**QUOTATION**

Quotation no: Sensation Fortune Mes LLP 314

Date 06/12/2022

**To**

**Sensation Fortune Mes LLP,**

**Goa**

Sub : Offer for the Supply of 62.5 kVA KOEL iGREEN DG Set confirming to CPCB II regulations.

Dear Sir/ Madam,

At the onset, we thank you for your valued enquiry and the interest shown in KOEL iGREEN Genset. “KOEL GREEN” is the world’s leading and the most preferred genset brand in India offering the widest range of power ratings.

Kirloskar Group has a strong lineage of over 133 years of rich engineering history. Today the group has a net worth of over INR 6000 Crs. Having its presence in various parts of the world.

Kirloskar Diesel Engines are used as prime movers in different applications such as DG Sets, Earth Moving, Tractors, Industrial Pump Sets, Cold Storages, Rice Mills and so many other applications.

KOEL is a major player globally, specialized in both air-cooled and water-cooled engines diesel generating sets with power output from 5kva to 3000kva.Over 50,000 establishments /businesses from different sectors such as manufacturing, service, software, construction and infrastructure are powered by “Kirloskar Green” Gensets annually .

KOEL has the widest service network with more than 360 service outlets across the country backed with trained and efficient service engineers. We offer single window service for the entire Genset (engine, alternator, canopy and control panel) and also offer customized AMCs and CMCs to suit our esteemed clients.

We are pleased to enclose herewith our detailed Techno - Commercial offer of "Kirloskar Green DG set" and brochure for your persuasion & consideration with following annexure:

Annexure A: Technical Specifications/Scope of Supply Annexure B: Specification of Kirloskar Green Acoustic Annexure C: Commercial Terms & Conditions

We trust you would find the same in line with your requirement and welcome any clarification sought pertaining to the subject. We look forward to establish a long term business association with you and await your favorable response.

Thanking you and assuring you of our best attention at all times. Yours truly,

**JP TECHATRONICS**

# “Annexure A”

**TECHNICAL SPECIFICATION OF 62.5 kVA KOEL iGREEN DIESEL GENERATING SET**

## DIESEL ENGINE:-

"KIRLOSKAR" Make diesel engine Model 4R810TA G1, four cylinders, liquid cooled, turbocharged After Cooled and developing 83 hp @ 1500 RPM. Our diesel engines are Vertical , electric start, compression ignition, 4 stroke, designed to run continuously at 1500 RPM confirming to IS 10002, ISO-3046, BS 5514 standard. Diesel Engine will comply with present CPCB II norms. The diesel engine will comprise of following: -

Radiator with Fan

Fuel pump with Mechanical Governor Dry type air cleaner

Exhaust Silencer

Lub Oil filter (Spin On Type) Fuel Oil filter (Spin On Type) 12V Electric starting system Battery charging alternator Stop Solenoid

Lub Oil pressure gauge Cylinder head temp. Gauge Ammeter battery charging First Fill of Lube oil

## ALTERNATOR

"KIRLOSKAR GREEN" make Alternator, suitable for continuous operation rated at 62.5KVA, 1500 RPM 415 V, 0.8 PF, 50Hz, 3Ph. in SPDP enclosure, self- excited & self- regulated, Brush less, floor mounted with Ball or Bearings on end shields. The alternator conforms to IS: 4722, BS EN 60034-1 & will be suitable for tropical condition.

## BASE FRAME:-

Suitable to couple above Engine & Alternator made from steel sheet metal.

## FUEL TANK:-

8 Hrs Capacity, with Inlet & Outlet arrangement, air vent & drain plug arrangement.

## BATTERIES:-

1 No.12 V Battery with Leads and Battery Cables.

E) STANDARD GENSET CONTROLLER WITH CONTROL PANEL

Genset controller unit ‘KG 934’ with totally enclosed, steel construction control panel suitable for indoor floor/wall mounting installation having following safeties and display parameters: -

|  |  |  |  |
| --- | --- | --- | --- |
| **Genset Display Parameters** | **Engine Display Parameters** | **Electrical Safeties (along with display)** | **Mechanical Safeties (along with display)** |
| 1. Phase Voltage | 1. Oil Pressure | 1. Genset Under / Over Voltage | 1. Phase Voltage |
| 2. Line Current | 2. Engine Temperature | 2. Under / Over Battery Voltage | 2. Low Lube Oil Pressure |
| 3. Frequency | 3. Fuel Status | 3. Under / Over Frequency | 3. High Lube Oil Temperature |
| 4. Average Voltage | 4. Engine Speed | 4. Phase Failure | 4. High Engine Coolant Temperature |
| 5. Average Current | 5. Battery Voltage Minimum Battery Voltage | 5. Phase Sequence Reverse | 5. Low Coolant Temperature |
| 6. Phase KW & Total KW | 6. Oil Temperature | 6. Over Current | 6. Low Coolant Level |
| 7. KWH | 7. Engine Hours | 7. Over KWH | 7. Low Fuel Level |
| 8. KVA | 8. Total Starts | 8.High Earth Current | 8. Start Stop Fail |
| 9. KVAR |  |  | 9. Charging Alternator Fail |
| 10. PF |  |  |  |
| 11. Earth Leakage Current |  |  |  |

# ANNEXURE “B”

**TECHNICAL SPECIICATIONS OF KIRLOSKAR iGREEN ACOUSTIC ENCLOSURE CONSTRUCTION**

Following are some technical features of Acoustic Enclosure:-

1. The enclosure is modular in construction.
2. Base frame is made of Sheet metal.
3. Durable industrial locking system is provided on doors.
4. Doors are gasketed with high quality EPDM gasket.

To make the Enclosure weather proof:-

1. All Sheet metal parts / components are hot dipped in seven tanks process, pretreated and passivated
2. Sheet metal components are painted with P.P base power.
3. Base frame is epoxy coated/powder coated
4. Zinc passivated hardware is used to avoid rusting

## ACOUSTIC INSULATION:-

1. Sound proofing of the enclosure is done with quality Foam & Rockwool confirming to IS: 8183.
2. Acoustic foam shall be fire retarded and fire resistant
3. Attenuates are provided to control sound at entry and exit to and from the container.
4. Specially designed Residential Silencer is provided.

## VENTILATION AND AIR CIRCULATION

Exhaust pipe is thoroughly insulated by covering it with Rock wool and further cladded in Enclosure.

## ELECTRICAL

Neutral Body earthing points at the sides of enclosure are isolated through Dough Moulded compound.

## SAFETIES

Emergency push button to stop the DG set from outside, Lub oil level, Lub oil pressure, Fuel level indicator, coolant level, High engine temperature.

## R & D

Our R & D department is constantly engaged in the modification of the product keeping pace with world's latest technology to give customers value for money in form of improvements. The canopies being offered are for output of < 75 dbA at a distance of 1-meter average around the set.

# ANNEXURE “C”

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. No** | **ITEM DESCRIPTION** | **Qty** | **Price** | **Amount** |
| 1 | Diesel Generating Set comprising of “KOEL” 4R810TA G1 Water Cooled Engine producing **83 BHP @ 1500 RPM coupled** With “K**irloskar iGreen” Three phase** Alternator mounted on a Base Frame along with | 1 | 648500 | 648500 |
| **AMF Panel** |
| **KIRLOSKAR Remote Monitoring System** |
| Fuel Tank |
| Battery with Leads |
| First fill Oil |
| Engine Safeties and Protection |
| Anti Vibration Mounting Pads |
| Acoustic Enclosure suitable for 62.5 kVA DG Set. **CPCBII** approved |
| [**GST@9%**](mailto:GST@9%25) | | | | **58,365** |
| [**GST@9%**](mailto:GST@9%25) | | | | **58,365** |
| **Sub Total** | | | | **765,230** |
| **Freight from Factory** | | | | **16,000** |
| **Grand Total (Rs)** | | | | **781,230** |
|  |  |  |  |  |
| **Sr. No** | **ITEM DESCRIPTION** | **Qty** | **Price** | **Amount** |
| 1 | Unloading generator on the platform | 1 | 8750 | 8750 |
| 2 | Making earth station including excavation and filling with chemical using GI plate, GI pipe. GI strip | 4 | 9000 | 36000 |
| 3 | Supply and Laying of 3.5core 35sq.mm aluminum armored cable | 15mts | 490 | 7350 |
| 4 | Supply and Laying of 4core 1.5sq.mm copper armored cable | 15mts | 220 | 3300 |
| 5 | Supply of 10sq.mm flexible copper wire | 16mts | 160 | 2560 |
| 6 | Making all connections onto the Generator and AMF panel including all hardware | 1 Job | 9000 | 5000 |
| 7 | TESTING COMMISSIONING | 1 | 18000 | 18000 |
| **Sub Total** | | | | **80,960** |
| [**GST@9%**](mailto:GST@9%25) | | | | **7,286** |
| [**GST@9%**](mailto:GST@9%25) | | | | **7,286** |
| **TOTAL** | | | | **95,533** |

**COMMERCIAL TERMS AND CONDITIONS**

**FREIGHT :-** as indicated in price schedule

**TRANSIT INSURANCE :-**

We shall arrange the transit insurance of the equipment from our works up to the destination at your cost.

**GOVT. LEVIES :-**

Any entry tax or any such Govt. charges, levy applicable at the entry point of the destination will be to your account.

**VALIDITY :-**

Our offer shall remain valid or 10 days from the date of issue and would be subject to our confirmation in writing thereafter.

**DELIVERY :-**

Within 10 days from the date of receipt of your Techno-commercially clear & firm Purchase Order along with advance, subject to Force Majeure condition and unforeseen delay which is beyond our / suppliers control.

**WARRANTY:-**

The warranty is for 12 months from the date of commissioning or 3600 hours of operation whichever is earlier. Customers can also avail extended warranty of 2 years or 5000 hours, from the date of commissioning, whichever is earlier, subject to use of Kirloskar K Oil Super, Kirloskar genuine filters, K cool super plus and services sourced through KOEL authorized Service Dealer. Other terms and conditions for warranty shall be as per our Company Standard Warranty

OTHER TERMS AND CONDITIONS

1. All Orders are subject to our Order Acceptance in writing.
2. All offers and orders are subject to the General Terms & condition of sale.
3. Any amount received as advance from Customer/Purchaser is for mobilization of the order and will not attract any interest thereof.
4. All disputes and / or differences arising out of the order / Contract against our Offer shall be referred to Arbitration under Arbitration & Conciliation ACT 1996 And/or any statutory modification in force thereof and such arbitration are Subject to Goa Jurisdiction.
5. If payment not received on time interest @ 15% will incurred per annum.
6. Any extra item if required to be charged as actual.
7. Warranty as per manufacturer not valid in case of surges, fluctuation, lightening etc.to be claimed directly with the manufacturer without involving JP TECHATRONICS.
8. Solution done as per recommendation and request by client hence, JP TECHATRONICS or its employees should not be held responsible for any kind of malfunctioning of the system for any reasons.
9. Service calls post installation to be charged as actuals

**Client scope:**

Scaffolding wherever required to be provided.

Electrification wherever necessary to be provided.

Required fabrication to be provided.

Entire Civil work.

Cabling along with terminations.

**Payment Terms**

100 % Advance

**Company’s Bank Details**

**Bank Name:** Central Bank of India

**Account Number:** 3167002097

**Branch & IFS Code:** Panaji & CBIN0280713.

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