

## Evaporative Cooled Chillers

Technical Systems Evaporative Condenser Chillers are able to dramatically reduce your energy and installation costs. Series 35E2 chillers are 30-40% more energy efficient than air cooled chillers, yet because they are a single piece package, they do not have the high installation costs of traditional water cooled systems.

By including both high efficiency operation and a built to order factory tested solution, 35E2 Chillers reduce your utility costs, are easier and faster to install, and provide the best return on your investment.



## Adiabatic Pre-Cooling Evaporative



Technical Systems Adiabatic Pre-cooling Evaporative eXchange (APEX) products are the next generation of energy efficient and environmentally conscious equipment. Traditional air cooled systems are simple but inefficient. Evaporative tower systems are highly efficient, but water usage and treatment costs are high. APEX Technology offers the best of both with one simple goal: reduce energy costs while minimizing maintenance.

Dry fluid coolers with APEX technology can supply water colder than the ambient dry bulb. Air cooled condensing units and chillers with APEX offer full load efficiencies 30-40% superior to AHRAE 90.1 2013 minimum standards. Competing systems use spray nozzles that cause excessive water use with scale and dirt buildup on the coils. APEX coils stay completely dry and reduce your maintenance time and costs. APEX products provide all these benefits, with up to 90% less annual water usage than a system using a cooling tower.

### Product Features

- Capacity range of 100-400 tons - custom sizes beyond
- High efficiency screw compressors with infinite position unloading
- Lowest sound performing packaged chiller
- 30-40% reduced energy compared to air cooled
- Reduced electrical loading and installation costs compared to air cooled
- Simpler and quicker field installation compared to traditional water cooled
- Reduced engineering time and field coordination
- Waterside economizer system available - ship loose section
- Packaged pumping systems available
- Independent refrigerant circuits - dual and quad circuit models
- Factory performance tested under load
- Seismically certified to IBC Code 2009
- Initial operating charge of R-134a refrigerant and POE oil
- Digital microprocessor controller with display screen and keypad
- Electrical phase failure and over / under voltage protection
- Refrigerant leak detector and ventilation system per ASHRAE 15
- Forced draft low sound condenser fans
- Variable speed fan motor control for part load efficiency
- High efficiency rotary screw compressors optimized for evaporative condensing
- Heavy gauge steel cabinetry with primed and painted exterior
- Factory verification testing under applied artificial load

### Product Features

- Applied to all product types, condensers, fluid coolers, condensing units, and chillers.
- Exceed minimum energy standards and qualify for rebate plans.
- Only use water when you have to. Able to run dry up to 85% of the year in most climates.
- Coils stay completely dry, reducing reliance on chemicals to prevent scale.
- Most locations do not need the cost and hassle of chemical water treatment.
- Minimize water usage without sacrificing energy efficiency.
- Can be sized to provide no lost capacity without water, avoiding costly emergency water makeup storage tanks for critical facilities like data centers.
- Microprocessor controls optimize water usage and wet / dry operation based on ambient.
- On-board water makeup and drain controls maintain sump water quality and reduce potential for scale.
- Variable speed fan options with VFD or EC control for optimal part load efficiency.