

Reliable. Economical. Total Solution.



**Diesel Generator Set
10 to 500 kVA
CPCB-II Compliant**

SMS GENSET TO 56767
(For sales enquiries)

Toll Free No. 1800 266 0670
(For service and support)

Greaves Cotton Limited
Auxiliary Power Business

Company Introduction

- Among India's leading and one of the oldest engineering companies.
- Core Competencies: Diesel / Petrol Engines, Gensets, Pump-sets and Construction Equipment.
- Manufacturing 5 lakh engines annually.
- More than 80% of diesel 3-wheelers run on Greaves engines in India.
- 11 state-of-the-art manufacturing facilities spread across the country.
- Significant Strengths: Technology. Value. Reach.
- Strong team of more than 200 R&D professionals, with excellent infrastructure.
- Extensive Marketing and Service Network: Over 1200 sales & service centres across India.
- Global footprint, with local presence in South-East Asia, Africa and Middle-East.

Auxiliary Power Business

- Over 5 decades of experience in generator sets.
- Wide product range from 10kVA to 500kVA.
- CPCB-II Compliant Gensets: Fuel-efficient, rugged and reliable.
- Total solutions by single point of contact for sales & service: anytime anywhere.
- State-of-the-art technology centre at Pune for multi-cylinder / higher HP engines and gensets.
- Testing facility equipped with sophisticated equipment is among the best in the industry and can test engines up to 2 MW.
- Segments we serve: Banks, Education, Government, Petroleum, Malls, Hospitals, Hotels, Industries, Manufacturing, Railways, Infrastructure, Engineering, Dairy, Telecom, Food Processing, Textile and many more.

Greaves - Few Prestigious Installations

- Greaves Gensets powered India's Antarctica Mission in 1982, operating continuously at sub-zero temperature.
- Power cars of the premium air-conditioned trains in the Indian Railways are powered by Greaves Gensets.
- Greaves Gensets (300 units) installed along the India-Bangladesh border help armed forces everyday from sunset to sunrise to keep a vigil.
- Supporting power requirement of India's largest project in the Oil & Gas industry.



Model	GPWII-10	GPWII-15	GPWII-20	GPWII-25	GPWII-30	GPWII-40	GPWII-45	GPWII-50	GPWII-62.5	GPWII-75
Power Rating (kVA/kW)	10 / 8	15/12	20/16	25/20	30/24	40/32	45/36	50/40	62.5/50	75/60
No. of Phases	1/3	1/3	1/3	1/3	3	3	3	3	3	3
Power Factor	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Max. Load Current @ 0.8 PF (Amps)	43.4/13.9	65.2/20.8	86.9/27.8	108.6/34.7	130/41.7	55.6	62.6	69.6	87	104.3
Battery Rating	12V,88AH	12V,88 AH	12V,88 AH	12 V 88 AH	12 V 88 AH	12 V 88 AH	12 V 88 AH	12 V 88 AH	12 V 88 AH	12 V 88 AH
Integral Fuel Tank Capacity (Ltrs)	100	100	100	100	100	120	120	150	150	150
Engine										
Make	Escorts	Escorts	Escorts	Escorts	Escorts	Greaves	Greaves	Greaves	Greaves	Greaves
Model	G-15-II	G-15-II	G-20-II	G-30-II	G-30-II	3G11TAG23	3G11TAG23	4G11TAG22	4G11TAG22	4G11TAG22
Cooling	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Aspiration	Natural	Natural	Natural	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled
No. of Cylinders	2	2	3	3	3	3	3	4	4	4
RPM	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Compression Ratio	17.5	17.5	17.5	17.5	17.5	17	17	17	17	17
Bore x Stroke mm	95X110	95X110	91X110	91X110	91X110	105X130	105X130	105X130	105X130	105X130
Cubic Capacity (Ltrs)	1.96	1.96	2.146	2.146	2.146	3.375	3.375	4.5	4.5	4.5
Power (HP)	21.6	21.6	25.2	42	42	59	59	101.3	101.3	101.3
Power (kW)	15.9	15.9	18.5	31.2	31.2	43.4	43.4	74.5	74.5	74.5
Governing	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1
Starting System	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE
Lube Oil Specification	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4
Lube Oil Sump capacity (Ltrs)	5	5	6	6	6	9	9	11	11	11
Alternator										
Voltage	230/415	230/415	230/415	230/415	230/415	230/415	415	415	415	415
Frequency	50	50	50	50	50	50	50	50	50	50
Voltage Regulation (max.)	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%
Insulation	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H
Enclosure	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23
Genset Installation										
Al. Armoured cable (3.5 Core, Sq.mm) * are with 1 core x no of run for copper cable	16 x 2* / 2.5 x 4*	16 x 2* / 2.5 x 4*	35 x 2* / 6 x 4*	35 x 2* / 25 x 1	35 x 2* / 25 x 1	25 x 1	25 x 1	25 x 1	70 x 1	95 x 1
Exh. Pipe Size (mm)	60 NB	60 NB	60 NB	75 NB	75 NB	75 NB	75 NB	75 NB	75 NB	75 NB
Dimensions										
Length x Width x Height (mm)	2000 x 950 x 1375	2000 x 950 x 1375	2000 x 950 x 1375	2300 x 950 x 1375	2300 x 950 x 1375	2500 x 1150 x 1565	2500 x 1150 x 1565	2800 x 1150 x 1470	2800 x 1150 x 1470	2800 x 1150 x 1470
Weight (Kg) (approx.)	650	790	860	1180	1180	1495	1495	1670	1670	1670

DG Set Technical Specifications*

GPWII-80	GPWII-82.5	GPWII-100	GPWII-125	GPWII-160	GPWII-180	GPWII-200	GPWII-250	GPWII-320	GPWII-400	GPWII-500
80 / 64	82.5/66	100/80	125/100	160/128	180/144	200/160	250/200	320/256	400/320	500/400
3	3	3	3	3	3	3	3	3	3	3
0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
111.3	114.3	139.1	173.9	222.6	250.4	278.2	347.8	445.2	556.5	695.6
12 V 88 AH	12 V 88 AH	12 V 88 AH	12 V 88 AH	12 V,1 x 120 AH	12 V,1 x 120 AH	12 V,1 x 120 AH	24 V, 2 x 180 AH	24 V, 2 x 180 AH	24 V, 2 x 180 AH	24 V, 2 x 180 AH
150	250	250	250	360	360	360	360	990	990	990
Greaves	Greaves	Greaves	Greaves	Greaves	Greaves	Greaves	Greaves	Greaves	Greaves	Greaves
4G11TAG22	4G11TAG23	4G11TAG23	4G11TAG24	6G11TAG24	6G11TAG24	6G11TAG24	6G11TAG25	12V14TAG23	12V14TAG23	12V14TAG23
Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled
4	4	4	4	6	6	6	6	12	12	12
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
17	17	17	16.8	17.2	17.2	17.2	16.8	17	17	17
105X130	105X130	105X130	105X133	105 x 133	105 x 133	105 x 133	108 x 133	115X135	115X135	115X135
4.5	4.5	4.5	4.6	6.9	6.9	6.9	7.3	16.8	16.8	16.8
101.3	126.6	126.6	155	243.1	243.1	243.1	313	604	604	604
74.5	93.4	93.4	114	178.8	178.8	178.8	230	444	444	444
Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Mech. / A1	Electronic / A1	Electronic / A1	Electronic / A1	Electronic / A1
12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	24V ESE	24V ESE	24V ESE	24V ESE
Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4	Greaves Maxtherm API CF4
11	11	11	11	17	17	17	17	50	50	50
415	415	415	415	415	415	415	415	415	415	415
50	50	50	50	50	50	50	50	50	50	50
±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%
Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H	Class - H
IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23	IP - 23
70 x 2	70 x 2	95 x 2	185 x 1	240 x 1	300 x 1	185 x 2	185 x 2	240 x 3	300 x 3	300 x 3
75 NB	75 NB	100 NB	125 NB	125 NB	125 NB	125 NB	125 NB	150 NB	150 NB	150 NB
2800 x 1150 x 1470	3000 x 1350 x 1865	3000 x 1350 x 1865	3000 x 1350 x 1865	3800 x 1350 x 1865	3800 x 1350 x 1865	4500 x 1600 x 2000	4500 x 1600 x 2000	6200 x 2000 x 2500	6200 x 2000 x 2500	6200 x 2000 x 2500
1670	1860	1860	2300	3025	3400	3400	4050	5000	6200	6700

*Due to the policy of continuous improvement, the specification may change without prior notice.

Engine Features and Benefits

- Very low basic engine noise level. Contributes to bettering the statutory MoEF stipulated noise level of 75 dB(A) for the DG Set.
- Lowest exhaust emissions. Meets the next generation CPCB and US Tier-2 norms.
- Individual cylinder head design. Savings on maintenance, cost and time.
- Modular design. High degree of commonality of hardware and components over entire range.
- Easy accessibility of all maintenance parts.
- Deep skirted crank case design. High degree of rigidity and ruggedness.
- Higher reserve margins in the lube and cooling circuits – gives the benefit of increased wear life of the engine, extended period between overhauls and hassle-free operation especially at high ambient temperatures commonly seen across the Indian sub-continent. Operates efficiently at temperatures from -20°C to 50°C.
- Wet liner construction eliminates time consuming and expensive block re-boring during overhauls.
- Gear-driven water pump (40 kVA onwards) improves the reliability of the cooling system.
- Easy fitment of electronic governor when required.

DG Sets - State-of-the-art Acoustic Enclosures

- Most compact acoustic enclosures. Best-in-class in India. Have the smallest footprint and space envelope. Saves space, a very precious resource in an increasingly crowded world.
- Liberally designed doors with easy access for maintenance.
- Easy access to radiator for maintenance and wide cable entry provision.
- Toughened glass inspection window for clear view of control panel.
- Green passivated / stainless steel fasteners and hardware for trouble-free operation.
- Fabricated out of 1.2/1.5 mm CRCA steel after 9 tank surface pre-treatment and pure polyester powder coating in a fully automated process with CNC / Laser machines.
- Excellent UV resistance. High retention of surface finish in outdoor installations and corrosive environments.
- Acoustic insulation with Foam / Rockwool material conforming to IS 8183.
- Water and lube oil drain outlets located on the outer surface - Leading to ease of maintenance and cleanliness.
- Lowest vibrations - Most suitable for roof-top installations.

Integrated DG Set Controller

The unique integrated DG Set controller incorporates both engine and alternator parameters in one console. This micro-processor based controller provides the most exhaustive display of critical engines and alternator performance parameters with alarm and safety features.

Display Parameters	Audio-Visual Warning	Shut-down with Audio-Visual Annunciation
Engine oil pressure, Coolant temperature, Fuel level indication %, Battery voltage, Engine rpm, DG set hours run, Gen. volts (phase-neutral and phase-phase), Gen. current (Amps), Power factor, kWhr, kW	Low oil pressure, High coolant temperature, Low battery voltage, Low fuel level	Low oil pressure, High coolant temperature, Engine over speed, Engine under speed, Under voltage, Over voltage, Over frequency, Under frequency, Low water level*, High canopy temp*



*Applicable for 160kVA and above

The controller has data logging facility for the latest 10 faults recorded and option for RS232 / RS485 connectivity for remote monitoring / BMS integration.

Scope of Supply

The RTU DG Set is supplied with the following standard accessories

- Inbuilt control panel with complete internal wiring/cabling
- Residential silencer - mounted with complete exhaust piping
- 12V 88 AH battery/ 24V, 2 x 180 AH battery
- Inbuilt fuel tank

Optional

- Electronic governor in lieu of mechanical governor
- AMF control panel with auto change-over feature and synchronising panels
- Cold starting aid
- Trailer / Trolley mounted mobile sets
- Single phase alternator in lieu of 3 phase



Our Esteemed Customers

Customers and Partners include: Kotak Bank, IDBI Bank, State Bank of India, Bank of Baroda, ICICI Bank, Breach Candy Hospital Trust, Sterling Hospital, Aditya Birla Memorial Hospital, JASLOK HOSPITAL, Doctors Regional CANCER CENTER, HONGKONG HEALTH SYSTEM, Vodafone, BSNL, ESSAR, Reliance Mobile, TATA, MANIPAL UNIVERSITY, KNP, SIEMENS, AIRPORTS AUTHORITY OF INDIA, PHILIPS, RELIANCE FRESH, SAIL, ABU, Great Eastern, FORTE GROUP, HILAND, KALPA THARU POWER TRANSMISSION, NEELKANTH, BELANI, AMANORA, Reliance Industries Ltd., Asian Paints, Amul, pantaloens, INOX CVA, P.C. CHANDRA, BIG BAZAAR, R MALL, SARB, HP, ONGC, Oil India Limited, APOLLO TYRES LTD., MITSUBISHI HEAVY INDUSTRIES LTD., IndianOil, IFB, Sun-n-Sand, Piccadilly, MERIDIEN, ginger, Hilton, SANTA CRUZ, KEVENTER, Cognizant.



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Auxiliary Power Business

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ISO 14001:2004 certified by



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