

Central Ordnance Depot
Rawalpindi

Telephone:- 051-5585165
0331-5763789
0319-9436032

Tender/9/RPD/LP

10 Sep 2024

To: PPRA Islamabad

Subject: **Request for Amendment in Opening Date of Tender No 9
(Generator Set 350 KVA, AVR & Oxygen Cyl FY 2024-25)**

Central Ordnance depot letter number Tender 09 (Generator Set 350 KVA, AVR & Oxygen Cyl) dated 29 Aug 2024 reference.

1. It is intimated that Tender No 09 (Generator Set 350 KVA, AVR & Oxygen Cyl) is avail on PPRA website with opening date of **12 September 2024** vide ID **TS546362E**. Due to some technical reasons, opening date of subject tender is required to be extended.
2. Therefore, please extend opening date of said tender on **19 September 2024 at 1100 hrs** instead of **12 September 2024**.
3. Your cooperation in this regard will be highly appreciated, please.


Lt Col
LPO
(Naqeeb ur Rahman)

CENTRAL ORDNANCE DEPOT - RAWALPINDI

Central Ordnance Depot
 Rawalpindi
 Telephone : **051-5585165**
0331-5763789
0319-9436032

Tender No 9/ RPD/ LP
27 Aug 2024

To: The Assistant Director IT, PPRA
 1st Floor, FBC Building, Near State Bank of Pakistan
 Sector G 5/2 Islamabad
(Attention Mr. Rizwan Mehmood)

Subject: **Invitation to Tender and General Instructions for Procurement of Generator Set 350 KVA, AVR & Oxygen Cyl FY- 2024/25**

1. Date and time of closing of tender is **12 Sep 2024 up to 1030 Hours**.
2. Date and time of opening of tender is **12 Sep 2024 at 1100 Hours** at the premises of Central Ordnance Depot Rawalpindi.
3. Bids of only those bidders will be entertained, in whose name the tender documents have been issued from this office.
4. Detail of tendered items is attached as per Annexure A to this letter respectively.
5. No change in sequence of listed items be made in soft copy of Proposal. Provision of Proposal soft copy (excel sheet) is mandatory duly conforming to the hard copy of bid. Bid/ offer must be submitted in same sequence (both hard and soft) as per tendered list.
6. **Terms and Conditions Governing Bidding/ Purchases and General Instructions for Bidders:-**
 - a. The purchaser can waive off any of the conditions stipulated in this tender inquiry and reserves the right to accept or reject thereto.
 - b. Bidders should note that decision of Commandant Central Ordnance Depot Rawalpindi will be final in respect of acceptance / rejection of the offers.
 - c. All samples and supplies will be subject to tests and inspections either by concerned inspectorates or a board of officers constituted for the purpose and any cost incurred on tests / inspections and stores consumed in the same will be borne by suppliers. Depot may test/inspect samples before placing of purchase orders.
 - d. Successful bidders will have to complete the supplies within period as specified in the purchase orders, failing which appropriate penalty as decided by Commandant Central Ordnance Depot Rawalpindi will be imposed and necessary / appropriate disciplinary action will also be taken.
 - e. During warranty period (if stores) supplied is/are backed by warranty if a fault occurs in supplied stores then supplier will be responsible to either rectify the faults communicated or get the faulty parts replaced within 14 (fourteen) days of receipt of information in this regard from the purchaser at his specified places which can be other than the place of delivery of stores. In case supplier fails to rectify the faults or replace the faulty parts in a specified time then purchaser will have the right to take disciplinary action against the supplier and also impose penalty if considered necessary/ appropriate.
 - f. During warranty period it will be the responsibility of the supplier to carry out periodic maintenance of supplied stores as prescribed by the manufacturers free of cost at purchaser's specified places which can be other than the place of delivery of stores.
 - g. Sample (when asked by Central Ordnance Depot, Rawalpindi) and store offered would be brand new, unused, as per approved specifications/ drawing and **must be packed in standard packing i.e. wooden box, carton, cardboard box, crate etc.**
 - h. In case an item has no specifications, drawing or approved sample then a board of officers appointed for the purpose will decide its acceptable standards.
 - i. Make / model / brand and country of origin of stores must be mentioned where applicable.
 - j. Manufacturer certificate of branded items must be provided.
 - k. Prices / rates quoted must be inclusive of all applicable taxes / duties.
 - l. Prices / rates quoted must be as per accounting unit.

TENDER NUMBER – 9 FY 2024-25

- m. More than one manufacture/ model may also be quoted giving separate price of each manufacture/model.
- n. Prices/ rates will be quoted in Pakistani currency.
- o. Prices / rates quoted will be valid till 30 June 2025 from date of opening of tender.
- p. Bid security (5% of quoted value) be deposited along with tender & performance guarantee (10% of quoted value) will be asked from successful bidder. Same will be required to be deposited within 3 (three) working days of intimation from Central Ordnance Depot, failure to deposit same will render the bid rejected in addition of additional administrative actions against the firm including forfeiture of any other bid/ performance guarantee against other contract as well.
- q. Successful bidders will have to supply stores as per prices / rates quoted with in delivery period.
- r. Part delivery / part payment will not be accepted / made against single Purchase order.
- s. Payment will be made after acceptance of ordered stores.
- t. Price Reduction (PR) will be imposed due to deviation in case the items (s) are not as per Army specs.
- u. If stores are not delivered within delivery period, penalty will be imposed.
- v. As far as possible price(s)/ rate(s) must be quoted against each item, where prices/ rates are not being quoted this should be reflected by words **“Not Quoted”**.
- w. Advance sample provided for test/inspection for acceptance of store(s) to be supplied against purchase order(s) will not be taken as part of ordered quantity(s).
- x. Before collection of tender, each firm will deposit **Rs. 4000/-** as Tender Fee (in the shape of CDR Pay Order). Same will be prepared in the name of Commandant COD Rawalpindi.

7. **Single Stage Two Envelope Procedure (PPRA Rule-36(b)).**

- a. The bid against tendered items at Annexure A shall comprise two separate envelopes. Each envelope shall contain separately the **Financial Proposal** and the **Technical Proposal**.
- b. The envelopes shall be marked as **“Financial Proposal”** and **“Technical Proposal”** in bold and legible letters to avoid confusion. Initially, only the envelope marked **“Technical Proposal”** shall be opened.
- c. The envelope marked as **“Financial Proposal”** shall be opened after acceptance of **“Technical Proposal”**.

8. **Purchaser’s Right.** Purchaser does not pledge to accept the lowest or any tender and reserves the right of accepting the whole or any part of the offer made.

9. **Date and Time of Receipt of Tender.** Your Tender Must Reach This Depot / Dropped in Tender Box Placed at **Fort Gate COD Rawalpindi** by time and date as specified in Para 1 above. This office will not accept any excuse of delay occurring in post. Tenders received after the appointed / fixed time will not be entertained. The appointed time will fall on next working day in case of closed / forced holiday.

10. **Withdrawal of Offer.** If a bidder / firm withdraw(s) its offer within validity period the competent authority (Commandant Central Ordnance Depot Rawalpindi) may place such bidder / firm under embargo or blacklist the same.

TENDER NUMBER – 9 FY 2024-25

11. **Pre-Qualification of Supplier and Contractors.** Firm will have to submit under mentioned documents along with tenders in separate envelop by mentioning “**Pre-Qualification Documents**”.

- a. Application for registration in the name of Central Ordnance Depot Rawalpindi Commandant.
- b. CNIC copy of the CEO, Directors & Shareholders.
- c. Photograph of the CEO, Directors & Shareholders.
- d. Chamber of Commerce Membership Certificate.
- e. SECP Registration Certificate.
- f. DGDP Registration Certificate (In held).
- g. PEC Registration Certificate (In case of construction firm).
- h. Names of CEO, Directors & Shareholders on company letter head with Contact numbers.
- i. Company Profile
- j. Original Bank Statement for last one year duly sealed / stamped by the bank.
- k. NTN & GST Certificate.
- l. Active Tax Payer List.
- m. Police Verification of firm & CEO, Directors & Shareholders.
- n. Proof of Moveable / Immoveable Property Certificate countersigned by Tehsildar.
- o. Staff List (Name, CNIC No, Address & Contact Number).
- p. Project Details, POs
- q. Office Rent/ Lease/ Ownership Certificate on E-stamp Paper.
- r. Income Tax Returns & GST (3 Years).
- s. FBR Form # 181.
- t. Current Financial Year Professional Trade Tax Clearance Certificate.
- u. Firm Non Blacklisting Certificate on E-Stamp paper.

12. **Disqualification.** Offer(s) are liable to be rejected if:-

- a. There is any deviation from general / Special Instructions/Pre-qualification of supplier/contractors.
- b. Price(s) / Rate(s) are offer excluding / applicable duties / taxes.
- c. If price(s) / rate(s) are not quoted (where applicable) against store(s) / item(s) with Army's approved specification(s), drawing(s) / sample(s).
- d. Offers are found conditional or incomplete in any respect.
- e. Multiple price(s) / rate(s) quoted against an item.
- f. More than one offer is made / submitted in same envelope.
- g. Received later than appointed / fixed date and time.
- h. Offers containing non – initialed, un-authenticated correction / over writing(s).
- i. If validity of offer is not quoted as required (as mentioned in tender inquiry) or made subject to confirmation later.
- k. Offer made through Fax / e-mail /Telex.
- l. If offer is found to be based on cartel action in connive with other sources / participants of the tender.

13. **Right's Reserved.** Commandant Central Ordnance Depot Rawalpindi reserves the right to accept or reject any or all offers including the lowest.

14. **Application of Official Secret Act.** All the matter connected with the inquiry and subsequent actions arising there are within the scope of official secret Act, 1923.

Note: This tender inquiry is also available on PPRA website www.ppra.org.pk

Lieutenant Colonel
Local Purchase Officer
(Naqeeb Ur Rahman)

DETAIL OF ITEMS

Ser	Nomenclature	A/U	Rate	Remarks
1.	Generator Set 350 KVA with Canopy	Nos		Tech data/ specs pasted below
2.	Automatic Voltage Regulator (AVR)	Nos		
3.	Oxygen Filling System	Nos		

TECH SPECIFICATIONS OF GENERATOR 350 KVA WITH CANOPY

Parameters	Range
Standby	<340 kVA
Prime Power Rating	<310kVA
Engine Governor	Electronic
Engine Speed	1500-1800 rpm
Engine Type	6 cylinder vertical in line 4 stroke, 4 Cycle turbocharged
Wiring Method	Three phase four wire
Engine Cooling	Air Cooled / water cooled
Fuel Tank	Built in fuel tank
Alternator	Stamford
Rated voltage	380-415 V Three Phase 220-240 V single Phase
Rated output current (A)	400-800
Frequency	50/60 Hz
Power factor	0.8-0.9
Starting method	Automated transfer switch (ATS) and 24 V DC Start
Control Panel	Electronic
Efficiency	Above 95%
Connection type	Circuit Breaker
Circuit Breaker	4 Pole
Exhaust Emission Level	Stage III-A
Fuel Consumption	90-110 liters per hr (at 100% load)
Dimension (LxWxH)	2400-2450mmx1200-1250mmx1800-1850mm
Dry Weight	1530-1700 Kg
Canopy Noise Level	76 dB (A) at 1m
Additional Features	Battery Charger Water Heater
Warranty	2 years
Installation and Commissioning	Complete installation and commissioning by firm
<u>TECH DOCU (HARD & SOFT COPY)</u>	
<ul style="list-style-type: none"> a. Operator Manual. b. Repair and Maintenance manual. c. Calibration data & procedure. d. Illustrated parts catalogue. 	
Software –Where applicable to be provided with CD.	

TRAINING

OEM certified maintenance, repair and calibration training (free of cost) in Pakistan (minimum 1x wk) in line with training imparted at OEM facilities to firm engineers / techs for repair of eqpt. Trg to include following:-

- a. Operation of equipment along with indent of all delivered items / accessories, probes etc.
- b. Software and licenses installation (where applicable).
- c. Configuration Settings.
- d. Troubleshooting procedure.
- e. Diagnosis through service login access (machine log-Where applicable).
- f. Calibration of equipment.
- g. Fault trend.

International Price List (IPL) of frequent replaceable components (valid for two years), along with eqpt delivery.

TECH SPECIFICATIONS OF AVRS

Tech Specifications		
a. Wind range of permissible input voltage windows (up to 40%) b. Precise output voltage regulation accuracy (up to $\pm 1\%$) c. Step-less automatic voltage regulation. d. High efficiency & reliability. e. Independent phase balancing & control. f. High over capability. g. Efficient/ fail safe protection function for over/ Low voltage, over heat/ load protection, short circuit protection. h. 2 year standard warranty. i. Installation & commissioning of complete system. j. Compliance with international standards. k. Ph-4 Line		
Input Voltage Range	$\pm 30\%$ tolerance for all standard output voltage above 380 V. $\pm 20\%$ tolerance for required 380 V output and all standard voltage below.	
Output Voltage	3 Phase 380 V (Optional: 110V/120V/208V/240V/415V/440V/460V/480V)	
Output Accuracy	$\pm 2-4\% \pm 1\%$ (Optional) in case of output accuracy of $\pm 2-4\%$ the voltage stabilizer will be servomotor based and in case of output of $\pm 1\%$ the voltage stabilizer would be SCR based.	
Frequency	50Hz/60Hz	
Control System	High Speed Servo motor system.	
Current Type	AC	
Efficiency	95%	
Response Time	≤ 0.3 Sec	
Ambient Temperature	-15C + 40 C	
Cooling Method	Naturally air cooled	
Insulation Resistance	$\geq 5M\Omega$	
Overload Capacity	Overload current (%)	Duration (Min)
	20	≤ 60
	40	≤ 15
	40	≤ 5
Waveform Distortion	Non-lack fidelity waveform	
Protection	Over-Voltage, Over-Current, feed phases	
Protection grade	IP 24	
Certificate	ISO9001: 2008,CE	
Weight	600-700 kg	
Dimensions	1000x2000 mm	
Alarms	Audible Visual	
Electromagnetic noise	<30 db (at 1 meter)	
Country of origin	EU/UK/USA/Japan/Equivalent	

TECH DOCUMENTS REQUIRED (HARD & SOFT COPY)

- a. Operator Manual.
- b. Repair and maintenance manuals.
- c. Calibration data & procedure.
- d. Illustrated parts catalogue.

Software—Where applicable to be provided with CD.

TRAINING

OEM certified maintenance, repair and calibration training (free of cost) in Pakistan (minimum 1x wk) in line with training imparted at OEM facilities to firm engineers / techs for repair of eqpt. Trg to include following:-

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- k. Diagnosis through service login access (machine log-Where applicable).
- l. Calibration of equipment.
- m. Fault trend.

International Price List (IPL) of frequent replaceable components (valid for two years), along with eqpt delivery

TECH SPECIFICATIONS OF OXYGEN FILLING SYSTEM

Oxygen Filling Station (Automatic Type)	
Specs	2*5 (2 sets of 5 x nozzles)
Texture	Brass
Working Pressure	≥15 Mpa
Oxygen Filling Machine	
Volume Flow	≥ 35-40Nm ³ /h
Intake pressure	≥ 0.4 Mpa (G)
Discharge Pressure	≥ 15 Mpa
Compressible Material	Oxygen
Motor power	≥ 22 Kw
Size	1600mm x 1100mm x 1100mm
Warranty	2 Years
Installation and Commissioning	Complete installation and trg/ commissioning by firm
<u>TECH DOCU (HARD & SOFT COPY)</u>	
e. Operator Manual. f. Repair and Maintenance manual. g. Calibration data & procedure. h. Illustrated parts catalogue.	
Software –Where applicable to be provided with CD.	
<u>TRANING</u>	
OEM certified maintenance, repair and calibration training (free of cost) in Pakistan (minimum 1x wk) in line with training imparted at OEM facilities to firm engineers / techs for repair of eqpt. Trg to include following:-	
n. Operation of equipment along with indent of all delivered items / accessories, probes etc. o. Software and licenses installation (where applicable). p. Configuration Settings. q. Troubleshooting procedure. r. Diagnosis through service login access (machine log-Where applicable). s. Calibration of equipment. t. Fault trend.	
International Price List (IPL) of frequent replaceable components (valid for two years), along with eqpt delivery.	
Assured Post Warranty Logistics Support (PWLS) including availability of spares and maintenance material for 15 Years from the date of delivery.	

CENTRAL ORDNANCE DEPOT - RAWALPINDI

Central Ordnance Depot
 Rawalpindi
 Tel : GHQ 34729
 Tender No 9/ RPD/ LP
 27 Aug 2024

To: The Assistant Director IT, PPRA
 1st Floor, FBC Building, Near State Bank of Pakistan
 Sector G 5/2 Islamabad
(Attention Mr. Rizwan Mehmood)

Subject: **Invitation to Tender and General Instructions for Procurement of Generator Set 200 KVA & AVR FY- 2024/25**

1. Date and time of closing of tender is **12 Sep 2024 up to 1030 Hours**.
2. Date and time of opening of tender is **12 Sep 2024 at 1100 Hours** at the premises of Central Ordnance Depot Rawalpindi.
3. Bids of only those bidders will be entertained, in whose name the tender documents have been issued from this office.
4. Detail of tendered items is attached as per Annexure A to this letter respectively.
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6. **Terms and Conditions Governing Bidding/ Purchases and General Instructions for Bidders:-**
 - y. The purchaser can waive off any of the conditions stipulated in this tender inquiry and reserves the right to accept or reject thereto.
 - z. Bidders should note that decision of Commandant Central Ordnance Depot Rawalpindi will be final in respect of acceptance / rejection of the offers.
 - aa. All samples and supplies will be subject to tests and inspections either by concerned inspectorates or a board of officers constituted for the purpose and any cost incurred on tests / inspections and stores consumed in the same will be borne by suppliers. Depot may test/inspect samples before placing of purchase orders.
 - bb. Successful bidders will have to complete the supplies within period as specified in the purchase orders, failing which appropriate penalty as decided by Commandant Central Ordnance Depot Rawalpindi will be imposed and necessary / appropriate disciplinary action will also be taken.
 - cc. During warranty period (if stores) supplied is/are backed by warranty if a fault occurs in supplied stores then supplier will be responsible to either rectify the faults communicated or get the faulty parts replaced with in 14 (fourteen) days of receipt of information in this regard from the purchaser at his specified places which can be other than the place of delivery of stores. In case supplier fails to rectify the faults or replace the faulty parts in a specified time than purchaser will have the right to take disciplinary action against the supplier and also impose penalty if considered necessary/ appropriate.
 - dd. During warranty period it will be the responsibility of the supplier to carry out periodic maintenance of supplied stores as prescribed by the manufacturers free of cost at purchaser's specified places which can be other than the place of delivery of stores.
 - ee. Sample (when asked by Central Ordnance Depot, Rawalpindi) and store offered would be brand new, unused, as per approved specifications/ drawing and **must be packed in standard packing i.e. wooden box, carton, cardboard box, crate etc.**
 - ff. In case an item has no specifications, drawing or approved sample then a board of officers appointed for the purpose will decide its acceptable standards.

TENDER NUMBER – 9 FY 2024-25

- gg. Make / model / brand and country of origin of stores must be mentioned where applicable.
- hh. Manufacturer certificate of branded items must be provided.
- ii. Prices / rates quoted must be inclusive of all applicable taxes / duties.
- jj. Prices / rates quoted must be as per accounting unit.
- kk. More than one manufacture/ model may also be quoted giving separate price of each manufacture/model.
- ll. Prices/ rates will be quoted in Pakistani currency.
- mm. Prices / rates quoted will be valid till 30 June 2025 from date of opening of tender.
- nn. Bid security (5% of quoted value) be deposited alongwith tender & performance guarantee (10% of quoted value) will be asked from successful bidder. Same will be required to be deposited within 3 (three) working days of intimation from Central Ordnance Depot, failure to deposit same will render the bid rejected in addition of additional administrative actions against the firm including forfeiture of any other bid/ performance guarantee against other contract as well.
- oo. Successful bidders will have to supply stores as per prices / rates quoted with in delivery period.
- pp. Part delivery / part payment will not be accepted / made against single Purchase order.
- qq. Payment will be made after acceptance of ordered stores.
- rr. Price Reduction (PR) will be imposed due to deviation in case the items (s) are not as per Army specs.
- ss. If stores are not delivered within delivery period, penalty will be imposed.
- tt. As far as possible price(s)/ rate(s) must be quoted against each item, where prices/ rates are not being quoted this should be reflected by words “**Not Quoted**”.
- uu. Advance sample provided for test/inspection for acceptance of store(s) to be supplied against purchase order(s) will not be taken as part of ordered quantity(s).
- vv. Before collection of tender, each firm will deposit **Rs. 4000/-** as Tender Fee (in the shape of CDR Pay Order). Same will be prepared in the name of Commandant COD Rawalpindi.

7. **Single Stage Two Envelope Procedure (PPRA Rule-36(b)).**

- d. The bid against tendered items at Annexure A shall comprise two separate envelopes. Each envelope shall contain separately the **Financial Proposal** and the **Technical Proposal**.
- e. The envelopes shall be marked as “**Financial Proposal**” and “**Technical Proposal**” in bold and legible letters to avoid confusion. Initially, only the envelope marked “**Technical Proposal**” shall be opened.
- f. The envelope marked as “**Financial Proposal**” shall be opened after acceptance of “**Technical Proposal**”.

8. **Purchaser’s Right.** Purchaser does not pledge to accept the lowest or any tender and reserves the right of accepting the whole or any part of the offer made.

9. **Date and Time of Receipt of Tender.** Your Tender Must Reach This Depot / Dropped in Tender Box Placed at **Fort Gate COD Rawalpindi** by time and date as specified in Para 1 above. This office will not accept any excuse of delay occurring in post. Tenders received after the appointed / fixed time will not be entertained. The appointed time will fall on next working day in case of closed / forced holiday.

10. **Withdrawal of Offer.** If a bidder / firm withdraw(s) its offer within validity period the competent authority (Commandant Central Ordnance Depot Rawalpindi) may place such bidder / firm under embargo or blacklist the same.

TENDER NUMBER – 9 FY 2024-25

11. **Pre-Qualification of Supplier and Contractors.** Firm will have to submit under mentioned documents along with tenders in separate envelop by mentioning “**Pre-Qualification Documents**”.

- v. 1x copy of valid NTN Certificate.
- w. 1x copy of valid Sales Tax Certificate.
- x. 1x copy of valid Professional Sales Tax Certificate.
- y. 1x copy of CNIC of the proprietor.
- z. 1x photograph of proprietor.
- aa. Original Bank Statement for last one year duly sealed / stamped by the bank.
- bb. Application for registration in Central Ordnance Depot Rawalpindi with complete profile.
- cc. In case firm is not properly registered with this installation, firm would provide performance Certificate from the installation where properly registered.

12. **Disqualification.** Offer(s) are liable to be rejected if:-

- i. There is any deviation from general / Special Instructions/Pre-qualification of supplier/contractors.
- j. Price(s) / Rate(s) are offer excluding / applicable duties / taxes.
- k. If price(s) / rate(s) are not quoted (where applicable) against store(s) / item(s) with Army's approved specification(s), drawing(s) / sample(s).
- l. Offers are found conditional or incomplete in any respect.
- m. Multiple price(s) / rate(s) quoted against an item.
- n. More than one offer is made / submitted in same envelope.
- o. Received later than appointed / fixed date and time.
- p. Offers containing non – initialed, un-authenticated correction / over writing(s).
- i. If validity of offer is not quoted as required (as mentioned in tender inquiry) or made subject to confirmation later.
- k. Offer made through Fax / e-mail / Telex.
- l. If offer is found to be based on cartel action in connive with other sources / participants of the tender.

13. **Right's Reserved.** Commandant Central Ordnance Depot Rawalpindi reserves the right to accept or reject any or all offers including the lowest.

14. **Application of Official Secret Act.** All the matter connected with the inquiry and subsequent actions arising there are within the scope of official secret Act, 1923.

Note: This tender inquiry is also available on PPRA website www.ppra.org.pk

Lieutenant Colonel
Local Purchase Officer
(Naqeeb Ur Rahman)

DETAIL OF ITEMS

Ser	Nomenclature	A/U	Rate	Remarks
4.	Automatic Voltage Regulator (AVR)	Nos		Tech data/ specs pasted below
5.	Generator Set 200 KVA with canopy	Nos		

TECH SPECIFICATIONS OF AVRS

<u>Tech Specifications</u>		
l. Wind range of permissible input voltage windows (up to 40%) m. Precise output voltage regulation accuracy (up to $\pm 1\%$) n. Step-less automatic voltage regulation. o. High efficiency & reliability. p. Independent phase balancing & control. q. High over capability. r. Efficient/ fail safe protection function for over/ Low voltage, over heat/ load protection, short circuit protection. s. 2 year standard protection. t. Installation & commissioning of complete system. u. Compliance with international standards. v. 3 Ph-4 Line/ Core		
Input Voltage Range	$\pm 15\%$ tolerance for all standard output voltage above 380 V. $\pm 20\%$ tolerance for required 380 V output and all standard voltage below.	
Output Voltage	3 Phase 380 V (Optional: 110V/120V/208V/240V/415V/440V/460V/480V	
Output Accuracy	$\pm 2-4\% \pm 1\%$ (Optional) in case of output accuracy of $\pm 2-4\%$ the voltage stabilizer will be servomotor based and in case of output of $\pm 1\%$ the voltage stabilizer would be SCR based.	
Frequency	50Hz/60Hz	
Current Type	AC	
Efficiency	95% or better	
Response Time	$\leq 1.5S$ or better	
Ambient Temperature	-15C + 40 C or better	
Cooling Method	Naturally air cooled	
Insulation Resistance	$\geq 5M\Omega$	
Overload Capacity	Overload current (%)	Duration (Min)
	20	≤ 60
	40	≤ 15
	40	≤ 5
Waveform Distortion	Non-lack fidelity waveform	
Protection	Over-Voltage, Over-Current, feed phases	
Protection grade	IP 24 or better	
Certificate	ISO9001: 2008,CE	

TENDER NUMBER – 9 FY 2024-25

Weight	600-700 kg or less
Dimensions	1000x2000 mm or better

TECH SPECIFICATIONS OF GENERATOR 200 KVA WITH CANOPY

Parameters	Range
Standby	200 kVA/160 kW
Prime Power Rating	182 kVA/ 146 kW
Engine Governor	Electronic
Engine Speed	1500 rpm or better
Alternator	Stamford UC1274 H or compatible
Voltage	380-415 V
Frequency	50 Hz
Amps per Phase	289
Control Panel	Power Command 1.2
Connection Type	Circuit Breaker
Circuit Breaker	4 Pole
Exhaust Emission Level	Stage IIIa
Base Fuel Tank Capacity	464 Liters or compatible
Fuel Consumption	42.3 liters per hr (at 100% load) or better
Dimensions (LxWxH)	4209mmx 1130mmx 2227mm or less
Canopy Noise Level	76 db(A) at 1m or better
Additional Features	Battery Charging, Fuel Filtration Mechanism
Warranty	2 years
Installation and Commissioning	Complete installation and trg/commissioning by firm

TECH DOCU (HARD & SOFT COPY)

- i. Operator Manual.
- j. Repair and Maintenance manual.
- k. Calibration data & procedure.
- l. Illustrated parts catalogue.

Software –Where applicable to be provided with CD.

TRAINING

OEM certified maintenance, repair and calibration training (free of cost) in Pakistan (minimum 1x wk) in line with training imparted at OEM facilities to firm engineers / techs for repair of eqpt. Trg to include following:-

- u. Operation of equipment along with ident of all delivered items / accessories, probes etc.
- v. Software and licenses installation (where applicable).

TENDER NUMBER – 9 FY 2024-25

- w. Configuration Settings.
- x. Troubleshooting procedure.
- y. Diagnosis through service login access (machine log-Where applicable).
- z. Calibration of equipment.
- aa. Fault trend.

International Price List (IPL) of frequent replaceable components (valid for two years), along with eqpt delivery.

Assured Post Warranty Logistics Support (PWLS) including availability of spares and maintenance material for 15 Years from the date of delivery.