DESUPERHEATER COILS SELECTION PROCEDURE

1. Choose CDAX model based on system gpm: water-side pressure drop = 0.4 PSI by capacity. interpolation.

2. Enter thermal performance chart for system capacity of CDAX model selected in Step 1 with water flow rate (gpm) and entering water temperature, EWT, and read Heat Recovered in MBtu/hr for either water-cooled or air-cooled operation. Also read refrigerant side pressure drop, ΔPR, from top of same chart.

4. Leaving water temperature is calculated to be: LWT = 90 + (2 x 4.75 / 0.8) = 101.9°F.

3. Enter water-side pressure drop data chart of CDAX model selected at water flow rate and read water-side pressure drop.

4. To calculate leaving water temperature, LWT: LWT = EWT + (2 x Heat Recovered / Water Flow Rate).

Sample: For other refrigerants or design conditions

Select CDAX model for 2 ton water-cooled air substantially different from above, please conditioning system. Water is available at a flow consult factory for selection and thermal rate of 0.8 gpm and entering temperature of 90°F. performance.

1. Select CDAX-5030-H for 2 ton system. 2. The shaded area in the thermal performance
2.

2. Entering thermal performance chart for 2 ton charts indicates that refrigerant condensing water-cooled system using CDAX-5030-H with occurs in the desuperheater coil. Any selection water flow rate = 0.8 gpm and EWT = 90°F: or operation that will result in refrigerant Heat recovered = 4.75 MBtu/hr. From top of condesning in the desuperheater coil requires chart, refrigerant-side pressure drop, ΔPR, = that system oil circulation be maintained, and 1.4 PSI. system refrigerant charge requirements met, at

3. Entering water-side pressure drop data chart of the various operating conditions. These CDAX-5030-H with water flow rate = 0.8 requirements are the responsibility of the system designer and installer.

Notes:

1. Thermal performance charts are based on using refrigerant R-22 at the following conditions:

refrigerant flow rate
compressor discharge temp.
saturated condensing temp.
Water-Cooled Air-Cooled
164 (lb/hr)/ton 180 (lb/hr)/ton

190°F 220°F
105°F 125°F
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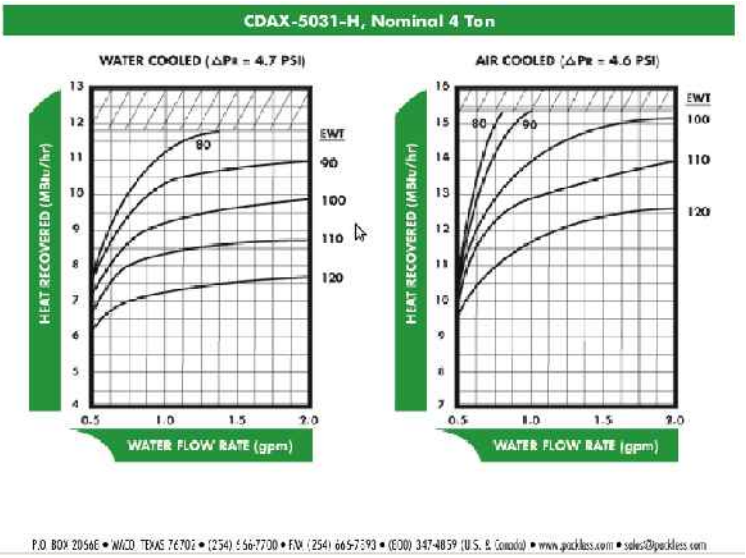
WATER-SIDE PRESSURE DROP DATA
GPM = WATER FLOW RATE
PSI = WATER-SIDE PRESSURE DROP
GPM



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