

India's first IOT enabled Genset

The Complete Power Back-up Solution

EFFICIENCY HAS A NEW NAME





Kirloskar iGreen Power Back-Up Solution

Kirloskar iGreen presents India's only digital power back-up solution, designed for the users of tomorrow. Kirloskar iGreen promises world class performance with world class features such as robust design, digital connectivity, ultimate convenience of use, smart user interface, superior looks and one-stop solution for its esteemed customers.

Ultimate Convenience with AMF

Kirloskar 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. This ensures uninterrupted power supply all the time.





Genset Monitoring at Your Finger Tips

Kirloskar iGreen gensets are enabled with Kirloskar remote monitoring system which shares Real Time Genset information and location Services. It can be accessed via mobile device or desktop. Kirloskar remote monitoring system also highlights any parameter which needs special attention. These critical indication alerts are sent to user mobile via text message. It also alerts nearest services dealer is case of any emergency break-down.

QR Code Enabled Genset

Kirloskar iGreen gensets are first in the industry to introduce QR code enabled Genset. It 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. So now all the information of your genset is a scan away.







Power

Power

Status Indicator

Kirloskar iGreen gensets comes with a genset indicator which will help user understand the genset running status from a distance with just a glance. The genset status indicator is multicolour with each colour indicating a separate status of your genset. Green light indicates load is on Genset and blue light indicates that load is on mains power.

Aesthetically Enhanced Genset

Kirloskar iGreen Gensets are aesthetically enhanced range of gensets with improved product life. It comes with a bolt-less designed canopy which along with seamless appearance minimises the canopy deterioration. Placing the silencer inside the canopy ensure saving on space and make it more aesthetic. The new attractive colour scheme makes Kirloskar iGreen gensets more vibrant and green decals reminds of Kirloskar commitment to efficiency in conservation & going green in everything we do.





Single Point Of Ownership

Kirloskar 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 customers. With India's largest service network Kirloskar iGreen provides a comprehensive warranty for all components of your power back-up ecosystem.

Refuel and Relax, We will take care of your Genset

In addition to warranty, customers can choose a Comprehensive maintenance contract, ANUBANDH, in which Kirloskar promises to maintain your genset for 5years (or 6000hrs whichever is earlier). This specially designed package provides you hasslefree 24X7 services through well trained professionals, genuine spares and consumables directly through an agreement with Kirloskar. All you need to do is Refuel and Relax.



15 - 160 kVA

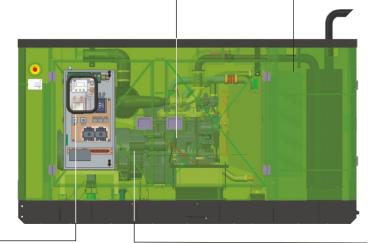
| Dalace Defines of sets domina | / 100 05001 | kVA | 15 | 20 | 25 | 30 | |
|--|-------------------------------|----------|----------------------|---------------|---------------|---------------|--|
| Prime Rating at rated rpm | i (as per 150 8528) | kW | 12 | 16 | 20 | 24 | |
| Genset Model | | | KG1-15ASE1 | KG1-20WSE1 | KG1-25WSE | KG1-30WSE | |
| Frequency | | Hz | 50 | 50 | 50 | 50 | |
| Power factor | | lagging | 0.8 | 0.8 | 0.8 | 0.8 | |
| Voltage | | V | 230 (1Ø) & 415 (3Ø) | | | | |
| Governing class (As per IS | O 8528 Part-V) | | G2 | G2 | G2 | G2 | |
| Noise level | | dBA | <75 | <75 | <75 | <75 | |
| | At 100% Load | | 4 | 5.1 | 5.8 | 7.6 | |
| Fuel Consumption # | At 75% Load | Ltrs/Hr | 3 | 3.8 | 4.4 | 5.8 | |
| | At 50% Load | | 2.2 | 2.7 | 3.2 | 4.4 | |
| Fuel tank capacity | | Ltrs | 45 | 65 | 65 | 65 | |
| Weight of genset | Dry | Kg | 810 | 880 | 1040 | 1040 | |
| with canopy (approx.) | Wet | Kg | 860 | 930 | 1090 | 1090 | |
| | Length | mm | 1740 | 2205 | 2500 | 2500 | |
| Overall dimensions of genset [^] | Width | mm | 1050 | 950 | 950 | 950 | |
| genser | Height | mm | 1474 | 1294 | 1294 | 1294 | |
| Electrical Battery starting vo | oltage | Volts-DC | 12 | 12 | 12 | 12 | |
| ENGINE | | | | | | | |
| Engine Model | | | HA294 G1 | 2R1040 G1 | 3R1040T G1 | 3R1040T G1 | |
| Rated output (Prime Continuous rating as per ISO 8528-1) | | kW | 15.1 | 18.8 | 24 | 30.9 | |
| Rated output (Prime Contin | uous raung as per 150 6526-1) | HP | 20.5 | 25.5 | 42 | 42 | |
| No. of cylinder | | Number | 2 | 2 | 3 | 3 | |
| Cubic capacity ² | | Ltrs | 1.88 | 2.08 | 3.12 | 3.12 | |
| Bore x Stroke | | mm | 100 x 120 | 105 x 120 | 105 x 120 | 105 x 120 | |
| Rated Speed | | RPM | 1500 | 1500 | 1500 | 1500 | |
| Aspiration | | NA/TC/TA | NA | NA | TC | TC | |
| Lube Oil change period | | hrs. | 500 | 500 | 500 | 500 | |
| Lube oil Sump Capacity | | Ltrs | 5 | 5.5 | 8 | 8 | |
| Coolant Capacity | | Ltrs | NA | 9 | 14.5 | 14.5 | |
| ALTERNATOR | | | | | | | |
| Insulation Class | | | Class H | Class H | Class H | Class H | |
| Alternator Efficiency (at 100% load) 0.8 pf | | % | 85.2 | 88.6 | 89 | 87.9 | |
| Max Voltage Dip at Full Loa | ad 0.8 pf Lag | sec | <u>≤</u> 20 % | <u>≤</u> 16 % | <u>≤</u> 16 % | <u>≤</u> 16 % | |
| Max Time to build up rated | voltage at Rated RPM | | | | | | |

Notes

- ^ Tolerances Apply
- # With 0.845 Specific Gravity of diesel (5% Tolerance)
- \$ These Weight are for handling & transportation only, ±5 % tolerance apply
- * Efficiency of Alternator as per standards IEC60034-1
- For Site Conditions other than standard operating conditions consult Kirloskar Oil Engines for available prime power.
- + Silencer inside canopy and bolt-less canopy is available only up-to 62.5kVA

Engine -

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



Controller -

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

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

Alternator

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

| 40 | 45 | 62.5 | 82.5 | 100 | 125 | 160 |
|-------------|-------------|--------------|-------------|-------------|-------------|-------------|
| 32 | 36 | 50 | 66 | 80 | 100 | 128 |
| KG1- 40WSE | KG1 - 45WSE | KG1- 62.5WSE | KG1- 82.5WS | KG1-100WS | KG1-125WS | KG1-160WS |
| 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| | | | 415 3Ø | | ' | |
| G2 | G2 | G2 | G2 | G3 | G3 | G3 |
| <75 | <75 | <75 | < 75 | < 75 | < 75 | < 75 |
| 9.2 | 10.3 | 14.1 | 18.8 | 21.9 | 27.4 | 36.6 |
| 7.4 | 8.7 | 11.3 | 13.8 | 16.9 | 20.2 | 27.7 |
| 5.5 | 5.9 | 7.5 | 10.3 | 12.2 | 15.3 | 19.1 |
| 100 | 100 | 150 | 150 | 230 | 230 | 300 |
| 1180 | 1180 | 1470 | 1710 | 2040 | 2090 | 2730 |
| 1215 | 1215 | 1600 | 1840 | 2240 | 2290 | 3110 |
| 2750 | 2750 | 2900 | 3200 | 3200 | 3200 | 4000 |
| 1050 | 1050 | 1100 | 1100 | 1300 | 1300 | 1500 |
| 1493 | 1493 | 1581 | 1595 | 1795 | 1795 | 1915 |
| 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | | | | | | |
| 3R1040TA G1 | 3R1040TA G1 | 4R810TA G1 | 4R1040TA G1 | 4K1080TA G2 | 4K1080TA G2 | 6K1080TA G2 |
| 41.2 | 41.2 | 61 | 74.8 | 114.7 | 114.7 | 147 |

| 3R1040TA G1 | 3R1040TA G1 | 4R810TA G1 | 4R1040TA G1 | 4K1080TA G2 | 4K1080TA G2 | 6K1080TA G2 |
|-------------|-------------|------------|-------------|-------------|-------------|-------------|
| 41.2 | 41.2 | 61 | 74.8 | 114.7 | 114.7 | 147 |
| 56 | 56 | 83 | 102 | 156 | 156 | 200 |
| 3 | 3 | 4 | 4 | 4 | 4 | 6 |
| 3.12 | 3.12 | 3.24 | 4.16 | 4.32 | 4.32 | 6.48 |
| 105 x 120 | 105 x 120 | 96 x 112 | 105 x 120 | 105 x 125 | 105 x 125 | 105 x 125 |
| 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| TA | TA | TA | TA | TA | TA | TA |
| 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| 8 | 8 | 10 | 10 | 14 | 14 | 18 |
| 11.5 | 11.5 | 17.5 | 24 | 21 | 21 | 28 |
| | | | | | | |
| Class H | Class H | Class H | Class H | Class H | Class H | Class H |
| 00.4 | 00.0 | 0.4 | 00.0 | 00 | 00.4 | 00.0 |

| Class H | Class H | Class H | Class H | Class H | Class H | Class H |
|---------|---------|---------|---------------|------------------|---------------|------------------|
| 88.4 | 88.2 | 91 | 89.9 | 92 | 92.4 | 92.8 |
| < 16 % | < 16 % | < 20 % | <u>≤</u> 20 % | <u><</u> 20 % | <u>≤</u> 20 % | <u><</u> 20 % |
| | | | | | | |

< 5 sec provided engine reach the rated speed



Prime rating and Stand-by rating¹

'Prime power' is designed for Unlimited hours, as compared to 'Emergency stand-by power' 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. Kirloskar offers Prime power as a standard offer. Contact Kirloskar for stand-by ratings.



Best-in-class Fuel Efficiency

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

02ESeries (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, Kirloskar has extended fuel efficiency optimization from 100%, right up to 50% of rated load.

Combination of best-in-class efficiency & 02E provides a double advantage.





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



State of the art Genset Controller

Kirloskar iGreen Genset 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, Genset Test Facility, Mains Frequency.

Optional Features: Modbus Communication, Synchronization, canopy Temperature



Controller



Kirloskar i Green

ASSURES A SAFE AND RELIABLE POWER BACKUP ECOSYSTEM



#iforTomorrow

What Kirloskar 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 Kirloskar Oil Engines

Remote Status Indicator

Multicolour genset status indicator

Space Saver

Silencer inside canopy with compact design



EFFICIENCY. INTEGRATED

A KIRLOSKAR PROMISE

Efficient Products

- India's first IoT enabled digital genset
- Designed for convenient user experience
- Best-in-class fuel efficiency delivered
- Compact design & long life product
- Optimized consumption of lubricant oil
- Optimized total cost of ownership (TCO)
- All products tested before delivery

EFFICIENT



EFFICIENT Efficient Solutions



- Load sizing for every single genset order
- One stop power back-up solutions
- Serves complete application gamut
- Highly trained & experienced team
- Non-conventional solutions (bio-diesel)
- Specific solution for harsh environments
- Exhaust mgmt., foundation, cabling etc.

Efficient Service

- India's widest service dealer network
- Kirloskar connect-self-service application
- eFSR-Electronic field service report
- Over 6000 trained service engineers
- Over 600,000 machines under care
- 98%+ parts available at each outlet
- Flexible & economical AMC-Bandhan

EFFICIENT



EFFICIENT **Efficient Network**



- Consistent, reliable & long-established
- 250+ expert touch points across India
- 500+ solution oriented professionals
- Uniform customer experience across
- Central system for enquiry to PRF
- Fair trade practices & Price transparency

Efficient Deliveries

- Cost-effective deliveries guaranteed
- Assured 7-day delivery of gensets
- Supports project management system
- Reduced working capital for customer • Award-winning replenishment model
- Assurance of FRESH products always

EFFICIENT



Efficient 24X7 Care **EFFICIENT**



- 24 X 7 operational customer care centre
- Team of over 70 trained & focused exec.
- Tracking every service request till closure
- Centrally maintained CRM for all requests
- Satisfaction call after every SR closure
- Central sales lead tracking system • Continuous NPS and CDI measurement





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