

# POWERING THE GROWTH JOURNEY OF THE NATION

High Performance Gensets are now

CPCBIV + Compliant

*Presenting*  
**10 kVA -  
320 kVA**



Range available for all Diesel & Gas Gensets



Low Maintenance



400 Sales & Service  
Touch Points



Product Life  
Cycle Support



Best-in-class  
fuel efficiency



Superior  
performance



Excellent block  
loading capacity



IOT  
Feature

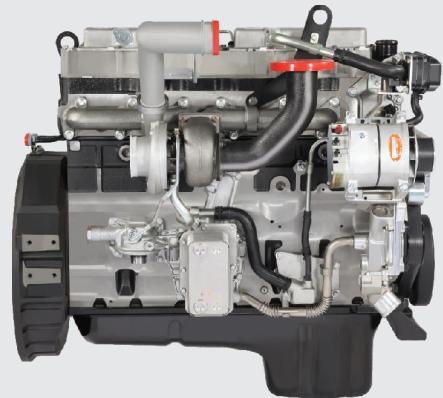
## Product Salient Feature

- Low operating & maintenance cost with service interval of 500Hrs/ 1 Year
- Wide Service Support Network across PAN India
- Supply to various rugged applications
- Proven engine in industry
- CPCB IV+ Complaint
- Remote Monitoring System as a standard feature
- Single Window Warranty Policy
- Sales, Service, Spares, Warranty under one umbrella
- Low foot print
- >Standard warranty of 2 Years/ 5000 Hours whichever is earlier for complete genset
- >5C Warranty for 5 Years/ 5000 Hours whichever is earlier



## Engine

- Mahindra Electronic Engine, In-Line 4 stroke, radiator cooled engine
- CRDI engine with Low fuel consumption
- Dry type air cleaner with service indicator
- First fill of lube oil, coolant & DEF
- Electrical starter motor with soft start system
- Battery charging alternator
- 1 X 12 Volts DC battery



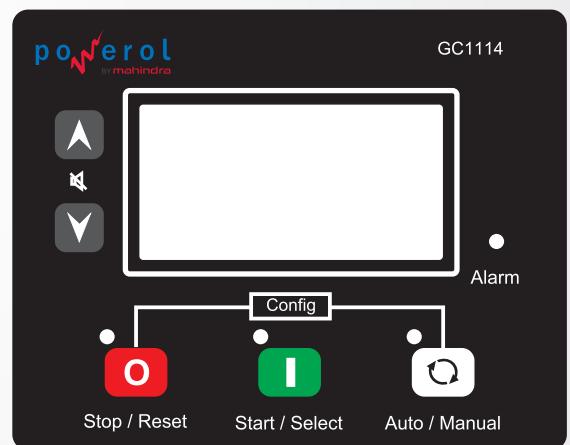
## Alternator

- Brushless type, screen protected, revolving field,
- self-excited alternator conforming to IS/ IEC 60034-1
- A reliable long life with superior class 'H' insulation
- Higher motor starting capability.
- Better transient response
- Ease of maintenance with integrated components and outboard Exciter/Rotating Rectifier
- Lighter and more compact with sealed bearings for lesser maintenance and longer life



## Controller

- SEDEMAC GC111X is a powerful ARM microprocessor based genset monitoring, metering and control system with full graphics LCD display for easy front panel access
- AMF, manual and remote start / stop modes for 1-ph & 3-ph gensets
- Backlit and full graphics display with power saving feature
- Engine parameter monitoring -Lube oil pressure, Engine coolant temperature, Fuel level, Battery voltage, Engine running hours
- AC Alternator parameter monitoring -Voltage L-N & L\_L,
- Current, kW, kVA [Phase & Total], Frequency, kWh, PF
- Genset Protection:
  - Engine: Low lube oil pressure, High
  - coolant temperature, Battery High/Low Volts, Fail to
  - Start, Sensor failure, Low fuel level, Overspeed
  - AC Alternator: Over/Under Voltage, Over/Under
  - Frequency, Loss of AC sensing, Overfrequency, Over Current,
  - kW Overload, Unbalancing load
  - Maintenance notification based on Engine Run Hour & due date
  - Communication: USB port, RS485, CAN
  - Fully configurable via front panel



## Acoustic Enclosure

- Specially designed to meet stringent MoEF/ CPCB norms
- Designed to operate in extreme climatic conditions in temperatures ranging from -10 deg to 55 deg without any external aid
- Superlative fade resistant paint can last longer in tough weather conditions
- Draw out type fuel tank for easy maintenance
- Fire retardant acoustic and insulation material (PU Foam/Rockwool) for better safety
- Lowest foot print
- Easy access for servicable parts
- Pretreatment process with UV resistant powder coating of all parts
- After Treatment System (ATS) for Emission compliance
- Engine and alternator are mounted on a common MS
- fabricated base frame with AVM pads
- Ease in fuel filling (Outside Canopy)



## Control Panel

- Powder Coated Control Panel for weather-proof and longlasting finish. The control panel consists of the following parts:
- SEDEMAC GC111X Controller
- Power Cable/ Bus bars with suitable capacity with incoming/ outgoing terminals
- Indicating lamps for 'Load ON' and 'Set Running'
- Fuses/MCB's for control circuit safety protection
- MCCB of suitable rating with short circuit protections
- Battery Charger

## Optional Accessories

- Cold Starting System (Temperature range upto -20 deg.)
- AMF/ATS/Sync. Controller/Sync. Panel
- PMG Alternator, Space heater, RTD/BTD

## Applications



Clinics



Industries



Residences



Small Offices



## TECHNICAL SPECIFICATION

Genset Rating (kVA)	10	*15	15	*20	20	25*
DG Model	M10DR	MB15DR	M15DR	MB20DR	M20DR	MB25DR
Power Rating (kW)	8	12	12	16	16	20
No. of Phases	1/3	1/3	1/3	1/3	1/3	1/3
Output Voltage (V)	230/415	230/415	230/415	230/415	230/415	230/415
Power Factor (lagging)	0.8	0.8	0.8	0.8	0.8	0.8
Current (A) (1Phase / 3Phase)	43.5/13.9	65.2/20.9	65.2/20.9	87/27.8	97.8 / 31.3	108.7/34.8
Frequency (Hz)/ RPM	50/1500	50/1500	50/1500	50/1500	50/1500	50/1500
Governing Class	G2	G2	G2	G2	G3	G3
Starting System	12 V DC electrical	12 V DC electrical	12 V DC electrical			
Fuel Tank Capacity (lit)	55	55	75	75	75	75
Genset Dimension (LxWxH \$\$) (mm) Approx.	1750 X 900 X 1250	1750 X 900 X 1250	1990 X 900 X 1330	1990 X 900 X 1330	1990 X 900 X 1330	1990 X 900 X 1330
Engine Specification						
Make	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra
Model	M2155G1	M2155G2	M3205G1	M3205G2	M3205G3	M3205G3
Fuel System	Mechanical	Mechanical	Mechanical	Mechanical	Electronic	Electronic
Rated Power Output# (HP)	16.3	18	22.7	25.2	30.5	30.5
Aspiration	Naturally Aspirated	Naturally Aspirated	Naturally Aspirated	Naturally Aspirated	Turbocharged	Turbocharged
No. of Cylinders	2	2	3	3	3	3
Bore x Stroke (mm)	88.9 x 120	88.9 x 120	88.9 x 110	88.9 x 110	88.9 x 110	88.9 x 110
Displacement (Ltr)	1.5	1.5	2.0	2.0	2.0	2.0
Lube Oil Specification	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+
Total Lube Oil capacity (lit)	5	5	6.2	6.2	7	7
Lube Oil Change Period (hrs.)	500Hrs	600Hrs	600Hrs	600Hrs	600Hrs	600Hrs
Radiator Coolant Capacity (lit)	5.5	5.5	5.5	5.5	5.5	5.5
Alternator Specification						
Make	LS/CG	LS/CG	LS/CG	LS/CG	LS/CG	LS/CG
Enclosure Type	IP23	IP23	IP23	IP23	IP23	IP23
Voltage Regulation	+/- 1%	+/- 1%	+/- 1%	+/- 1%	+/- 1%	+/- 1%
Class of Insulation	H	H	H	H	H	H
Maximum Unbalanced load across Phases	25%	25%	25%	25%	25%	25%



Low Fuel Consumption

Low Ownership Cost

Long Life Reliable

Easy Serviceability

TECHNICAL SPECIFICATION

Genset Rating (kVA)	25	30	*35	40	*45	50
DG Model	M25DR	M30DR	MB35DR	M40DR	MB45DR	M50DR
Power Rating (kW)	20	24	28	32	36	40
No. of Phases	1/3	1/3	1/3	1/3	1/3	3
Output Voltage (V)	230/415	230/415	230/415	230/415	230/415	415
Power Factor (lagging)	0.8	0.8	0.8	0.8	0.8	0.8
Current (A) (1Phase / 3Phase)	108.7/34.8	130.4/ 41.7	152.2 / 48.7	173.9 / 55.6	195.7/62.6	69.6
Frequency (Hz)/ RPM	50/1500	50/1500	50/1500	50/1500	50/1500	50/1500
Governing Class	G3	G3	G3	G3	G3	G3
Starting System	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical	12 V DC electrical
Fuel Tank Capacity (lit)	75	115	115	115	115	156
Genset Dimension (LxWxH \$\$) (mm) Approx.	1990 X 900 X 1330	2325 X 980 X 1330	2325 X 980 X 1330	2325 X 980 X 1330	2325 X 980 X 1330	2600 X 1130 X 1575
Engine Specification						
Make	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra
Model	M3205G4	M3205G5	M3205G5	M4275G1	M4275G1	V4355G1
Fuel System	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Rated Power Output# (HP)	35.1	40.0	40.0	51.8	51.8	65.4
Aspiration	Turbocharged	Turbocharged & Intercooled				
No. of Cylinders	3	3	3	4	4	4
Bore x Stroke (mm)	88.9 x 110	88.9 x 110	88.9 x 110	88.9 X 110	88.9 X 110	96 x 122
Displacement (Ltr)	2.0	2.0	2.0	2.7	2.7	3.5
Lube Oil Specification	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+
Total Lube Oil capacity (lit)	7	7	7	10.5	10.5	8.5
Lube Oil Change Period (hrs.)	600Hrs	600Hrs	600Hrs	600Hrs	600Hrs	600Hrs
Radiator Coolant Capacity (lit)	9.5	9.5	9.5	9.5	9.5	15
Alternator Specification						
Make	LS/CG	LS/CG	LS/CG	LS/CG	LS/CG	LS/CG
Enclosure Type	IP23	IP23	IP23	IP23	IP23	IP23
Voltage Regulation	+/- 1%	+/- 1%	+/- 1%	+/- 1%	+/- 1%	+/- 1%
Class of Insulation	H	H	H	H	H	H
Maximum Unbalanced load across Phases	25%	25%	25%	25%	25%	25%

- 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
- All Specifications are at Standard NTP operating conditions

- Considering 0.845 Specific Gravity of diesel, + 5 % Tolerance
- Fuel –High Speed diesel (HSD IS 1460:2005)
- Represent the Standby Ratings
- Considering 0.89 Specific Gravity of Oil Engine Power will have + 5 % Tolerance
- Height Without Silencer

TECHNICAL SPECIFICATION

Genset Rating (kVA)	58.5	75	82.5	100	125	160
DG Model	M58.5DR	M75DR	M82.5DR	M100DR	M125DR	M160DR
Power Rating (kW)	46.8	60	66	80	100	128
No. of Phases	3	3	3	3	3	3
Output Voltage (V)	415	415	415	415	415	415
Power Factor (lagging)	0.8	0.8	0.8	0.8	0.8	0.8
Current (A) (1Phase / 3Phase)	81.3	104.3	114.8	139	174	222
Frequency (Hz)/ RPM	50/1500	50/1500	50/1500	50/1500	50/1500	50/1500
Governing Class	G3	G3	G3	G3	G3	G3
Starting System	12 V DC electrical	12 V DC electrical	12 V DC electrical	12	12	12
Fuel Tank Capacity (lit)	156	169	169	250	250	388
Genset Dimension (LxWxH \$\$) (mm) Approx.	2600 X 1130 X 1575	3190X 1225 X 1575	3190X 1225 X 1575	3950 X 1350 X 1425	3950 X 1350 X 1425	4201 X 1400 X 1745
Engine Specification						
Make	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra	Mahindra
Model	V4355G2	V4355G3	V4355G4	H4485G2	H4485G1	H6725G2
Fuel System	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Rated Power Output# (HP)	75.5	101.3	101.3	126	156	199
Aspiration	Turbocharged & Intercooled	Turbocharged & Intercooled	Turbocharged & Intercooled	TCIC	TCIC	TCIC
No. of Cylinders	4	4	4	4	4	6
Bore x Stroke (mm)	96 x 122	96 x 122	96 x 122	105 X 137	105 X 137	105 X 137
Displacement (Ltr)	3.5	3.5	3.5	4.7	4.7	7.2
Lube Oil Specification	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+	SAE 15W40 CI4+
Total Lube Oil capacity (lit)	8.5	11.5	11.5	13.5	13.5	20.2
Lube Oil Change Period (hrs.)	600Hrs	600Hrs	600Hrs	500Hrs	500Hrs	500Hrs
Radiator Coolant Capacity (lit)	15	19	19	19	19	25
Alternator Specification						
Make	LS/CG	LS/CG	LS/CG	LS/CG/Equivalent	LS/CG/Equivalent	LS/CG/Equivalent
Enclosure Type	IP23	IP23	IP23	IP23	IP23	IP23
Voltage Regulation	+/- 1%	+/- 1%	+/- 1%	+/- 1%	+/- 1%	+/- 1%
Class of Insulation	H	H	H	H	H	H
Maximum Unbalanced load across Phases	25%	25%	25%	25%	25%	25%

TECHNICAL SPECIFICATION

Genset Rating (kVA)	180	200	250	320
DG Model	M180DR	M200DR	M250DR	M320DR
Power Rating (kW)	144	160	200	256
No. of Phases	3	3	3	3
Output Voltage (V)	415	415	415	415
Power Factor (lagging)	0.8	0.8	0.8	0.8
Current (A) (1Phase / 3Phase)	250	278	348	445
Frequency (Hz)/ RPM	50/1500	50/1500	50/1500	50/1500
Governing Class	G3	G3	G3	G3
Starting System	12	12	24	24
Fuel Tank Capacity (lit)	388	388	425	570
Genset Dimension (LxWxH \$\$) (mm) Approx.	4201 X 1400 X 1745	4201 X 1400 X 1745	4750 X 1600 X 2000	4750 X 1600 X 2000
Engine Specification				
Make	Mahindra	Mahindra	Mahindra Heavy engines ltd	Mahindra Heavy engines ltd
Model	H6725G3	H6725G4	H6935G1	H6935G2
Fuel System	Electronic	Electronic	Electronic	Electronic
Rated Power Output# (HP)	223	247	310	390
Aspiration	TCIC	TCIC	TCIC	TCIC
No. of Cylinders	6	6	6	6
Bore x Stroke (mm)	105 X 137	105 X 137	116.6 X 146.1	116.6 X 146.1
Displacement (Ltr)	7.2	7.2	9.3	9.3
Lube Oil Specification	SAE 15W40 CI4+	SAE 15W40 CI4+	15W40 Ci4+	15W40 Ci4+
Total Lube Oil capacity (lit)	20.2	20.2	35	35
Lube Oil Change Period (hrs.)	500Hrs	500Hrs	500Hrs	500Hrs
Radiator Coolant Capacity (lit)	24	24	31	45
Alternator Specification				
Make	CG/LS/Equivalent	CG/LS/Equivalent	CG/LS/Equivalent	CG/LS/Equivalent
Enclosure Type	IP23	IP23	IP23	IP23
Voltage Regulation	+/- 1%	+/- 1%	+/- 1%	+/- 1%
Class of Insulation	H	H	H	H
Maximum Unbalanced load across Phases	25%	25%	25%	25%



**powerol**  
BY mahindra

**Mahindra Powerol**

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