Advanced Energy Saving Technology

Expert Application / Technical Support

Advanced Energy Saving Technology for Commercial Refrigeration and AC Systems
Energy Efficiency

- Cost savings, increasing legislation, tax incentives

With energy costs for refrigeration and cooling alone accounting for over half of the energy costs in commercial buildings used for food sales, service and storage, it’s no surprise that targeting this area for energy reductions can yield significant cost savings.

Environmental Preservation

- Reduction of carbon footprint, public awareness

Everyone is familiar with the recent push for companies and individuals alike to minimize their impact on the environment. Companies are looking for ways to “do the right thing,” without negatively impacting their bottom line.

Shortage of Skilled Technicians

- Increasing complexity of systems, shift from mechanical to electronic refrigeration controls

While the industry in general recognizes that electronic controls are the path to the future of HVACR, many resist the change merely because they lack proper training on the application and implementation of electronic controls and valves.
**KE2 Evaporator Efficiency**

**True defrost on demand**

- Up to 40% energy savings over existing technology
- Self adjusting for all seasons
- Up to 80% reduction in defrost cycles over conventional methods
- Eliminates unnecessary defrosts associated with timed based alternatives
- Maximizes energy efficiency with less compressor run time resulting from fewer and shorter defrosts
- Eliminates ice formation on floors and ceilings
- Eliminates excessive temperature swings found with conventional defrost cycles
- Rehumidification of conditioned space to increase product shelf life

**Applications:**
- Walk-in coolers
- Meat prep rooms
- Closed door display cases
- Walk-in freezers
- Refrigerated warehouses
- Blast freezers

---

**KE2 Simple Superheat**

- Eliminates expense of unnecessary functionality
- Works with unipolar or bipolar valves
- Provides 6 custom setpoint configurations
- Limits OEM exposure to field issues by preventing modifications by unauthorized personnel

**Applications:**
- Self-contained
- Walk-in coolers
- Walk-in freezers
- Air conditioning
- Reach-in cases
- Coffin cases

---

**KE2 Fan Control**

- Up to 45% energy savings over existing technology
- Patented package solution
- Simplifies installation and field retrofits
- Pre-assembled and tested package eliminates potential for call backs
- Control scheme allows for reduced inverter size and cost
- Protects existing motor windings and bearings by filtering inverter output

**Applications:**
- Multi-fan condenser
- Cooling Towers
- Air Handlers

---

**KE2 Custom Control**

- Custom controllers designed to OEM specifications.
- A variety of applications and markets including commercial refrigeration, commercial air conditioning and specialty equipment
- Wide range of solutions available from single component control to separate subsystem and complete system control
While our core strength at KE2 ThermSolutions is developing innovative, energy saving components, we recognize that providing a complete product means offering our technical expertise and support.

From OEM application engineering assistance and the development of customized controls, to webcasts and contractor certification, our commitment to our customers is what makes a KE2 control more than a product, it is a solution.