ANNEXURE - III

Test Protocol for AC units Up to 25 TR (Hermetically sealed Compressors) with MAXR 100

1. Check the refrigerant levels are as per the manufacturers recommendations and if needed it has to restore to recommended levels in the targeted AC unit/s.

2. The following parameters to be recorded during the pre and post MAXR100 in the prescribed format. All the parameters should be recorded on hourly basis or on mutually agreed intervals in the prescribed format for 100 hours.

    a. **Energy Consumption** in KWH by installing a KWH meter
    b. **Humidity:** With digital Hygrometer to record the humidity in the air during the entire trial duration.
    c. **Ambient temperatures**: to be measured within 3 feet of the outdoor unit by using digital thermometer
    d. **Set Point or Inside room temperatures**: The inside room temperature (Set Point) must be kept constant during the entire period of trials.
    e. **Current & Voltages**: Measure Amps & Voltage and recorded in the format.

3. Based on the 100 hour pre MAXR 100 installation data, the average Energy Consumption in KWH per hour has to be calculated ,which will be the bench marking and for comparison with post MAXR 100 installation data to establish the Energy Savings.

4. On establishing the bench mark for energy consumption (Kwh) / hour is established, install MAXR 100 on the AC unit. The Installation ratios are:

    a. Hermitically sealed AC systems up to 10 Tons - 1 Oz per Ton
    b. Hermitically sealed AC systems above 10 Tons - 10% of Oil Volume
    c. Industrial AC systems up to 10 Tons – 1 Oz per Ton
    d. Industrial AC systems over 10 Tons – 10 % of Oil Volume

5. Allow the AC unit to run for 21 days (from the date of MAX R 100 installation), and after completion of 21 days, recording all the parameters on similar lines of pre MAX R 100 installation data for 100 Hours.

6. Calculate the average Energy Consumption per hour in KWH and compare with the PRE Installation data for establishing the energy savings with MAXR 100.

7. A detailed report with all supporting data shall be submitted in 2 days' time for the client's perusal.

8. Throughout the trial period no maintenance activities or changing the set operating parameters should be changed

Note:

1) We shall be using the following measuring instruments for recording the pre and post MAXR 100 installation data in a prescribed format.

   Smart Energy Data Logger used for recording all Electrical parameters will be recorded with Data Logger if the AC units operating on 440 Volts, 3 PH AC supply.