**TECHNICAL SPECIFICATIONS**

**Air Conditioner**

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| **IOM’S SPECIFICATIONS / MINIMUM REQUIREMENTS** | | **BIDDER'S SPECIFICATIONS** | **Indicate**  **COMPLY or NOT Comply** |
| **System type (compressor type)** | Inverter type |  |  |
| **Main components** | (1)- Indoor unit (fan coil) that includes the casing. the supply fan, the evaporator, the air filter(s), the remote control ("Wireless), and the electronic control board.  (2)-Outdoor unit (condensing unit) that includes the casing, the compressor, the condenser, the condenser fan(s), and the electronic control board.  (3)- The refrigerant piping with insulation and control cable(s) |  |  |
| **Packaging** | Equipment should be properly packed at the factory and protected against all transport and handling hazards |  |  |
| **Installation Types** | Decorative wall mounted |  |  |
| **Codes and Standards** | Rating and performance ISO 5151, ARI, EUROVENT, TUV, or equal  Comply with the latest relevant standards of UL, NEMA, NFPA70, ANSI or NEC or approved equal |  |  |
| **Submittals** | Label of tested compliances.  Energy efficiency class or label.  Energy consumption (full load at 500 hours per year),  Cooling output at full load in KW, BTU/H or TR.  Heating output at full load (where applicable) in KW, BTU/H or TR.  The energy efficiency ratio (EER) in cooling mode at full load.  Coefficient of performance (COP) in heating mode at full load (where applicable).  Noise rating in dB.  The information listed in this paragraph should also be included by internet retailers on their websites, Certificates of complying with the above codes and standards as well as Maintenance and repair manuals. |  |  |
| **Warranty, maintenance and support** | One-year full system warranty from the date the legal authority approves the official acceptance (Full warranty includes all peripherals and spare parts and labor cost).  All the offered equipment must be under warranty with the original equipment for the whole period.  Spare parts shall be available for the next /10/ ten years.  The contractor or (sub-contractor) shall have a qualified technical team to support LAF in case of a major failure. |  |  |
| **Indoor Unit Fan** | Equipped with relay.  Forward curved with double-inlet, low noise, mounted on motor  dynamically and statically balanced.  Multi-speed fan motor, factory lubricated, with internal overload protection and resiliently mounted.  Fan motor assembly should be able to slide out for maintenance. |  |  |
| **Indoor Unit Evaporator** | Aluminum plate fins coil, mechanically bonded to nonferrous tubing with all Joints brazed.  Factory-installed  Condensate pans with primary and auxiliary drain connections.  Refrigerant line fittings that allow mechanical connections. |  |  |
| **Indoor Unit Filter** | Reversible filter rack with duct connection flanges and sliding permancul. Type filter for (ducted type).  Cleanable, expandable Aluminum or special blown plastic without viscous oil coating |  |  |
| **Outdoor Unit Refrigerator** | R410A |  |  |
| **Outdoor Unit Condenser** | Constructed with aluminum plate fins mechanically bonded to nonferrous tubing with all joints brazed.  Coil shall be protected by vinyl-coated non-corrosive gill. |  |  |
| **Outdoor Unit Fan** | Propeller type, direct driven, and arranged for vertical or horizontal air discharge.  Fan motor Shall be factory lubricated, inherently protected, and resiliently mounted. |  |  |
| **Outdoor Unit Compressor** | Scroll or rotary welded-hermetic type with internal vibration isolation.  Motor shall have both thermal and current sensitive overload devices. |  |  |
| **Mounting and Protection** | Quiet operation with sound insulating blanket and rubber mounting on the compressor.  The condensing unit shall have IP24 or better value.  The condensing unit should be installed on galvanized foldable and adjustable supports. |  |  |
| **Control (thermostat)** | Wireless remote control |  |  |
| **Control (features)** | LCD display.  5 operation modes (cool. beat, auto, dry, ran), Sleep mode.  Room temperature setting with thermostat.  Timer (24h)  Airflow direction setting with auto louver swing (when applicable).  Three fan speeds  Three minutes timer delay to avoid rapid compressor recycling.  Auto restart: Saving settings during a power failure and restarting the system automatically when the power is back. |  |  |
| **Performance** | Cooling capacity:  Outdoor air: 350 C (DB).  Indoor air: 270 C (DB). 190 C (WD).  Heating capacity:  Outdoor air 70C (DB), 60 UC (WD),  Indoor air: 200 C DB |  |  |
| **Tolerance** | Plus, or minus 5 percent of the required cooling capacity may be acceptable. |  |  |
| **Energy Efficiency Ratio** | Minimum acceptable EER (Energy Efficiency Ratio): 3.2 W/W |  |  |
| **Coefficient of Performance** | Minimum acceptable COP (Coefficient of Performance): 3.6 W/W |  |  |
| **Power Supply** | 220V, 1 PH, 50Hz (for units having a capacity of less than 36000 BTU/H).  380V, 3 PH, 50Hz (for AC units having a capacity greater than 36000 BTU/H). |  |  |
| **Refrigerant Piping** | Copper piping with proper insulation and electrical cables according to manufacturer recommendations.  Min length: 3m for each of suction and liquid pipes. |  |  |
| **Anti-Vibration Pads** | Four appropriate rubber anti-vibration pads |  |  |
| **Warranty** | 1-year standard warranty |  |  |

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