

Tender Document for

Supply of 100,000 Car AC Units

Tender Number: 17389373

Issue Date: 20/12/2024

Closing Date: 20/01/2025

1. Introduction

The [Organization Name] requires the supply of **100,000 car AC units** with high-end specifications to meet the stringent performance needs of its new fleet of vehicles. These units are critical to ensuring a premium customer experience, adhering to global standards for energy efficiency, environmental impact, and advanced technology. This tender invites bids from qualified suppliers to manufacture, test, deliver, and support these units over the course of the contract.

The bidder is expected to deliver high-performance air conditioning systems that meet precise operational criteria, such as energy efficiency, environmental responsibility, noise control, and superior cooling performance. The contract will be awarded to the bidder who offers the best value while meeting all specified technical, logistical, and financial conditions.

2. Project Overview

This section elaborates on the strategic importance of the AC units to the company's product offerings and the technological advancements needed:

- End-User Satisfaction:** The units should provide superior comfort in both cooling and heating functions, meeting customer expectations for comfort, energy efficiency, and environmental responsibility.
- Target Markets:** The AC units will be installed in vehicles intended for global markets, including regions with diverse climatic conditions (e.g., tropical, desert, and temperate zones). Therefore, high adaptability to different operating environments is essential.

- **Technological Features:** The units should incorporate smart sensors, Wi-Fi/Bluetooth compatibility for remote monitoring, and IoT capabilities for real-time diagnostics and predictive maintenance.
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3. Need for the Project

Climate Control Requirements:

- The car AC units will serve both cooling and heating needs, ensuring optimal cabin temperatures in a variety of climatic conditions.
- The units must be capable of efficient air circulation, ensuring that all vehicle occupants experience consistent airflow across the cabin.

Sustainability Goals:

- The project aligns with the company's sustainability goals by minimizing energy consumption while meeting regulatory emissions standards. Units must comply with Euro 6 and similar international standards.
- The refrigerants used must have low global warming potential (GWP) and zero ozone depletion potential (ODP).

Innovation:

- To stay ahead in a competitive market, the units must include innovative features such as automatic climate control, air purification, and real-time energy consumption tracking.
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4. General Instructions

- **Clarifications:** Any queries regarding the tender must be submitted in writing no later than [Insert Date]. The responses to queries will be circulated to all potential bidders.
- **Pre-Bid Conference:** A pre-bid conference will be held on [Insert Date] to provide bidders with an opportunity to clarify doubts regarding specifications, compliance, and requirements.
- **Modifications to Tender:** [Organization Name] reserves the right to amend the tender documents at any time before the closing date. All changes will be notified to all bidders.

5. Eligibility Criteria

Detailed eligibility criteria have been outlined to ensure that only capable and reliable suppliers participate:

- **Past Performance:** Bidders must provide evidence of having delivered at least [X] car AC units annually to major automakers over the past [Y] years.
- **Technical Competence:** Bidder must have an in-house R&D facility for testing and development, as well as the technical capacity to produce the required volumes within specified timelines.
- **Compliance with Standards:** Bidder must demonstrate compliance with industry-specific regulations, such as:
 - ISO 9001:2015 for Quality Management Systems.
 - ISO 14001 for Environmental Management.
 - IATF 16949 for automotive quality standards.
- **Quality Certifications:** Submission of valid product quality certifications and third-party testing results, including CE, UL, and RoHS certifications.
- **Supply Chain Reliability:** The bidder must prove a reliable supply chain and provide a list of approved suppliers and manufacturers of critical components such as compressors, condensers, and evaporators.

6. Technical Specifications

Cooling Performance:

- Cooling capacity of **15 kW** or higher at an ambient temperature of **40°C**, ensuring the AC unit operates efficiently across various climate conditions, including extreme heat.
- The AC system must maintain a stable internal temperature even when the vehicle is exposed to fluctuating external temperatures (e.g., temperatures as low as **-10°C** and as high as **60°C**).

Energy Efficiency:

- The units should have an **Energy Efficiency Ratio (EER)** greater than **4.5** to meet global energy efficiency requirements.
- Low-energy operation during idle times, with eco-friendly modes that reduce fuel consumption.

Safety Features:

- **Overcurrent protection, temperature sensors, and thermal cutoff switches** to prevent overheating and ensure safe operation.
- The units must be resistant to **electromagnetic interference** to ensure they don't disrupt the vehicle's other electronic systems.

Refrigerant Compliance:

- The refrigerants used should comply with the latest international standards such as **R-1234yf** or an equivalent environmentally friendly refrigerant with a low **Global Warming Potential (GWP)**.
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7. Delivery and Logistics

Given the scale of the project, the delivery must be precisely timed to meet the vehicle production schedule:

- **Packaging:** The bidder must package each AC unit with high-quality, recyclable packaging materials, ensuring that no damage occurs during transit. All units must be wrapped in anti-static plastic and placed in moisture-proof packaging.
- **Transportation:** Delivery vehicles should be equipped to handle sensitive equipment, with temperature-controlled containers to avoid exposure to extreme temperatures during transit.
- **Storage and Handling:** All units must be stored in a clean, dry, and secure facility until they are delivered. A detailed inventory management system should be in place to track each batch's status.

Logistical Schedule:

- The first batch of **10,000 units** must be delivered within **[X] weeks** from the contract signing. Subsequent deliveries will follow a weekly schedule of **10,000 units**.

- The logistics provider should ensure that there are no delays in transit, especially during the peak production seasons.
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8. Quality Assurance and Testing

A detailed quality assurance plan is critical to ensure the AC units meet the defined specifications:

- **Batch Testing:** Each batch of 10,000 units will undergo an initial test for quality and performance compliance. Bidders must provide details of their in-house testing facilities and capabilities.
 - **Field Testing:** Once installed, a random sample of units will be monitored in live vehicle environments to ensure performance and energy efficiency.
 - **Acceptance Criteria:** The units must meet all testing parameters (cooling capacity, noise levels, energy consumption) before being accepted for shipment.
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9. Penalties for Delay and Non-Compliance

To maintain accountability and prevent any disruptions, the following penalties are outlined:

- **Delivery Delay Penalties:** A delay of more than **7 days** in delivering the weekly quota of 10,000 units will incur a **penalty of 0.5% of the total value of the delayed units per day**.
- **Failure to Meet Quality Standards:** If any unit does not meet the specified performance criteria, a penalty of **1% of the batch value** will be charged, and the units will need to be replaced at no additional cost.
- **Non-Compliance with Environmental Standards:** If any unit fails to meet the environmental compliance standards for refrigerants and energy usage, the penalty will be **2% of the total batch value**.
- **Termination:** If the bidder fails to rectify non-compliance within 15 days of being notified, [Organization Name] may terminate the contract without further liability.

10. Warranty and Post-Delivery Services

Bidder must provide a **comprehensive warranty** covering defects in material and workmanship:

- **Warranty Period: 5 years**, covering parts and labor, starting from the date of final installation.
- **Maintenance Services:** Bidder must provide preventive maintenance services every **6 months**, including checks for refrigerant levels, filter changes, and performance testing.
- **Support:** A dedicated technical support hotline and online portal for real-time troubleshooting, with a commitment to resolving issues within **48 hours** of reporting.

11. Contract Administration

The contract will be governed by the following terms:

- **Contract Duration:** The contract shall be effective for a period of [Insert Period] from the contract signing date, with provisions for extension based on mutual agreement.
- **Compliance Audits:** Periodic audits will be conducted to ensure compliance with quality standards, delivery timelines, and contract terms.
- **Risk Management:** A risk management plan will be developed to address potential delays, quality issues, or logistical challenges.

12. Environmental Impact

In line with sustainability initiatives, the selected bidder will be required to:

- **Use Recyclable Materials:** All components, including plastic casings and packaging, must be recyclable to reduce waste.

- **Carbon Footprint:** Bidder must calculate and provide details of the estimated carbon footprint of manufacturing and transportation of the AC units, and propose measures to reduce emissions.
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13. Terms and Conditions

The following terms govern the contract between [Organization Name] and the selected bidder:

- **Termination for Convenience:** [Organization Name] reserves the right to terminate the contract with a 30-day notice if project requirements change.
 - **Dispute Resolution:** Any disputes that arise will be handled through arbitration in [City], in accordance with the applicable laws.
 - **Force Majeure:** Neither party will be held liable for delays caused by circumstances beyond their control, including natural disasters or strikes.
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14. Annexures

1. **Annexure A: Technical Compliance Sheet**
2. **Annexure B: Bidder's Experience and Past Performance Documentation**
3. **Annexure C: Financial Statements and Proof of Financial Stability**
4. **Annexure D: Logistics and Delivery Plan**
5. **Annexure E: Warranty and Maintenance Terms**
6. **Annexure F: Environmental Compliance Documentation**
7. **Annexure G: Sample Testing and Compliance Report**
8. **Annexure H: Risk Management and Contingency Plan**

Annexure A: Technical Compliance Sheet

This annexure serves as a comprehensive list of technical specifications that bidders must fill out to confirm compliance with the project's requirements.

The bidder must provide detailed explanations and references to demonstrate that their products meet the criteria outlined in the tender document.

Technical Specifications Table:

Specification	Required Standard	Bidder's Confirmation	Deviation (if any)
Cooling Capacity	15 kW or higher at 40°C ambient temperature	[Bidder's Response]	[Any Deviation]
Energy Efficiency Ratio (EER)	Greater than 4.5	[Bidder's Response]	[Any Deviation]
Refrigerant Used	R-1234yf or equivalent, low GWP, zero ODP	[Bidder's Response]	[Any Deviation]
Safety Features	Overcurrent protection, temperature sensors	[Bidder's Response]	[Any Deviation]
Noise Levels	Must not exceed 40 dB at idle	[Bidder's Response]	[Any Deviation]
Warranty Period	Minimum 5 years, covering parts and labor	[Bidder's Response]	[Any Deviation]
Compliance with ISO Standards	ISO 9001, ISO 14001, IATF 16949	[Bidder's Response]	[Any Deviation]
Operational Temperature Range	-10°C to 60°C	[Bidder's Response]	[Any Deviation]

Supporting Documents:

The bidder must attach all supporting documents, such as:

- **Certification of Compliance:** A letter from a recognized testing body confirming compliance with the standards specified.
- **Product Test Reports:** Detailed reports from accredited labs, demonstrating compliance with performance and safety standards.
- **Component Certifications:** Copies of the certificates for the refrigerants and components used in the units (e.g., UL, CE, RoHS).

Comments and Notes:

- **Deviation Explanation:** Any deviations from the required specifications must be clearly noted, with a full explanation of why they do not meet the stated requirements and how the product still meets the intended purpose.
 - **Additional Information:** If applicable, the bidder can include additional technical information to further justify their product's suitability for the tender.
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Annexure B: Bidder's Experience and Past Performance Documentation

This annexure aims to provide detailed information about the bidder's past experience in manufacturing and delivering high-quality automotive AC units. The bidder must provide comprehensive documentation and case studies to demonstrate their track record in meeting large-scale supply demands.

Required Information:

1. Company Overview:

- Name of the bidder's company and a brief company profile.
- Description of manufacturing capabilities, facilities, and certifications.
- Total years of operation in the automotive AC manufacturing industry.
- Overview of the company's management team and key personnel involved in the tender.

2. Relevant Past Projects:

- **Project 1:** Supply of 50,000 car AC units to [Company Name], with successful delivery completed within [X months].
 - Key Specifications: [Provide Details]
 - Challenges Overcome: [Provide Details]
 - Client Feedback: [Attach letter of recommendation or testimonial, if available]

- **Project 2:** Supply of 100,000 car AC units to [Automaker Name], meeting global emission and performance standards.
 - Key Specifications: [Provide Details]
 - Key Performance Indicators: [Provide Data]
 - Client Feedback: [Attach letter of recommendation or testimonial, if available]

3. Quality Control and Testing Protocols:

- Detailed description of the bidder's in-house quality control process and third-party testing certifications.
- Case studies or reports on how the bidder has handled product defects and client complaints, including corrective actions and outcomes.

4. References:

- Provide at least three references from customers who have received similar products, with contact information.
- Letters of recommendation from reputable automakers or manufacturers confirming the bidder's ability to meet project requirements.

Annexure C: Financial Statements and Proof of Financial Stability

This annexure provides an overview of the bidder's financial stability, ensuring that the bidder has the necessary financial capability to execute the contract successfully.

Required Documents:

1. Audited Financial Statements (Last 3 years):

- Income statements, balance sheets, and cash flow statements for the last three fiscal years.
- Any financial audits or third-party verification of the company's financial performance.

2. Bank Guarantee:

- The bidder must provide a bank guarantee equivalent to 5% of the total value of the tender, as a sign of their financial capability and commitment to the project.

3. Credit Rating:

- If available, provide a recent credit rating report from a recognized agency (e.g., Moody's, Standard & Poor's).

4. Statement of Financial Capability:

- A signed statement from the bidder's finance department detailing the company's working capital, assets, and ability to finance the supply and delivery of the 100,000 AC units.

5. Letter of Credit (Optional):

- A letter of credit from the bidder's bank indicating their capacity to meet the financial requirements of the contract.

Annexure D: Logistics and Delivery Plan

This annexure outlines the detailed plan for the logistics, storage, and delivery of the 100,000 AC units. The bidder must provide a clear and actionable strategy to meet the stringent delivery deadlines.

Required Sections:

1. Logistics Timeline:

- Detailed week-by-week delivery schedule, ensuring that the initial 10,000 units are delivered within the first week of the contract, followed by weekly deliveries.
- Transport routes, expected transit times, and delivery locations.
- Any contingencies or backup plans in case of delays or disruptions.

2. Warehouse Management:

- Provide details of the bidder's storage facilities, ensuring that the units are stored in controlled, secure conditions.
- Inventory management systems in place to track batches and ensure timely delivery.

- Handling and packaging processes to ensure no damage during transit.

3. **Transportation Plan:**

- The type of transportation to be used (e.g., refrigerated trucks, standard transport).
- The bidder must ensure that all transport vehicles are equipped to handle temperature-sensitive products.

4. **Risk Mitigation:**

- Identify potential logistics risks (e.g., transportation delays, customs clearance issues) and outline strategies to mitigate them.

Annexure E: Warranty and Maintenance Terms

This annexure outlines the warranty and maintenance commitments the bidder offers for the car AC units.

Warranty Details:

- **Warranty Period:** 5 years, starting from the date of final installation of the last batch.
- **Warranty Coverage:** The warranty covers all manufacturing defects, including parts and labor.
- **Exclusions:** Normal wear and tear, damage caused by improper installation or maintenance, and external damages (e.g., accidents, misuse).

Maintenance Services:

- **Preventive Maintenance:** A detailed maintenance schedule, including tasks like cleaning filters, refrigerant checks, and performance assessments.
- **Emergency Services:** The bidder must provide a 24/7 emergency support hotline for troubleshooting and parts replacement.
- **Service Level Agreements (SLAs):** Response times for repairs and replacements (e.g., within 24 hours for urgent issues).

Annexure F: Environmental Compliance Documentation

This annexure contains documents to ensure that the car AC units comply with environmental standards.

Required Documents:

1. Refrigerant Compliance:

- Provide proof that the refrigerant used is compliant with the **EU F-Gas Regulation** and has a Global Warming Potential (GWP) of less than 150.

2. Energy Efficiency Certification:

- Certificates confirming that the units meet international standards for energy efficiency (e.g., **Energy Star**, **ISO 50001**).

3. End-of-Life Recycling:

- Provide a plan for the recycling of used AC units at the end of their operational life, including details of how components like refrigerants, metals, and plastics will be recycled or disposed of responsibly.
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Annexure G: Risk Management and Contingency Plan

This annexure outlines how the bidder plans to manage risks throughout the lifecycle of the contract.

Risk Identification:

- Identify all major risks related to manufacturing, logistics, and quality control.

Mitigation Strategies:

- For each identified risk, provide a detailed mitigation strategy, including risk avoidance, minimization, or transference methods.

Contingency Plan:

- Outline the actions to be taken in case of major issues such as delays, quality failures, or logistical disruptions.

- Define the roles and responsibilities for crisis management, including escalation procedures and points of contact.
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Annexure H: Testing and Compliance Report

This annexure contains detailed reports and documents demonstrating that the AC units meet all performance, safety, and environmental compliance requirements.

Required Documentation:

1. Product Testing Reports:

- Include detailed test reports from accredited third-party labs, showing that the AC units meet the required cooling, energy efficiency, and noise level specifications.

2. Safety Compliance:

- Provide certificates proving that the units meet all relevant safety standards, such as UL, CE, and RoHS certifications.

3. Regulatory Compliance:

- Documents proving compliance with environmental regulations, including refrigerant specifications and energy consumption limits.