

PREMIUM COMFORT



Air Cooled Condensers can lose 20% of their capacity as outdoor temperature increases from 70°F to 100+°F compared to only about 4% for a Freus™ system.

This capacity change forces air cooled units to be sized for hot temperatures and cycle to maintain temperature during milder conditions, causing indoor drafts with hot spots, cold spots and drastically reduced dehumidification performance (in other words - fluctuating comfort).

Freus' consistent capacity allows indoor air volume sizing closer to load requirements, with higher CFM in arid locations to maximize high temperature capacity without overheating the compressor lower CFM in humid climates to optimize dehumidification without freezing the coil. This leads to consistent dehumidification performance, and provides premium comfort

1. Totally Enclosed High Efficiency Condenser Fan Motor
2. Efficiency optimized fan blades in a tubaxial volume with vertical discharge to reduce noise.
3. Commercial Grade Low Pressure Drift Eliminator.
4. Large 1" PVC distribution piping.
5. Low pressure clog-resistant 1/4" synthetic spray nozzles.
6. Intertwined Helical Condenser Coil which centrifugally throws refrigerant to the outside of the tube to enhance heat transfer. The tubes are offset spaced to provide enhanced water flow contact and superior refrigerant to water heat transfer.
7. Air Cooled totally enclosed PSC energy efficient pump.
8. One to three separate Copeland Scroll Compressor(s) - One for each Cooling System, can share the evaporative condenser cabinet, thereby saving space and allowing cooling to be directed only where needed.

Summary:

Compressing refrigerant simultaneously raises its pressure and temperature. Indoor cooling requires expelling heat outdoors and achieving a refrigerant temperature 20°F+ above the air or water cooling the refrigerant. With 95°F air a "dry" condensing needs to generate 250 psi while a "wet" condenser only needs 180psi to generate the same cooling capacity. Thereby the compressor in the "wet" Freus system uses remarkably less power

FREUS REQUIRES LESS POWER, LAST LONGER

The Freus water cooled units operate at much lower pressures and temperatures than air cooled units. Motors and compressors that operate at lower pressures and temperatures require less power and last longer

