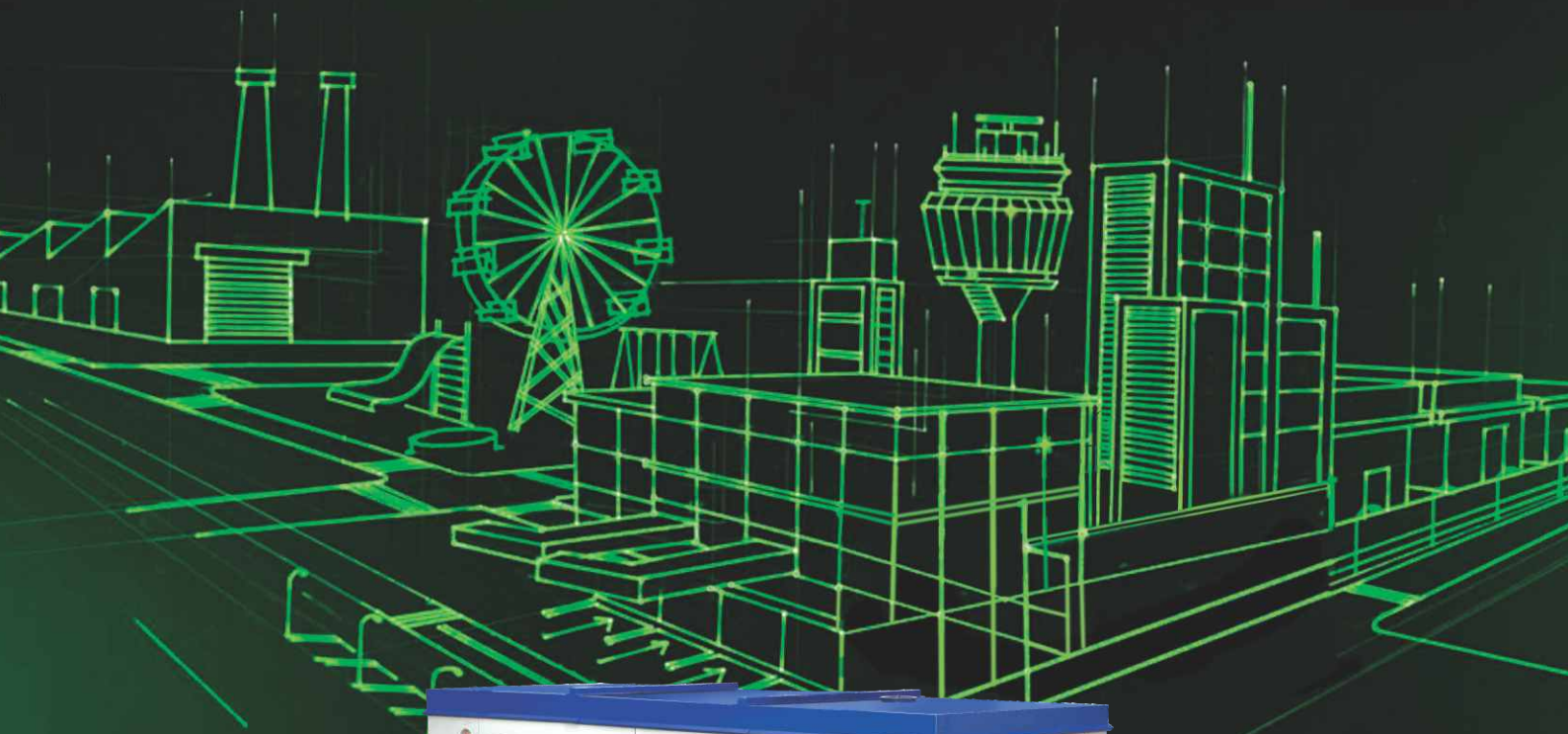




WIN ENGINEERING

Power Solutions that give you the winning edge



5 kVA - 5200 kVA

KIRLOSKAR GREEN
INDIA'S #1 GENSET BRAND



40 kVA - 125 kVA

Prime Rating at rated rpm (as per ISO8528) ¹		kVA	40	62.5	82.5	100	125	125HD
		kW	32	50	66	80	100	100
Genset Model			KG1- 40WS	KG1- 62.5WS	KG1- 82.5WS	KG1-100WS	KG1-125WS	KG1-125WS HD
Frequency		Hz	50	50	50	50	50	50
Power factor		lagging	0.8	0.8	0.8	0.8	0.8	0.8
Voltage		V	415 3Ø	415 3Ø	415 3Ø	415 3Ø	415 3Ø	415 3Ø
Governing class (As per ISO 8528 Part-V)			G2	G2	G2	G3	G3	G3
Noise level		dB(A)	< 75	< 75	< 75	< 75	< 75	< 75
Fuel Consumption*	At 100 % Load	Ltrs/hr	9.2	14.1	18.8	21.9	27.4	28.5
	At 75 % Load		7.4	11.5	13.8	16.9	20.2	21.4
	At 50 % Load		5.5	7.9	9.9	12.2	15.3	16.5
Fuel tank capacity		Ltrs	100	150	150	230	230	230
Overall dimensions of genset (L x W x H) [^]		mm	2575 x 1050 x 1448	2840 x 1140 x 1595	3240 x 1100 x 1594	3240 x 1340 x 1795	3240 x 1340 x 1795	3460 x 1340 x 1916
Dry weight of genset with canopy (approx...) [^]		Kg	1300	1700	1750	2150	2200	2450
Wet weight of genset with canopy (approx...) [^]		Kg	1385	1830	1880	2350	2400	2650
Electrical Battery starting voltage		Volts-DC	12	12	12	12	12	12

ENGINE

Engine Model		3R1040TA G1	4R810TA G1	4R1040TA G1	4K1080TA G2	4K1080TA G2	6R1080TA G1
Rated output (Prime Continuous rating as per ISO 8528-1)	kW	41.2	61.0	74.8	114.7	114.7	114.7
	HP	56	83	102	156	156	156
No. of cylinder	Number	3	4	4	4	4	6
Cubic capacity ²	Ltrs	3.12	3.24	4.16	4.32	4.32	6.49
Bore x Stroke	mm	105 x 120	96 x 112	105 x 120	105 x 125	105 x 125	105 x 125
Rated Speed	RPM	1500	1500	1500	1500	1500	1500
Aspiration	NA/TC/TA	TA	TA	TA	TA	TA	TA
Lube Oil change period	hrs.	500	500	500	500	500	500
Lube oil Sump Capacity	Ltrs	8.0	10.0	10.0	14.0	14.0	12.0
Coolant Capacity	Ltrs	11.5	17.5	24.0	21.0	21.0	28.0

ALTERNATOR

Insulation Class		Class H					
Alternator Efficiency (at 100% load) 0.8 pf ^{**}	%	89.2	91.0	91.4	92.0	92.6	92.6
Max Voltage Dip at Full Load 0.8 pf Lag		≤ 16 %	≤ 20 %	≤ 20 %	≤ 20 %	≤ 20 %	≤ 20 %
Max Time to build up rated voltage at Rated RPM	sec	< 5 sec provided engine reach the rated speed					

For intermediate ratings, kindly contact nearest KOEL office

Notes

[^] Tolerances Apply

*With 0.845 Specific Gravity of diesel (5 % Tolerance)

^{**} Efficiency of Alternator as per standards IS 4722 and IEC 34-1

For Site Conditions other than standard operating conditions consult KOEL for available prime power.

Prime rating and Stand-by rating¹



'Prime power' is designed for Unlimited hours, as compared to 'Emergency stand-by' designed for 200 hours in a year. Prime rated Gensets also permit 10% temporary overloading. Users need to carefully select the Genset rating to meet their requirement. KOEL offers Prime power as standard offer. Contact KOEL for stand-by ratings.



Engine capacity does matter²

Engine capacity (cc) plays a vital role in Genset performance. Higher engine capacity leads to a robust and stable Genset performance.

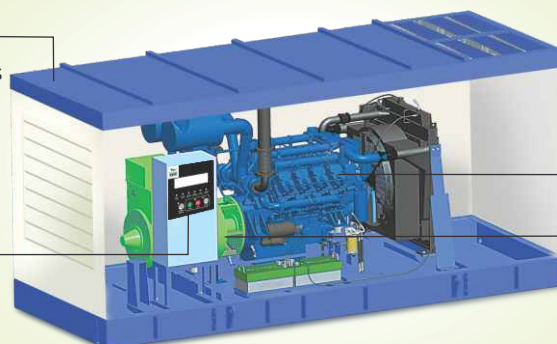
Higher engine capacity also enables Genset to respond quickly & positively to sudden load additions.

Canopy

- Ease of Access and Serviceability
- Aesthetically designed, weather and sound resistant enclosure
- Insulation conforms to UL94-HF1 class for flammability

Controller

- Microprocessor based fully configured
- Graphical bigger LCD display
- Best in class monitoring and diagnostic
- Integrable with AMF, synchronization & communication configurations



Engine

- O2E Series: Low emission, high efficiency engines
- Compact, Robust and Rugged Design
- 500 hours lube-oil change period

Alternator

- Best In Class Efficiency
- Special Windings to Reduce Harmonics
- Vacuum Pressure Impregnation and epoxy gel coating on winding

KOEL's approach to meet revised CPCB norms[^]

Revised CPCB norms are aimed at protecting environment by reducing Genset emissions and improving emission quality. These are one of the most stringent emission norms in the world.

To meet the new norms, KOEL R&D team had choice of multiple technologies. While selecting the technology, KOEL laid significant emphasis on long term needs of users viz:

- High reliability and durability of Gensets: Owing to extreme operating conditions in India, preference has been given to robust configurations, running successfully for several years.
- Low running costs: An effort to reduce emissions tends to increase the running costs. KOEL succeeded in achieving both in the same design, after persistent efforts.

- Optimized fuel efficiency as per actual usage: KOEL DG sets are tuned to provide maximum fuel efficiency in the most common operating band. At KOEL, we call it **O2E series** (Optimal Operating Efficiency).
- Affordable, On-site support: Proven technology will ensure that product support is available close-by, without waiting for a specialist. KOEL team has taken special efforts to keep complex technologies at bay, which may require high on-site maintenance costs.

All this, while keeping the initial costs within reach of the smart Genset buyers.

That's what we call **WINGeering!** We Engineer, You Win !!

Edge

Winning



Best-in-class Fuel Efficiency

Kirloskar Green Gensets offer a unique combination of CPCB norm compliance and enhanced fuel efficiency. Across the range, KG Gensets offer substantial savings in fuel cost.

O2E Series (Optimal Operating Efficiency):

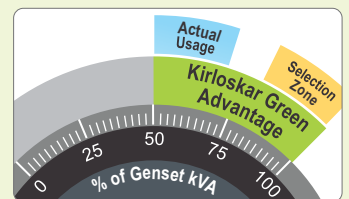
Genset ratings are selected based on present load and future expansion. Fuel efficiency of most Gensets is optimized at the full rating of Genset.

In practice, Gensets rarely get loaded to full capacity. Power demand variations across day & night, weekdays & weekends,

summer & winter lead to an average 50-70% loading on Gensets.

Considering this practical situation, KOEL has extended fuel efficiency optimization from 100%, right up to 50% of rated load.

Combination of best-in-class fuel efficiency & O2E provides double advantage- truly a **winning edge!**



Edge

Winning



Genset Controls at your finger-tips

There is no comfort like being in command. Kirloskar Green Gensets put the command in your hands. Micro-processor based Genset controllers display a host of Genset parameters and put all controls at your fingertips.

Monitoring Features –

- Phase Voltages, Phase Currents, kVA, KW, KVAr, KWH, Power Factor
- Lube oil Pressure, Engine Temperature, RPM, Run Hours, Number of starts, Fuel Level, Auto / Manual Stop
- Battery charge condition
- Common Alarm / Hooter output , AMF feature with ATS

Diagnostic Features –

- Battery charging failure, Over/Under speed, Over Current, Over/Under Voltage, Over KW, Phase Sequencing, Phase missing
- Low Lube oil Pressure, High Engine Temperature, Low/High battery voltage, Low Fuel Level, Over Crank protection, Routine Maintenance indicator, Genset Test Facility

Optional Features-

- Modbus communication

Being in control of your Genset is certainly a **winning edge!**



Edge

Winning



Peace-of-mind Ownership

Kirloskar Green Gensets have always been preferred for their robust design and reliability over long usage life.

Kirloskar Green range carries the confidence of well-established and proven engine platforms. For compliance to revised CPCB

norms, KOEL has carefully selected those technologies which not only retain, but enhance Gensets durability and on-site serviceability.

Thus, KG Gensets offer you many years of trouble-free performance; backed by the assurance of prompt support. Peace-of-mind driven by product reliability and low cost of ownership – your **winning edge!**

[^]As per MOEF norms effective from 1st July 2014

The Promise Behind The Product



Kirloskar Green Brand

Kirloskar Green is the Genset brand of Kirloskar Oil Engines Ltd (KOEL), the flagship company of the century-old Kirloskar Group. Kirloskar Green is India's largest selling and most trusted Genset brand for over a decade. Providing back-up power solutions from 5 to 5200 kVA for diverse market sectors, "Kirloskar Green" has over 1 million Gensets in service across the globe.

Research and Engineering

KG Gensets are designed and developed indigenously, using modern design & simulation technologies. KOEL's R&D team combines decades of application knowledge, global technology trends and emerging user expectations to develop best-in-class products for the target markets. The products are launched after extensive validation in world-class facilities.



State-of-the-art Manufacturing

Kirloskar Green Gensets are manufactured at the state-of-the-art manufacturing facilities of KOEL and authorized GOEMs across India. Common design, modern infrastructure, trained manpower, stringent process controls and standardized material quality ensure that every Kirloskar Genset complies with the standards and meets KOEL's stringent quality norms.

Sales Network

A well-trained network of authorized KG Dealers and GOEM Sales teams is spread across India to serve your requirements. KOEL offices at key locations provide further techno-commercial back-up. KG Sales teams are equipped to carry-out load study, Genset sizing and techno-commercial support. Installation and commissioning activities are also undertaken in line with KOEL's stringent guidelines.



Service Network

As Genset cannot be driven to a Service Station, service has to come to your door-step. KG Gensets are supported by over 5000 trained Engineers and over 450 well-equipped service outlets throughout India. Standard and custom-made maintenance packages offer a total-peace-of-mind ownership experience. Service response time and quality is centrally monitored for cross-industry bench marking and continual improvement. Customers just need to dial our toll free number and service will be available at the door step.

7 Easy steps for a happy Genset Ownership

- Insist on load-study
- Select Genset rating as per load-study and with sufficient margin for future load expansion
- Apply site-selection guidelines carefully
- Insist on installation in line with KG guidelines
- Ensure adequate size and proper connection of cables
- Understand the Genset operation & maintenance procedures during commissioning
- Follow routine maintenance protocols through authorized KG service Dealers



1800 233 3344
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koel.helpdesk@kirloskar.com

Product improvement is a continuous process. Kindly contact KOEL for latest information

North: ● Delhi: 011 - 2871 5826 ● Jaipur: 0141 - 2370007 ● Lucknow: 0522 - 274 1442 ● Ludhiana: 0161 - 254 6668 / 69 ● Meerut: 0121 - 240 1199
South: ● Bengaluru: 080 - 2558 7562 ● Chennai: 044 - 23744624 ● Kochi: 0484 - 238 5757 ● Secunderabad: 040 - 2781 9563
East: ● Bhubaneshwar: 0674 - 258 8047 ● Guwahati: 0361 - 245 7616 ● Kolkata: 033 - 217 0858 ● Patna: 0612 - 222 0412
West: ● Ahmedabad: 079 - 2692 9687/ 89 ● Indore: 0731 - 3913100 ● Mumbai: 022 - 6151 1234 ● Pune: 020 - 2581 0341



Enriching Lives

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