



# KE2 Evap for Rack Efficiency Supermarket Retrofit Kit

pn 21096



The pre-programmed rack control default options incorporated in the KE2 Evap for Rack Efficiency (KE2 Evap-RE) eliminate steps at setup and are carefully selected for complicated rack systems, with control for EEV, EEPRV or EHGBPVs.



**KE2 Evap for Rack Efficiency makes a difference** - Recent field tests show more than 20% energy savings\*, even when the KE2 Evap RE is used on a refrigeration system that is currently operating efficiently. Savings are realized by defrosting the evaporator only when needed, eliminating unnecessary defrosts by up to 87%, and through proper fan and coil heater control.

Further savings are possible with the controller's graphing, data logging and alarm alerts features. By reviewing the performance graphs of the controller, system issues are often identified, many of which correspond to inefficient performance. In cases where the KE2 Evap-RE was used to identify and correct system performance issues, energy improvements of up to 49% were realized. Additionally, the KE2 Evap-RE's alarm alert feature sends notification of system issues via text or e-mail, so the problem is corrected promptly, and the refrigeration system is again performing at optimum efficiency.

Another benefit of the KE2 Evap-RE controller is the reduction in ice build up on the evaporator, as well as walk-in walls, ceilings, floors and product. Eliminating the ice build up on the evaporator keeps it running at design conditions, and improves efficiency. Meanwhile, the reduction of ice on surfaces improves temperature consistency in the walk-in and eliminates potential safety issues.

The KE2 Evap-RE controller provides communication via the Internet, allowing access to the controller via smart phone, tablet or PC. Remote access allows user to change setpoints, monitor defrosts, check performance history and view real time system operation.

## Eliminate Frost Buildup

### BEFORE:

Refrigerated spaces can often experience a variety of issues related to the build-up of frost on evaporator coils, unit cooler cabinets, walk-in ceilings and stored product.



### AFTER:

Using the KE2 Evap-RE controller, excessive frost build-up is eliminated through adaptive refrigeration control. The room cools more evenly, food quality is preserved and energy is saved.



\* Energy savings were verified in testing performed by Ameren Missouri, Fisher Nickel, Cascade Energy, Avista Utilities and more.



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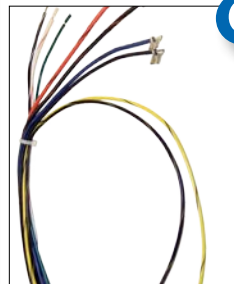
**Contents:**

- A KE2 Evap for Rack Efficiency** includes KE2 Evap-RE controller, mounting hardware, screw down terminals, voltage jumpers and air sensor mount
- B Mounting Box - pn 20687**  
40 mil embossed aluminum
- C KE2 Wire Harness - pn 20736**  
9-wire, 10 ft. harness with appropriate gauge wires and connections for controller
- D (3) pack 15' Color Temperature Sensors - pn 21151**  
2K  $\Omega$  NTC at 77°F ; operating range -60°F to 150°F; quick response and precise thermal tracking
- E Heavy Duty Door Switch - pn 20543**  
24" stainless steel armored cable, hermetically sealed reed switch
- F Ethernet Adaptor Kit - pn 20938**



**B Mounting Box**

- provides a stationary location to attach conduit
- accommodates controller's wiring and provides space for service loops
- supports the controller when accessing the back of the controller
- provides clean appearance to final installation



**C KE2 Wire Harness**

- simplifies installation - color coded wires with connectors that correspond to the controller's inputs
- speeds installation - eliminates on site preparation of wires and wire labeling
- reduces need to stock multiple colors and gauges of wires



**D 15 ft. Color Temperature Sensors**

- makes it much easier to understand wiring, especially on future calls



**A KE2 Evap for Rack Efficiency**

- pre-programmed rack control options eliminate steps at setup
- default settings carefully selected for complicated rack systems
- KE2 Smart Access communication capability enables remote monitoring quickly
- energy savings through reduction of defrosts and evap fan management
- eliminates icing issues
- configurable to work with rack controllers or conventional systems
- works with mechanical or electronic EPR's
- Maximizes energy efficiency with less compressor run time resulting from shorter defrosts
- Reduces liability - eliminates ice buildup on floors
- Eliminates excessive temperature swings
- Alarm notification text/e-mail
- Remote monitoring & system control
- Includes seven days of room and coil temps
- reduce/eliminate service calls from high temperature alarms as a result of frozen evaporator coils
- achieve better room temperature control, and saves energy over rack controllers alone
- ues with ANY refrigerant or secondary fluid system
- troubleshoot using graphing / datalog of last 31 days of operational history



**E Door Switch**

- eliminates worry of door being left open
- heavy duty for high traffic situations



**F Ethernet Adaptor Kit**

- Provides easy access to Ethernet port on backside of controller
- No need to remove controller from mounting screws to access Ethernet on return visits.