



KRACK

MK Quiet Series

EVAPORATOR UNIT COOLER FOR
WINERIES, BREWERIES, AND PRODUCTION APPLICATIONS



Products that provide lasting solutions.



Medium Profile Evaporator with Air Defrost

New Options.

MK Quiet was designed with people in mind for a climate controlled environment. For use in wineries and breweries where tour groups can have conversations with their guide during tours. The lower sound levels and adjustable air velocity create a more comfortable environment for employees in a production facility.

- **Quiet Fan Blade:** A “Swept-Wing” fan blade reduces the sound level by 6 dba at full speed with no change in air flow or evaporator capacity.
- **Variable Speed EC Motor:** The EC (electronically commutated) motor provides true variable speed operation controlled by a 0-10V signal which reduces sound level by an additional 13.5 dba when operating at minimum speed. This new motor is dual voltage for either 115V or 208-230V single phase installations and will provide energy savings of 50% to 70% operating at reduced speed.
- **KE2thermsolutions Evap OEM Controller:** A control board installed on the evaporators will provide one option for control of the fan speed based on temperature. Including the control board also provides opportunity to use electronic expansion valves, adaptive defrost and remote monitoring which are included in the boards programming.

Existing Options.

Several existing options are commonly used to customize evaporators for a complete solution for these applications including:

- **Cabinet:** A rugged aluminum cabinet and drain pan with coated corrosion proof fan guards are standard. These can be upgraded to a stainless-steel cabinet for better corrosion protection or a painted (black or white) enclosure to blend in with the ceiling.
- **Coil Protection:** Copper tubes expanded into enhanced aluminum fins provide excellent heat transfer. Electrofin™ coating on fins and tubes can be added for corrosion protection which may be needed in barrel rooms.
- **Custom Circuiting:** Coil circuiting and distributors specific for direct expansion with HFC refrigerants would be standard but coils can be circuiting for chilled glycol or CO2 to match other types of refrigeration systems.
- **Electronic Expansion Valves (EEV):** In place of mechanical valves, EEVs will provide improved evaporator capacity and efficiency while using the full capabilities of an installed KE2thermsolutions Evap OEM Controller.

A full description of available options and standard features along with engineering information for selection is available in the MK Technical Bulletin. Please visit www.krack.com or contact your sales representative for more information.



Applications.

- **Wineries:** Refrigeration equipment is applied to maintain the 55°F to 58°F storage temperature in barrel rooms. The quiet operation of the MK Quiet evaporators enhance the tour groups' experience by lowering the background noise level during tours.
- **Micro-Breweries:** MK Quiet lowers background noise during tours of the beer production and storage areas.

Other Applications.

- **Production, Packaging or Prep Areas:**
People working in these environments will benefit from quieter operation and reduced air circulation when fans are operating at lower fan speeds.
- **Loading Docks:** Refrigeration loads for these areas are calculated for a design day using hot summer temperatures and doors opening. Actual operation with cooler ambient temperatures or doors closed reduce the refrigeration loads allowing operation at reduced fan speeds while still providing capacity to meet the peak refrigeration loads.

Advantages and Benefits.

Each MK Quiet Unit Cooler is tested to ensure reliable performance in your cold storage facility where you can see these advantages and benefits.

- **Quieter Operation:** The "Swept-Wing" fan blade reduces the sound level by 6 dba at full speed with no change in air flow or evaporator capacity. The variable speed EC motor reduces the sound level by another 13.5 dba. Combined, these two options significantly lower sound levels and create an environment for conversational level discussions during winery and brewery tours.
- **Energy Savings:** Variable speed operation can save 50% to 70% on fan power depending on the refrigeration load. This translates into a \$55 to \$75 annual energy cost savings per fan motor at \$0.10 per KWH, resulting in a quick payback and nice return on investment (ROI).
- **California Title 24 Regulations:**
Meets the requirement for variable speed fans on evaporators for walk-in coolers or freezers larger than 3000 square feet for application in California.
- **Improved Temperature Control:** Fan speed will vary by temperature allowing better control of capacity to match varying refrigeration loads. The addition of the electronic controls and monitoring with temperature recording and alarm outputs to for feedback on temperatures.



Products that provide lasting solutions.

KRACK



Krack, a Hussmann Corporation brand

890 Remington Boulevard
Bolingbrook, Illinois 60440
Ph: 630.629.7500

www.krack.com