



Scope of work

Department of Public Works & Infrastructure: Central Government Offices (CGO), on site contact Mr. Samson Motshoane @ 0714350869/0124061559.

ID3227417: Repair of VRF split conditioner(s), offices N6-SE (05), Mitsubishi Electric Variable Refrigerant Flow (VRF) System.

The complaint request for the Major repair(s) of air conditioner(s) N6-SE supplying of 05 offices (indoor units and outdoor units). The CGO building consists of Mitsubishi Electric Variable Refrigerant flow (VRF) system. The service provider shall also compile a service report of the work done and must be submitted together with a signed and stamped job card by the user Department official in charge.

The service and repairs of the equipment shall be done professionally and in a proper manner by a competent Technician.

Occupational Health and Safety Act, 1993 (Act no. 85 of 1993) as amended shall be adhered to.

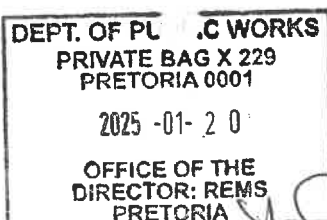
All equipment and materials shall be repaired, serviced and installed strictly in accordance with the manufacturer's specifications, instructions, code of practice.

All equipment, component parts, fittings and materials shall conform in respect of quality, SABS or SANS specification.

Noise and Vibration

The equipment shall be mounted on vibration isolators of the correct type and selection depending on deflection requirements and vibration frequency.

Anti-vibration connections shall be used on the pipework (where necessary) where it joins vibrating equipment such as compressor(s), etc.





Mechanical and electrical checks shall be done prior commissioning.

Self-contained air conditioning units

- Clean the air intake screen.
- Clean filters or replace filters inly if necessary.
- Clean housing, ensure that all panels are properly secured and door panels close properly.
- Check settings and operation of all pressure switches and rest if required.
- Check settings and operation of all safety switches, i.e. LP & HP switches, oil pressure switches, etc.
- Check setting and operation of thermostats. Check all different timers & reset if required.
- Check running current of fans, compressors, settings and operation of overloads.
- Check tightness of all electrical connections.
- Check condition of all cables, whether cables are neatly strapped and reposition if required.
- Check oil acidity.
- Ensure correct operation of emergency stop.
- Carry out a leak test on all refrigeration piping and components inclusive of evaporator and condenser.
- All leaks shall be repaired or replaced provided a complaint is being logged.
- The filter drier shall be replaced when blocked.
- Check compressor vibration mount, etc.
- Check the refrigerant charge sight glass being clear or flashing.
- Check moisture indicator.
- Clean condensate tray and test drainage operation.
- Clean evaporator and condenser blades and check unbalance thereof.
- Check all the service valves for full operation, replace caps if missing.



- The superheat setting of the thermostatic expansion valve (TEV) shall be checked and also adjusted if required.
 - Check pressure drops over filters and the air quantity over filters.
- ±Repair 95 500/107 500 Btu/h (28.0kw/31.5kw)Mitsubishi Electric City Multi.

IMPORTANT NOTES TO CONTRACTORS

- Final Summary **MUST** be fully completed by the contractor; failure will invalidate the contractor's quotation.
- The Contractor is advised **NOT TO EXECUTE** any additional work other than specified above/ or one the scope of works.
- The Contractor **SHALL NOT TAKE** any instruction(s) from the Client department or any person other than the relevant Works Manager when executing the service.
- The Contractor **MUST** visit the site to acquaint themselves with the condition of the service to be rendered.
- Quantity of material listed is provisional, the Contractor will only be paid for material used on site and proof of purchase for the material utilized for this service must be attached to the invoice.
- The Guarantee provided **MUST** comply with requirement set out in the Scope of Works.
- Electrical Work **MUST** be executed by a qualified Installation Electrician.
- Mechanical Work **MUST** be executed by a qualified Artisan/Tradesman.
- Plumbing Work **MUST** be executed by a qualified Artisan/Tradesman.
- Works **MUST** be done according to SABS and Public Works Standards.
- **NO HIDDEN** service(s) (e.g. underground) will be covered before being verified by the Works Manager.
- Kindly be advised that the above service is **NOT** to be sub-contracted in its entirety to third parties as the agreement is only between the Department and the Contractor herein.
- The contractor must ensure compliance with Occupational Health Safety Act of 1993. Failure may lead to contract being suspended with immediate effect.
- Please provide VAT No. (if registered)
- Please provide CIDB Registration number
- The contractor shall notify the Works Manager of any additional faulty components detected, that are not appearing on the scope of works before going ahead with the job.
- If any of the above mentioned components/items are not replaced, the quoted amount will be deducted from the total quotation amount.
- Redundant material must be left on site for verification.
- Ensure that all the worn parts are being replaced with the same SABS approved ones.
- The contractor must give a (06) six months written guarantee on the above work.
- For major parts repairs or equipment replaced the guarantee must be 12 months
- Complete replacement and new installation is 12 months.



The CGO building consists of Mitsubishi Electric Variable Refrigerant flow (VRF) system which covers:

- an Area of 26000m².
- 913 indoor units (Evaporators), and 81 Outdoor units (Condensers).
- Each outdoor unit consume 8Amps when starting up, with and effective cooling of 3455kw.
- An average of ±11.3 indoor units (Evaporators) connected to one outdoor unit.

Description	Qty	Unit Price	Total price
Major repairs on the VRF air conditioner Split Unit N6-SE as per sample onsite and ensure it complies with Manufacturer specification. Consist of Outdoor (condenser) unit N6-SE which suppliers 05(indoor evaporator) units, 1 per office, 05 offices) Mitsubishi Electric City Multi.	1	R	R
Labour & Travelling Rates			
Technician per hour		R 200.00	R
Assistant Technician per hour		R 75.00	R
Travelling Costs per KM(From Church Square to CGO BUILDING AT Church Square)		R5.00	R
Subtotal			R
VAT			R
Grand Total			R

Name of Service Provider & Registration number:

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