

THERMOBANK SYSTEM APPLICATION PARAMETERS

- 1. Thermobank condensing units are to be used only in conjunction with existing Kramer evaporators or supplied with new HTPG manufactured evaporators. Condensing units are not to be matched with any other manufacturers' low side .
- 2. Thermobank systems should be limited to a maximum of (2) evaporators per system.
- 3. Thermobank Systems are limited to R-404A/ 507 on low and medium temp applications and R-407C on medium temp applications
- 4. Theoretical system TD's for any Thermobank system should be no lower than approx. 9 degrees.
- 5. The maximum length of field piping allowed on Thermobank systems should not exceed 150' lineal feet. For any installations which may exceed this length it may be necessary to consider an oversized Thermobank to ensure re-evaporation of the additional liquid refrigerant that will be required due to the longer piping runs. Contact AE when system line runs will exceed this maximum length.
- 6. Thermobank systems should not be quoted with any type of capacity control (ex, cylinder unloading or hot gas bypass) unless approved by AE.
- 7. 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 from the system condensing unit via a factory mounted and wired, fused evaporator fan contactor.
- It is strongly recommended that all Thermobank systems be matched with 4 FPI evaporators whenever possible. Closer fin spacing can potentially lead to "bridging" of condensate on the coil fins resulting in the accumulation of ice on the bottom of the coil assembly.
- 9. 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.
- 10. Thermobank systems may be selected based on a minimum of 20 hours per day system run time.
- 11. 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 both systems simultaneously in order to prevent the circulation of cold air through a defrosting evaporator.
- 12. Contact AE for any Thermobank application below -30 degree room temperature.

- 13. All Thermobank condensing units are currently supplied with flooding type head pressure control valves for low ambient operation (smaller HP units use non-adjustable valves while larger HP units use adjustable valves).
- 14. All system defrost controls (with the exception of a hot gas solenoid valve and liquid solenoid) 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.
- 15. All Thermobank condensing units are supplied with liquid line solenoid valve(s) and hot gas solenoid valve(s) as standard (which are factory mounted in the evaporator(s)).
- 16. The current Thermobank system is configured as a two-pipe system. If replacing an old style Thermobank I (3 pipe) system where the contractor wishes to utilize the existing field piping we can build the replacement Thermobank condensing unit with a separate hot gas connection (see AE for the applicable price adder).
- 17. All Thermobank condensing units are equipped as standard with energy efficient, 1 HP, 850 RPM condenser fan motors. For increased condenser performance the standard motors can be upgraded at additional cost to 1.5 HP, 1140 RPM motors. Contact AE for the applicable price adder.

