HIGH SIERRA SYSTEM APPLICATION PARAMETERS

1. High Sierra condensing units are to be used only in conjunction with existing High Sierra evaporators or supplied with new HTPG manufactured evaporators. Condensing units are not to be matched with any other manufacturers' low side.

2. High Sierra systems should be limited to a maximum of (2) evaporators per system. Any exception to this must be approved by AE.

3. High Sierra system selections should be limited to those listed in the current product catalog. Any exceptions must be approved by AE.

4. All High Sierra systems for medium temperature applications must be submitted to and approved by AE prior to quoting.

5. Medium temperature High Sierra systems must be limited to a minimum outdoor ambient temperature of +20 degrees.

6. Theoretical system TD's for any High Sierra system should be no lower than approx. 8 degrees.

7. The maximum length of field piping allowed on High Sierra systems should not exceed 100 lineal feet. For any installations which may exceed this length it may be necessary to consider an auxiliary receiver to ensure adequate system pumpdown capacity. Contact AE when system line runs will exceed this maximum length.

8. Multiple evaporator systems must be field piped to equalize the flow of hot gas to each evaporator during the defrost cycle. The use of "bull head" tees is therefore preferred and the piping runs from this point to each individual evaporator should be of equal length and diameter whenever possible.

9. High Sierra systems should not be quoted with any type of capacity control (ex, cylinder unloading or hot gas bypass) unless approved by AE.

10. The voltage characteristics (not necessarily phase) of condensing units and their matching evaporators must always be the same since the power supply for the evaporator fans is fed directly from the system condensing unit.

11. It is strongly recommended that all High Sierra units be quoted with the optional suction line accumulator and a crankcase pressure regulating valve. These two devices offer a greater measure of protection to the compressor both during and immediately following the defrost cycle.

12. It is strongly suggested that an attempt be made to "pre-qualify" the installing contractor when possible to ensure they have some basic familiarity with re-evaporative type hot gas defrost systems.

13. High Sierra systems may be selected based on a minimum of 20 hours per day system run time.

14. Hot gas defrost evaporators used on opposing systems which are located in the same room in close physical proximity to each other (opposed or adjacent) may experience incomplete defrost and resulting coil icing. It is strongly recommended that the customer provide a field interlock or system controller which will pumpdown the opposing system and shut off the evaporator fans or defrost all systems simultaneously in order to prevent the circulation of cold air through a defrosting evaporator.

15. All High Sierra systems are based on a floating head pressure or “saver” design which utilizes a specially selected, balanced port expansion valve and only pressure fan cycling control for year round head pressure control.

16. High Sierra is a “minimum refrigerant charge” system and will therefore not tolerate significant over charging.

17. All system defrost controls are factory mounted and wired in the condensing unit control panel. Therefore there should never be any reason to include any defrost or fan controls on the matching system evaporator.

18. All High Sierra system evaporators include a factory mounted liquid line solenoid valve, room thermostat, TXV and all required check valves.

19. Both suction and liquid line field piping should be insulated to prevent sweating and excessive heat gain.