



Jakson & Company
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Jakson & Company
Authorized GOEM for Kirloskar Green Gensets

Ref. -No. J&CO/RP/**KOEL GREEN**/(320-625)/RPB/5618
Dated: 28.01.2021

M/S. ICON PHARMACHEM PVT LTD
29, ROHINI ENCLAVE
SHIMLA BYPASS ROAD
DEHRADUN

Kind Attention: MR. ASHISH VERMA
Cell Number: 9997433227
E-mail:- IKONPHARMA_DDN@YAHOO.COM

SUBJECT: -YOUR REQUIREMENT FOR KOEL GREEN SILENT DIESEL GENERATOR SET.

Dear Sir,

We are thankful to you for giving us an opportunity to work with you, refer to your subject requirement and in line with same we wish to submit our **“JAKSON-KOEL GREEN Silent DG Set”** manufactured by us as per CPCB Norms “Under License from Kirloskar Oil Engine Limited Pune”. Proposal as per following annexure, for your kind perusal and acceptance.

Price Schedule	(Page no. 2)	-Annexure “I”
Commercial Terms & Conditions	(Page no. 3)	-Annexure “II”
Technical Specification of DG Set	(Page no. 4 - 7)	-Annexure “III”
Salient Features of KOEL Green DG Set	(Page no. 8-9)	-Annexure “IV”

We trust, you will find our offer in line with your requirement and we look forward to receive your most valued order.

Thanking and assuring you our prompt attention at all times.

Yours faithfully,
FOR JAKSON & COMPANY

RP Balyan
9897042284
jakson.rpbalyan@jakpower.com

JAKSON Care Centre No : 8800447864

After Sales Support Office: New Delhi, Cont. No. – 011-28114072, 09871590738.

E mail – jakson.service@jakpower.com

Mfg Units: Unit- Mayapuri (New Delhi), Unit-2 Silvassa, Unit-3 Kherdi (Silvassa)

Regd. Office : 47, Shardhanand Marg (G.B.Road), Delhi-110006

Cont. No. : 011-23216363, Email: jaksongbr@jakpower.com

★ Authorized Gen Set OEM of Kirloskar Oil Engines Ltd. ★

www.koel.co.in KOEL Care Centre No : 1800 233 3344/ 880 633 4433



#i for Tomorrow

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**ANNEXURE – “I”****PRICE SCHEDULE**

Dear Sir,

We thank you very much for your enquiry for “**KOEL’ GREEN SILENT DIESEL GENERATOR SET**”.
We are pleased to quote as under:

GENSET (KVA)	ENGINE (MODEL)	ENGINE (BHP)	ALTERNATOR (THREE PHASE)	GENSET, BASIC PRICE, EX WORKS, GST EXTRA (Each) Rs.
500 (WC)*	DV10TAG1	608	500 KVA / 400 KW	26,51,250/-

SCOPE OF SUPPLY:

Factory assembled Unpacked “**KOELGREEN SILENT DG SET**” comprising of KOELGreen Make above model Diesel Engine directly coupled To “KOEL GREEN” make Alternator mounted on Common Base Frame fitted with AVM Pads complete with Fuel Tank, Standard Manual Control Panel, Battery with leads and Acoustic Enclosure (C A N O P Y) as per latest CPCB Norms along with K-Oil Premium & K-Cool (Coolant)

NOTE:

- **GST & Freight are extra at actual.**
- **(WC)* = Water Cooled.**
- **These prices are governed by Commercial Terms & Conditions given in Annexure-“II”.**
- **Our standard scope of supply given in Annexure-“III”.**



- After First Oil Change Next LUBE Oil Change Period is 500 hrs/1 Year whichever is earlier
- Free 2 Service Check (CSP Check) as per KOEL Policy

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ANNEXURE – “II”**COMMERCIAL TERMS & CONDITIONS**

PRICE	Ex-Works (Basic)
GST	Extra @ 18%. (Applicable at the time of dispatch.)
DESPATCH	Within 14 Days from the date of receipt of Techno Commercial clear order along with balance payment.
VALIDITY	Our offer is open for acceptance for 07 Days from the date of submission.
PAYMENTS	30% advance (Non Refundable) along with order, Entry Permit (if applicable) and balance payment against Proforma invoice.
WARRANTEE	<p>The Warranty of the offered DG Set is applicable as per KOEL Policy. However The DG Set comprising of Engine, Alternator & battery carries a warranty against defective material/ Manufacturing defects for a period of 24 months from the date of commissioning or 5000Hrs whichever occurs earlier.</p> <p>The terms of KOEL warranty policy will have precedence under all circumstances & the Warrantee Will Be applicable if customer sources K-Oil Premium, Cool Super and avail the services from authorized service dealers. “The Warranty is applicable to DG sets Only for Domestic sales and commissioned in India”</p>
INSTALLATION /CUSTOMER SCOPE	Unloading of “DG” and installation work like Foundation Exhaust Piping, Earthing, Cabling, Change Over Switch, Fuel (Diesel) has to be arranged by Customer.
INSURANCE	Extra at cost, if required.
Note	If the order is cancelled after one month, for whatever reason ,may be the advance amount will not be refunded.

COMMISSIONINGRef. -No. J&CO/RP/**KOEL GREEN**/(320-625)/RPB/5618**Dated: 28.01.2021****Jakson & Company (RP)**



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Commissioning of DG Set shall be done by our service engineer (will visit for commissioning after getting confirmation of completion of Installation). Extra visit will be on chargeable basis.

ANNEXURE - "III"

TECHNICAL SPECIFICATION OF WATER / AIR COOLED KOEL GREEN DG SETS

DIESEL ENGINE:

"KOEL GREEN" make diesel engine rated at 1500 rpm, Water Cooled, Four Stroke Electric Start Diesel Engine conforming to ISO 3046 with capacity of 10% over loading for one hour in every twelve hours duration having following accessories as scope of supply:

AIR INTAKE SYSTEM

- *Air intake manifold
- *Dry type air cleaner.
- *Vacuum indicator.

EXHAUST SYSTEM

- *Turbo-charged After cooled
- *Expansion bellow.
- *Exhaust manifold
- *Exhaust silencer.

COOLING SYSTEM

FOR WATER COOLED

- *Engine water pump.
- *Coolant
- *Radiator with pusher type fan (Fan mounted on engine Shaft)

LUBRICATING SYSTEM

- *Lube oil cooler
- *Lube oil filter "Spin-on" type
- * Centrifugal filter

FUEL SYSTEM

- *"Spin-on" type fuel filter
- * 12/ 24 V DC solenoid coil
- *Inline/ V type fuel injection pump and Fuel Feed Pump.
- *Governor – Electronic

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STARTING SYSTEM

* 180 KVA & Above 24-Volt Starter *24 Volt DC solenoid coil & 24 Volt DC Battery charging Alternator

INSTRUMENT PANEL

- | | |
|--|---|
| *Start / stop Push Button. | *Lube oil pressure indication. |
| *Water temperature indication. | *RPM indication. |
| *Engine running hour indication. | *Low lube oil trip indication. |
| *High Engine temperature trip indication | * Low/ High Battery Voltage Indication. |
| * Over /Under Speed trip Indication | *Low Fuel level Indication |
| * Over Load trip Indication | |

SAFETY CONTROLS

- | | |
|-------------------------------|-------------------------|
| * Low lube oil pressure trip. | * High Engine temp trip |
| * Low Fuel Level Trip | * Over load trip |
| * Over / Under Speed Trip | |

OTHERS

- AVM pad.
- Engine suitable for closed couple alternator
- Front and rear engine-mounting supports.

ALTERNATOR:

Synchronous alternator of "KOEL GREEN (KIRLOSKAR GREEN)" make suitable for continuous operation at 1500 RPM generating 415 volts at 0.8 p. f (lag) suitable for 50 Hz, three phase, 4 wire system. The alternator shall be brushless, single bearing, self excited & self regulated with an AVR .The alternator will be suitable for tropical climate and shall generally confirm to IS: 4722. The salient features of the alternators are:

- +-1% voltage regulation (max) in static conditions.
- IP: 23 protections with class 'H' insulation.
- Permanent lubricating bearing.
- Permissible overload of 10% for one hour in 12 hours of operation.

CONTROL PANEL:

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The standard control panel is fabricated from 16/14 SWG sheet and powder coated after seven tank treatment process. The panel is equipped with:

- (A) Digital Genset Control Unit ,
Digital Control Unit is Special Designed to Standardize most of control Panels components in Single Unit.

Salient Features of Controller

Gen –set Display Parameters	Engine Display parameters	Electrical safeties (along with display)	Mechanical safeties (along with Display)
1) Line /Phase Voltage	1) Oil Pressure	1) Under / Over voltage	1) Under/Over speed
2) Line current	2) Engine coolant Temperature	2) Under/Over Battery voltage (Only digital message not tripping)	2) Low Lube oil pressure
3) Frequency	3) Fuel Status	3) Under/Over frequency	3) High engine coolant temperature
4) Average Voltage	4) Engine Speed(RPM)	4) Phase Failure	4) Battery Charging Voltage Indication(only digital message not tripping)
5) Average Current	5) Engine running Hours	5) Phase sequence reverse	5) Low coolant level
6) Phase kW & Total kW	6) Total no. of starts	6) Over Current	6) Low fuel level
7) Kwh & PF	7) Battery Voltage Minimum Battery Voltage required	7) Over kW	7) Start / Stop fail

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8) KVA / KVA r		8) High Earth Leakage Current	
9) Earth Leakage Current			

(B) The Control Panel is equipped with MCB/MCCB of suitable rating and CT along with bus bars & cables.

C). Set of Buttons

a) Canopy Lamp ON/OFF

ACOUSTIC ENCLOSURE:

KOEL GREEN Acoustic enclosure shall be powder coated and fabricated out of 16 SWG CRCA MS sheet. The silent canopy shall be of nut bolt type construction. Critical processes of punching is done on CNC machines to maintain dimensional accuracy of holes within 0.1 mm. Powder coating is done after seven-tank surface preparation process of sheet metal. Canopy panel and doors shall have inside lining of FIRE-RETARDANT foam as acoustic material up to 200 KVA & Rock wool for higher ratings. Adequate hinged doors shall be provided to canopy, one door shall have glass window for control panel visibility.

BASE FRAME:

Base frame is fabricated either in ISMC channel or in sheet metal. The base frame will be primer coated and painted. The base frame is rugged in construction and designed for mounting KOEL engine and KG alternator close coupled, with cross members mounted on AVM. The base frame shall have provision for mounting of acoustic enclosure & control panel on it. The base frame is having provision of lifting hook for convenient lifting of complete set, i.e. along with canopy, engine and alternator.

COLOR SCHEME:

The base plate is painted/ powder coated with KOEL BLUE, the canopy is powder coated with IVORY color.

FUEL TANK:

Daily service fuel tank of 8 hours of continuous operation, fabricated from 14/16 SWG sheet metal complete with drain, inlet and outlet connection and fuel gauge.

BATTERIES:

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2 Nos. Kirloskar Green/ KOEL Green make batteries of 12 V 180 AH capacities in charged condition with its leads.

DOCUMENTATION:

One set of following documents shall be provided with each set.

- O & M Manual of Diesel Engine.
- Packing list of S.D.G. Set.
- Test certificate of diesel engine.
- Test certificate of alternator.
- Test certificate of S.D.G set.

ANNEXURE – “IV”

SALIENT FEATURES OF KOEL GREEN DG SETS

- Low ownership costs due to competitive upfront investment, optimal fuel, and Lube Oil & parts consumption.
- The best Lube oil Change interval in its class
- Diesel Engines meeting the latest CPCB norms for emission.
- Convenient lifting arrangement.
- Microprocessor based DG controller which provide safety for engine and alternator.
- Branded Sound-Proof Enclosures with standard warranty & serviced by company service dealer.
- The only DG set brand to offer consistent deliverables (All DG manufacturing Plants ISO 9001:2008, BS EN 14001:2004 and OHSAS 18001:2008 certified & most Service Dealers are ISO 9001:2008 certified).
- The most extensive After Sales Service Network rated the best in the industry (according to a survey* conducted by AC Nielsen) with:
 - 65 Service Dealers & 195 locations. (41- cities 24*7 service)
 - Complement of trained engineers.
 - Easy parts availability with first pick at above 95 % level
 - Specially formulated Lube Oil (K-Oil Premium) for longer Change intervals.
 - Single Window Support for providing support Engine, Alternator and acoustic enclosure, another unique KGPI advantage.
 - Value added Services like Annual Maintenance Contracts, Stand-by DG sets, Customer training programme – to name a few

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• Industry best Warranty

* The Customer Satisfaction Survey conducted by AC Nielsen, an independent market research firm of international repute, has placed KOEL at the top of the charts consecutively for 2 years in a row. Our Customer Satisfaction (CSI) is one of the best in the world in manufacturing sector.

KOEL GREEN SALIENT CANOPY FEATURES

- RTU canopy kits, which can be assembled on site within a time period of 90 minutes.
- Canopy fabricated on machines with dimensional accuracy of 0.1mm.
- Canopy is powder coated after passing through seven tank processes.
- Canopy is lined with acoustic foam, which is non-igniting / Fire Retardant ((confirming to UL94-HF1).
- No grouting required on the ground, only a level surfaces capable of withstanding the DG weight.
- Designed for installation in open-air conditions.
- Suitable for outdoor/ rooftop installation.
- Lockable doors provided.
- Lockable fuel filling arrangement provided inside the canopy.
- Residential Silencer.
- Externally accessible emergency stops button.
- The exhaust gases shall be taken out through a suitable flexible pipe to prevent any back pressure on the engine.

Performance Parameters

- The average sound level, when measured in green field condition (ISO 3744 OR 8528 PT 10) at 1-meter distance from all four sides shall be less than 75-dBA averages or as per CPCB norms.
- The average stabilized hot air temperature rise within the canopy near suction of air filter is maintained within 0-7°C above ambient temperature.
- Ease access and serviceability.

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