750 x 1300<br>x 1800 / 2569<br>(upto silencer) | 4300 x 1400<br>x 1800 / 2458<br>(upto silencer) | 4300 x 1400<br>x 1800 / 2458<br>(upto silencer) |
| Genset Weight in Kg (approx.)  | 1700   | 1750  | 1900                                     | 2350  | 2750  | 2800  |
|  | Engine Specification                               |   |  |   |   |   |
| Make / Series  | Mahindra mPOWER                                    |   |  |   |   |   |
| Model  | mPower41015G                                       | mPower41265G                                    | mPower61565G                             | mPower61995G                                    | mPower62235G                                    | mPower62485G                                    |
| Rated Power at<br>100% Load (HP)   | 101  | 126   | 156                                      | 199   | 223   | 248   |
| Aspiration   | TCA  | TCA   | TCA                                      | TCA   | TCA   | TCA   |
| No. of cylinders   | 4  | 4   | 6  | 6   | 6   | 6   |
| Bore x Stroke (mm)   | 105 x 137  | 105 x 137                                       | 105 x 137                                | 105 x 137                                       | 105 x 137                                       | 105 x 137                                       |
| Displacement (lit)   | 4.8  | 4.8   | 7.2                                      | 7.2   | 7.2   | 7.2   |
| Fuel consumption @ 75%<br>load (lit/hr) ^  | 13.9   | 17.3  | 21.4                                     | 27.8  | 28.7  | 33.3  |
| Fuel consumption @ 100%<br>load (lit/hr) ^   | 18.1   | 23.1  | 28                                       | 36.7  | 38.2  | 40.8  |
| Lube oil specification   | 15W40 API CI4+                                     | 15W40 API Cl4+                                  | 15W40 API CI4+                           | 15W40 API CI4+                                  | 15W40 API CI4+                                  | 15W40 API CI4+                                  |
| Total lubrication system capacity (liters)   | 13.5   | 13.5  | 20.2                                     | 20.2  | 20.2  | 20.2  |
| Lube oil consumption @<br>full load <sup>\$</sup>  | 0.1% of Fuel Consumption                           |   |  |   |   |   |
| Lube oil change period (hrs.)  | 500  |   |  |   |   |   |
| Radiator coolant capacity (liters  | ) 19   | 19  | 22.5                                     | 25  | 24  | 24  |
|  |  |   | Alte                                     | ernator   |   |   |
| Make   | Mahindra Powerol                                   |   |  |   |   |   |
| Enclosure Type   | IP23   |   |  |   |   |   |
| Voltage regulation   | ±1%  |   |  |   |   |   |
| Class of insulation  | Class H  |   |  |   |   |   |
| Maximum Unbalanced<br>Load across Phases   | 25%  |   |  |   |   |   |
| Notes:   |  |   |  |   |   |   |

Above specifications are subject to change without prior notice due to continuous product improvements

All engines & alternators conform to respective IS standards
All the genset specifications conform to ISO 8528 standard
Fuel - High Speed Diesel (HSD IS 1460 : 2005)

^ Considering 0.845 specific gravity of diesel, 5% tolerance

\$ Considering 0.89 specific gravity of oil

\* For Standby duty, contact Powerol authorized representative
All specifications are at standard NTP operating conditions

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Dealer Stamp









