

MUMBAI HOUSING AND AREA DEVELOPMENT BOARD
A REGIONAL UNIT OF
(MAHARASHTRA HOUSING AND AREA DEVELOPMENT AUTHORITY)

Ref. No.- EE/Elect/M.B./Quotation/ /2024

Date-

Notice to Agency for rates only

Executive Engineer / Electrical Division / Mumbai Housing and Area Development Board, Room no.368, 2nd Floor, Grihnirman Bhavan, Kalanagar, Bandra (East), Mumbai-400051 is inviting the quotation **for obtaining rate of item only** from contractor / agencies having experience in carrying out similar type of work. Contractor / agency required to submit the Quotation rates with & without GST and duly signed with seal. Sealed quotation will be received in the same office on or before 17/12/2024 up to 5:00 PM. and opened on the next working day if possible for the work mentioned below—

	Name of work and Description of Item	Rate without GST	% GST	Total Rate
1.	Supplying ,Installation, testing and commissioning of DG set 320KVA 320KVA(3PHASE)DG Set as per enclosed technical specifications, along with AMF LOGIC PANEL, Sound-Proof Acoustic Enclosure complying to CPCBIV+ norms. [Including 1year DLP & CAMC after commissioning date] (Please visit www.mhada.gov.in --> tenders for detailed description)			
2.	ATS PANEL for 1no of 400 Amps Including 1year DLP & CAMC after commissioning date] (Please visit www.mhada.gov.in --> tenders for detailed description)			
3.	Comprehensive AMC for 2 nd year			
4.	Comprehensive AMC for 3 rd year			

For any queries contact below officers: Priyanka Ahire, Dy. Engg, Electrical division :- 02266405265

(Please visit www.mhada.gov.in--> tenders for detailed description)

Terms and Conditions:-1) Interested agencies shall contact above mentioned office for any clarification and collect the detailed expected sample estimation proforma from this office during working hours from 11 am to 03.00pm in order to get standardized quotations.

2)Agency shall provide complete estimate for Supplying installation, testing and commissioning. Agency shall clearly mention scope of work with them and with MHADA to avoid future delay and ambiguity.

3)Agency has to quote the rate without GST & With GST with percentage of applicable GST for this work

4)Rate Shall be inclusive of all overheads and profits.

5)Agency has to submit the duly filled quotation along with required documents in sealed envelope.

6)Executive Engineer / Electrical Division / Mumbai Housing & Area Development Board reserves the right to accept or reject any or all quotation without assigning any reason.

7)The quotations are invited for **obtaining rates of item for estimation purpose**. The rates should be agency's Supplying installation, testing and commissioning and getting license price at site

8)Agency must submit the OEM certificate.



Executive engineer,
Electrical Division,Mumbai
Board

TECHNICAL SPECIFICATION OF DIESEL GENERATING SET

DIESEL ENGINE

Diesel Engine suitable for above DG sets. The standard Design consists of Direct injection, turbo-charged, four stroke liquid cooled technology confirming to BS:5514 and IS 10000 suitable for prime duty generating set application as follows :

KVA / kW	BHP @ 1500 RPM	NO. OF CYLINDERS
320/256	380	6

The engine shall be complete with the following standard accessories:

- Dry type air cleaner
- Exhaust silencer
- Expansion bellows
- Lube oil cooler
- Lube oil filter
- Fuel filter
- Radiator, radiator fan and mounting
- Fuel pump
- Fly wheel with starter ring
- Battery charging alternator
- 24 Volt electric starter motor
- Electronic Governor

➤ **ENGINE MONITORING SYSTEM –**

- a state-of-the-art engine & genset monitoring and safety system, having following features:
 - Control panel consisting of built in On / Off / Start key.
 - Battery charging voltmeter
 - Electronic Hour meter
 - Indication & Monitoring of Oil Pressure & safety trip in case of Low Oil Pressure.
 - Indication & Monitoring of Coolant Temperature & safety trip in case of High Coolant Temperature.
 - In-built engine shut down system in case of Engine Overspeed.
 - Indication & Monitoring of Fuel Level and alarm.
 - Indication & Monitoring of Canopy Temperature and alarm / safety trip incase of High Canopy Temperature.

- Vibration Damper
- Set of documents comprising spare parts book and operation & maintenance manual

ALTERNATOR

Alternator suitable rated at 0.8PF, 415V, 3 Phase, 4 Wires, 50 Cycles/Sec., 1500 RPM, self excited and self regulated, with Brushless Excitation Band of voltage regulation $\pm 1\%$ of rated voltage, from no load to full load, Insulation class "H". The alternator generally conforms to BS: 2613/IS: 4722.

BATTERY

2 Nos. 12 Volts Factory Pre-charged Lead Acid Battery with leads.

AMF LOGIC PANEL

Sheet steel made duly painted with stoving enamel paint consists of followings:

- 1 No. MCCB of suitable rating
- 1 No. EMS
- 3 No's. Current Transformer
- 2 No's. Indicating Lamps
- 1 Set Control Fuses
- 1 No. LVM

1 No. Automatic Battery Charger

FEATURES OF ENGINE MONITORING SYSTEM –

- State-of-the-art Microprocessor based fully configurable technology
- High performance graphical LCD and prominent display
- LED indications for genset status and alarms
- Event logging history (stores last 100 events) for ease of maintenance/service & preventive maintenance annunciation.

- Canopy temperature monitoring
- Individual touch buttons for Manual, Test & Auto modes.
- Battery condition monitoring
- Statistical cumulative counters like No. of starts, Engine run Hrs & kWh
- In-built AMF module

Salient features of Controller

MECHANICAL SAFETIES (along with metering)	ELECTRICAL SAFETIES (along with metering)
Under / Over Speed	Genset Under / Over Voltage
Low Lub Oil Pressure	Under / Over Frequency
High Coolant Temperature	Phase failure
Low coolant level	Phase sequence reverse
Low Fuel level (alarm)	Over current
Start / Stop Fail	Over kW
High Canopy Temperature	Battery Under / Over Voltage
Charging alternator failure	Mains Monitoring

Genset metering parameters		Engine metering parameters	
Phase / Line Voltage	Line Current	Oil Pressure	Coolant Temperature
Frequency	Average Voltage	Fuel Status	Engine Speed
Average Current	Phase kW & Total kW	Canopy Temperature	Engine Run Hours
kWH & PF	kVA / kVAr	Total Starts	Battery condition

Specification of canopy

Construction of Acoustic Enclosure

Acoustic enclosure shall be powder coated and fabricated out of 1.4 / 1.5 mm thickness MS sheet. The silent canopy shall be of nut bolt type construction. Powder coating is done after surface treatment process of sheet metal. Canopy panel and doors shall have inside lining of Fire Retardant Foam as acoustic material. Hinged doors shall be provided to canopy, one door shall have glass window for control panel.

Surface Treatment-Painting

The enclosure surface is pretreated with 11 tank process and thereafter they are coated with high quality powder and are baked in uniform temperature in conveyor oven

Base Frame

The Base frame is rugged in construction and designed for mounting engine and alternator close coupled, with cross members mounted on AVM. They are fabricated with MS HR sheet steel of suitable thickness. The Base frame is pretreated and coated with primer based powder / Epoxy paint.

Fuel Tank

Fuel tank is fabricated out of 2/ 3mm MS HR sheet integrated with base frame (Detachable) and is fitted with inlet and outlet connections.

Noise suppressor (Silencer)

Residential type Silencer is provided to suppress exhaust noise from the engine to meet CPCB IV+ norms.

Emergency Push Stop Button:

The canopy has the provision of emergency push button, external to the canopy.

Performance Parameters

- ❖ DG with canopy are manufactured as per (ISO 3744 OR 8528 PT 10) to meet CPCB IV+ norms of average 75 DBA under green field conditions @ 1 meter distance from all four sides.
- ❖ The average stabilized hot air temperature rise with in the canopy is maintained within 10° C over and above ambient temperature.

Features of canopies

- Fabrication of canopies are on CNC-operated **AMADA Turret Punch Press AC255NT** for a repeat dimensional accuracy of $\pm 0.1\text{mm}$
- All sheet metal are processed further on **AMAD Press Brake RG100** for accurate bending
- All fabricated parts are pre-treated under 11 tanks process and powder coated on automatic powder-coating plant for the longevity of the color & finish.

COMMERCIAL TERMS & CONDITIONS

Sr No	PARTICULARS	Rate (without GST)	% GST (Amount)	Rate (Including GST)
1	320KVA (3PHASE) DG Set as per enclosed technical specifications, along with AMF LOGIC PANEL , Sound-Proof Acoustic Enclosure complying to CPCB IV+ norms.			
2	ATS PANEL for 1no of 400Amps			