



### **Scope of work**

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

**ID3192289N2-SE: Repair of VRF split conditioner(s), offices N2-SE (13), Mitsubishi Electric Variable Refrigerant Flow (VRF) System.**

The complaint request for the Major repair(s) of air conditioner(s) N2-SE supplying of 13 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.  
The Service Provider must have knowledge of /or accredited to Mitsubishi Electric Air conditioner system

Description	Qty	Unit Price	Total price
Major repairs on the VRF air conditioner Split Unit N2-SE as per sample onsite and ensure it complies with Manufacturer specification. Consist of Outdoor (condenser) unit N2-SEwhich suppliers 13(indoor evaporator) unit(s), 1 per office, 13 offices) Mitsubishi Electric City Multi.	1	R	R
<b>Labour &amp; Travelling Rates</b>			
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
<b>Subtotal</b>			R
<b>VAT</b>			R
<b>Grand Total</b>			R

**Scope of work**

**Department of Public Works & Infrastructure: Central Government Offices (CGO), Repair of VRF split conditioner(s), Mitsubishi Electric Variable Refrigerant Flow (VRF) System.**