

**15 kVA – 62.5 kVA DG Sets
(Air Cooled, HA Series)**



EFFICIENCY HAS A NEW NAME **KOEL GREEN**

**EFFICIENT
PRODUCTS**



**EFFICIENT
SERVICE**



**EFFICIENT
DELIVERIES**



**EFFICIENT
SOLUTIONS**



**EFFICIENT
NETWORK**



**EFFICIENT
24X7 CARE**



ELECTRO EQUIPMENTS

OEMs of M/s. Kirloskar Oil Engines Limited (KOEL)

Reg. Off.: Plot No. 21 – 23, Raipur Cooperative Industrial Area, Bhagwanpur,
(16 KMS from Roorkee) Roorkee- 247661, Uttarakhand (INDIA)

Corp. Off.: Suite No. 4K, 04th Floor, Uppal's Plaza M6, Jasola District Centre,
New Delhi- 110025, Delhi (INDIA)

INDIA'S # 1 GENSET BRAND



Prime Rating at rated rpm (as per ISO8528) ¹		kVA	15	20	25	30	40	62.5
		kW	12	16	20	24	32	50
Genset Model			KG1-15AS	KG1-20AS	KG1-25AS	KG1-30AS	KG1-40AS	KG1-62.5AS
Frequency		Hz	50					
Power factor		lagging	0.8					
Voltage		V	230 (1Ø) & 415 (3Ø)					
Governing Class (As per ISO 8528 Part-V)			G2					
Noise Level		dBA	< 75					
Fuel Consumption*.	At 100 % Load	Ltrs/hr	4	6.4	6.4	8.2	9.9	16.2
	At 75 % Load		3	5	5	6.4	7.9	12.7
	At 50 % Load		2.2	4	4	4.9	5.8	8.9
Fuel tank capacity		Ltrs	65		65	65	100	150
Weight of Genset with canopy (approx.)^	Dry	Kg	900	1130	1130	1130	1270	1700
	Wet	Kg	950	1180	1180	1180	1370	1825
Overall dimensions of Genset^	Length	mm	1740	2130	2130	2130	2400	3150
	Width	mm	1050	1050	1050	1050	1050	1200
	Height	mm	1410	1520	1520	1520	1670	1635
Electrical Battery starting voltage		Volts-DC	12					
ENGINE								
Engine Model			HA294G1	HA394TCIG1	HA394TCIG1	HA394TCIG2	HA494TCIG1	HA694TCIG1
Rated output (Prime Continuous rating as per ISO 8528-1)	kW		15.1	23.5	23.5	29.4	41.19	61
	HP		20.5	32	32	40	56	83
No. of Cylinder		Number	2	3	3	3	4	6
Cubic Capacity ²		Ltrs	1.88	2.89	2.89	2.89	3.77	5.65
Bore x Stroke		mm	100 x 120	100 x 120	100 x 120	100 x 120	100 x 120	100 X 120
Rated Speed		RPM	1500					
Aspiration		NA/TC/TA	NA	TC	TC	TC	TC	TC
Lube Oil change period		hrs	500					
Lube Oil sump capacity		Ltrs	5	8	8	8	8.3	11
Coolant Capacity		Ltrs	NA					
ALTERNATOR								
Insulation Class			Class H					
Ingression Protection			IP 23					
Alternator Efficiency (at 100 % load) 0.8 p.f.**		%	86	88.8	88.8	88.8	89.2	91
Max. Voltage Dip at Full Load 0.8 p.f. lag		Second	≤ 20%	≤ 16%	≤ 16%	≤ 16%	≤ 16%	≤ 20%
Max. Time to build up rated voltage at rated RPM			< 5 sec provided engine reach the rated speed					

Notes:

[^] Tolerances Apply

^{*}With 0.845 Specific Gravity of diesel

⁰ These weight are for handling & transportation only

^{**} 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

PS: For intermediate Ratings, Kindly contact nearest KOEL CARE

- All above Ratings are available with Manual / AMF Panel & with / without Installation.

KOEL's approach to meet revised CPCB norms

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

To meet the new norms, KOEL R&D team had a 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 that have been running successfully for several years.
- Low running costs: An effort to reduce emissions tends to increase the running costs. KOEL has succeeded in achieving both in the same design.

- Optimized fuel efficiency as per actual usage: KOEL Green Gensets 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 ensures 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 the reach of a smart Genset buyer.

Integrated **Best-in-class Fuel Efficiency**



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

O2E Series (Optimal Operating Efficiency):

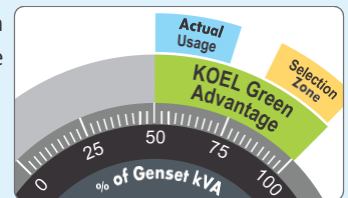
Genset ratings are selected based on the present load and future expansion. Fuel efficiency of most Gensets is optimized at the full rating of the Genset.

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 the 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 a double advantage.



Integrated

Genset Controls at your finger-tips



There is no comfort like being in command. KOEL 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 –

- Lube oil Pressure, Engine Temperature, RPM, lube oil Temperature*
- Run Hours, No. of starts, Fuel Level, Auto / Manual Stop, Battery charge condition, AC Phase Voltage, Current, kVA, kW, kWh, kVAr, Power Factor

Optional Features-

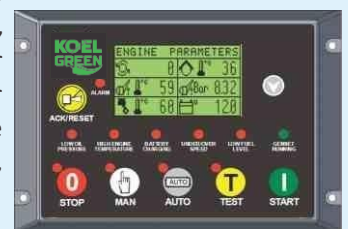
- Modbus communication*

* Features are available from 15 kVA onwards

Diagnostic Features –

- Battery charging failure, Over speed, Under speed, Over Current, Under Voltage, Over Voltage, Over kW, Phase Sequence monitoring, Phase missing, Common Alarm, Hooter Output.
- Low lube oil Pressure, High Engine Temperature, Low/High battery voltage, Low Fuel Level alarm, Over Crank protection, Routine Maintenance indicator, Genset Test Facility, fail to start/stop

KG934 Controller



Integrated

Peace-of-mind Ownership



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

KOEL 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, KOEL 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.



The Promise behind the Product

KOEL GREEN ELECTRO Brand

KOEL GREEN ELECTRO is the Genset brand of Kirloskar Oil Engines Ltd (KOEL), the flagship company of the century- old Kirloskar Group. KOEL Green is India's largest selling and most trusted Genset brand for over a decade.

Providing back-up power solutions from 2.1 to 5200 kVA for diverse market sectors, "KOEL GREEN ELECTRO" has over Lacs of Gensets in service across the globe.



Research and Engineering

KOEL 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

KOEL GREEN ELECTRO Gensets are manufactured at our Roorkee Plant with the state-of-the-art manufacturing facilities. Latest design, modern infrastructure, trained manpower, stringent process controls and standardized material quality ensure that every 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. KOEL 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. KOEL Green 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 benchmarking 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 a load-study
- Select the Genset rating as per the load-study and with sufficient margin for future load expansion
- Apply site-selection guidelines carefully
- Insist on installation in line with KOEL Green guidelines
- Ensure adequate size and proper connection of cables
- Understand the Genset operation & maintenance procedures during commissioning
- Follow routine maintenance protocol through authorized KOEL Green service dealers

ELECTRO EQUIPMENTS

- Sales: +91-9717793407;
- Service: +91-9810445607
- KOEL Toll Free Number: 1800-233-3344
- Landline No.: 011-49501111
- Web: www.electroequipments.com
- For Inquiries: sales@electroequipments.com
- Service: info@electroequipments.com

