KOEL
iGREEN

Best Genset of India
with Complete Power Back-up Solution

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KOEL iGreen Power Back-Up Solution

KOEL iGreen presents India's only digital power back-up solution, designed for the users of tomorrow. KOEL iGreen promise world class performance, robust design, digitally connected, ultimate convenient, smart user interface, superior looks and one-stop solution for its esteemed customers.

Ultimate Convenience With AMF

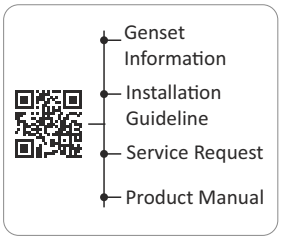
KOEL iGreen gensets comes with an Auto Main Failure panel which are specifically designed to deliver ultimate convenience to user. With mains power failure this panel automatically starts the genset and once the mains power is restored this panel switch off the genset, providing hassle free experience with running cost optimization.

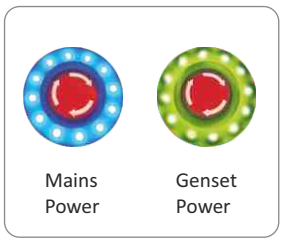
Genset Control At Your Finger Tips

KOEL iGreen gensets are enabled with KOEL remote monitoring system, KOEL remote monitoring enables users to remotely monitor the important parameters of the genset, in case of any critical parameter alert is generated by ECU, KOEL remote monitoring system alerts the user immediately. KOEL remote monitoring system can be accessed via mobile device or desktop and this innovative system also alerts nearest service dealer is case of any emergency break-down.

QR Code Enabled Genset

KOEL iGreen gensets are QR code enabled and provides genset relevant information to user on a single scan. This QR code can also be used for accessing product catalogue or raising product service requests.





Status Indicator

KOEL iGreen gensets comes with a multicolour genset status indicator which will help user understand the genset running status from a distance with just a glance.

Aesthetically Enhanced Genset

KOEL iGreen gensets are aesthetically enhanced range of gensets with improved product life. First of its kind KOEL iGreen gensets comes with a bolt-less designed canopy which along with seamless appearance minimises the canopy deterioration. Building on seamless appearance KOEL iGreen gensets comes with silencer inside the canopy which in turn provides reduced height and symmetrical shape to genset. New attractive colour scheme makes KOEL iGreen gensets more vibrant and green decal reminds KOEL commitment to efficiency in conservation & going green in everything we do.

Single Point Of Ownership

KOEL iGreen provides a single point ownership of your complete power back-up ecosystem. These systems are designed to work in coherence with each other and hence are capable of providing a seamless experience to customer. With India's largest service network KOEL iGreen provides a comprehensive warranty for all components of your power back-up ecosystem.

5 - 160 kVA*

Prime Rating at rated rpm (as per ISO 8528) [1]		kVA	5	7.5	10	12.5	15	20	25	30	40	45	62.5	82.5	100	125	160
		kW	4	6	8	10	12	16	20	24	32	36	50	66	80	100	128
Genset Model			KG1-5AS3	KG1-7.5AS4	KG1-10AS5	KG1-12.5AS2	KG1-15AS	KG1-20WS	KG1-25WS	KG1-30WS	KG1- 40WS	KG1 - 45WS	KG1- 62.5WS	KG1- 82.5WS	KG1-100WS	KG1-125WS	KG1-160WS
Frequency		Hz	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Power factor		lagging	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Voltage		V	230 (1Ø) & 415 (3Ø)								415 3Ø						
Governing class (As per ISO 8528 Part-V)			G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G3	G3	G3
Noise level		dBA	<75	<75	<75	<75	<75	<75	<75	<75	<75	<75	<75	< 75	< 75	< 75	< 75
Fuel Consumption*	At 100% Load	Ltrs/Hr	1.6	2.21	3	3.45	4	5.1	5.8	7.6	9.2	10.3	14.1	18.8	21.9	27.4	36.6
	At 75% Load		1.3	1.62	2.4	2.65	3	3.8	4.4	5.8	7.4	8.7	11.3	13.8	16.9	20.2	27.7
	At 50% Load		1	1.21	1.8	1.94	2.2	2.7	2.9	4.4	5.5	5.9	7.5	9.9	12.2	15.3	19.1
Fuel tank capacity		Ltrs	50	50	50	50	45	65	65	65	100	100	150	150	230	230	300
Weight of genset with canopy (approx..) ✪	Dry	Kg	640	650	710	800	810	880	1040	1040	1180	1180	1470	1710	2040	2090	2730
	Wet	Kg	890	700	760	850	860	930	1090	1090	1215	1215	1600	1840	2240	2290	3110
Overall dimensions of genset^	Length	mm	1417	1417	1767	1767	1740	2205	2500	2500	2750	2750	2900	3200	3200	3200	4000
	Width	mm	820	820	820	820	1050	950	950	950	1050	1050	1100	1100	1300	1300	1500
	Height	mm	1321	1321	1328	1321	1474	1294	1294	1294	1493	1493	1581	1595	1795	1795	1915
Electrical Battery starting voltage		Volts-DC	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
ENGINE																	
Engine Model			EA10 G1	EA10G1	EA16G1	EA16G1	HA294 G1	2R1040 G1	3R1040T G1	3R1040T G1	3R1040TA G1	3R1040TA G1	4R810TA G1	4R1040TA G1	4K1080TA G2	4K1080TA G2	6K1080TA G2
Rated output (Prime Continuous rating as per ISO 8528-1)		kW	7.3	7.3	11.8	11.8	15.1	18.8	24	30.9	41.2	41.2	61	74.8	114.7	114.7	147
		HP	10	10	16	16	20.5	25.5	42	42	56	56	83	102	156	156	200
No. of cylinder		Number	1	1	2	2	2	2	3	3	3	3	4	4	4	4	6
Cubic capacity[2]		Ltrs	0.95	0.95	1.56	1.56	1.88	2.08	3.12	3.12	3.12	3.12	3.24	4.16	4.32	4.32	6.48
Bore x Stroke		mm	102X116	102X116	95x110	95x110	100 x 120	105 x 120	105 x 120	105 x 120	105 x 120	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	1500	1500	1500	1500	1500	1500	1500	1500	1500
Aspiration		NA/TC/TA	NA	NA	NA	NA	NA	NA	TC	TC	TA	TA	TA	TA	TA	TA	TA
Lube Oil change period		hrs.	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube oil Sump Capacity		Ltrs	3.5	3.5	6.5	6.5	5	5.5	8	8	8	8	10	10	14	14	18
Coolant Capacity		Ltrs	NA	NA	NA	NA	NA	9	14.5	14.5	11.5	11.5	17.5	24	21	21	28
ALTERNATOR																	
Insulation Class			Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H
Alternator Efficiency (at 100% load) 0.8 pf**		%	78.1	82.5	82.6	84.9	85.2	88.6	89	87.9	88.4	88.2	91	89.9	92	92.4	92.8
Max Voltage Dip at Full Load 0.8 pf Lag		sec	<20%	<20%	<20%	<20%	≤ 20 %	≤ 16 %	≤ 16 %	≤ 16 %	< 16 %	< 16 %	< 20 %	≤ 20 %	≤ 20 %	≤ 20 %	≤ 20 %
Max Time to build up rated voltage at Rated RPM			< 5 sec provided engine reach the rated speed											Voltage recovery time 6 sec			< 1 sec provided engine reach the rated speed

Notes

^ Tolerances Apply, *With 0.845 Specific Gravity of diesel (5 % Tolerance)

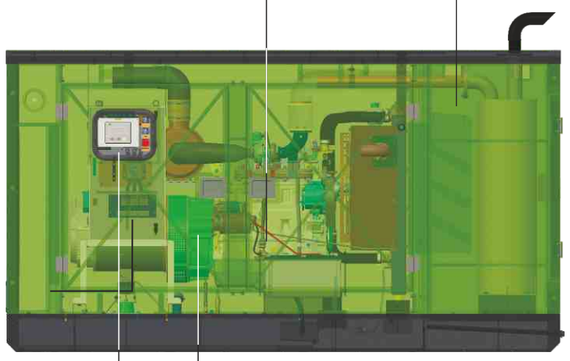
✪ These weight are for handling & transportation only

* Silencer inside canopy and bolt-less canopy is available only up-to 62.5kVA

** 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.

Engine

- Industries most reliable engines, proven over decades
- Low emission, high efficiency engines
- Compact, robust and rugged design
- 500 hours lube-oil change period



Canopy

- Silencer inside canopy
- Aesthetically designed bolt-less canopy for enhanced product life
- Weather and sound resistant enclosure
- Ease of access and serviceability
- Insulation confirms to UL94-HF1 class for flammability

Controller

- Microprocessor based with graphical LCD display
- Best in class monitoring and diagnostic capability
- Communication configuration enabled

Alternator

- Best in class efficiency
- Minimum harmonics interference
- Vacuum pressure impregnation
- Epoxy gel coating on the winding

Prime rating and Stand-by rating [1]

'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 a standard offer. Contact KOEL for stand-by ratings.

Best-in-class Fuel Efficiency

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

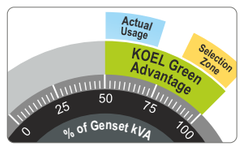
O2E Series (Optimal Operating Efficiency):

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 efficiency & O2E provides a double advantage.



Engine capacity does matter [2]

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 the Genset to respond quickly & positively to sudden load additions.

State of the art Genset Controller

KOEL iGreen 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 Voltage, Phase Current, kVA, kW, kWh, kVAr, Power Factor, Lube Oil Pressure, Engine Temp, RPM, Run Hours, Battery condition etc.

Diagnostic Features: Battery charging failure, Over speed and Under speed, Over Current, Over voltage and Under Voltage, Over kilo Watt, Phase Seq., Phase missing, Earth Fault trip.

Low lube oil Pressure, High Engine Temperature, Low and High battery voltage, Low Fuel Level, Over Crank protection, Routine Maintenance indicator, Genset Test Facility, Mains Frequency.

Optional Features: Modbus communication, Synchronization, Canopy Temperature

Controller

KOEL iGREEN

ASSURES A SAFE AND RELIABLE POWER BACKUP ECOSYSTEM

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What KOEL iGreen brings to you

Unmatched Convenience AMF as standard offering	**Ease Of Information** QR code enable genset	**Genset At Your Fingertips** Remote monitoring as standard	**Superior Looks** New attractive colour scheme
Improved Product Life Bolt-less designed canopy	**Single Point Of Ownership** Comprehensive warranty from KOEL	**Remote Status Indicator** Multicolour genset status indicator	**Space Saver** Silencer inside canopy with compact design