

CONDENSER SELECTION

SELECTION FACTORS

There are five factors that are required to enable the selection of a suitable condenser.

1. Refrigerant type
2. Application (Low, medium or high temperature)
3. Total heat rejection
4. Condensing temperature
5. Entering water temperature

SELECTION PROCEDURE

1. Determine system compressor capacity at the design conditions.
2. From Table A (for hermetic compressors) or Table B (for open compressors) find the total heat rejection factor.
3. Multiply the compressor capacity by the total heat rejection factor to obtain the THR.
4. Air conditioning applications - use the THR as above.

Medium temperature refrigeration applications - use the following formula:
Compressor capacity x THR factor x 1.05 = THR

Low temperature applications - use the following formula:
Compressor capacity at design suction and condensing temperature x
THR factor x 1.10 = THR