THERMO KING

FEATURE OF THE MONTH

ETV FOR TRAILER

Maximize Your Unit

The Electronic Throttling Valve (ETV) on Thermo King trailer units protects fresh loads while saving you time and fuel. ETV allows the reefer to run in modulation mode, assuring the most consistent temperature throughout the trailer.

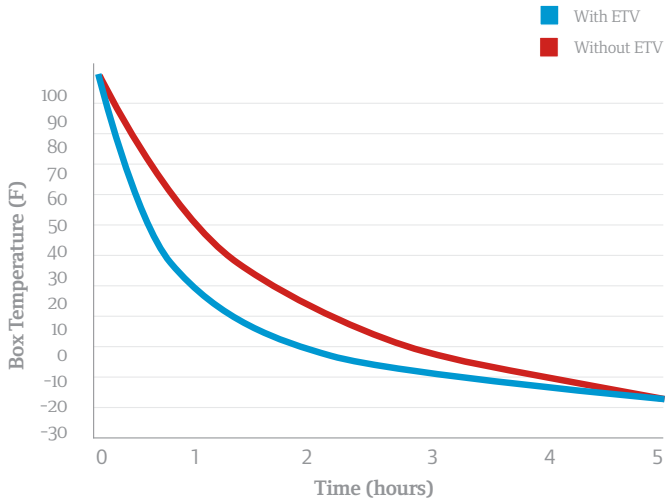
How it Works

The Electronic Throttling Valve (ETV) for trailer units from Thermo King uses a microprocessor to precisely control the refrigeration system. As the temperature approaches setpoint, the ETV begins to close, throttling the suction gas returning to the compressor and thus reducing cooling/heating capacity. As the box temperature approaches setpoint , the ETV becomes almost completely closed. This process provides very smooth and steady temperature controls, resulting in benefits for users.

ETV Benefits

- **Maximizes Capacity** The suction pressure control algorithm on ETV for trailer allows the refrigeration system to fully utilize the power capabilities of the engine under varying conditions.
- **Extends Shelf Life** ETV allows trailer units to run in Modulation mode, preventing temperature spikes which can cause costly damage to product and profits. (See details on back)
- **Runs in Extreme Ambient** The ETV prevents trailer unit shutdowns in high ambient temperatures by allowing continued operation of the unit at a temporarily reduced refrigeration capacity.
- **Improved Pull Down (and Pull Up)** Even when ambient temperatures are high, the ETV gets your trailer to the right temperature faster than any other product in the industry.
- **Enhanced System Safeguards** The ETV provides an additional measure of protection against high discharge pressures and possible compressor damage, as well as high coolant temperatures which can lead to engine shutdown.

ETV (electronic throttling valve) gets your trailer to the right temperature faster.



UA 180, ambient 100°F

ETV The fastest pull down (and pull up) in the industry

Temperature Spikes

Temperature spikes pose a serious threat to the freshness and quality of many products, especially produce. As the refrigeration unit cycles from hot to cold, temperatures out of the evaporator spike at high and low points. Cold spikes blowing over the top of a load can result in "top freeze," while heat spikes cause dehydration and costly product shrinkage. Both result in loss of product and profits.

Thermo King Modulation

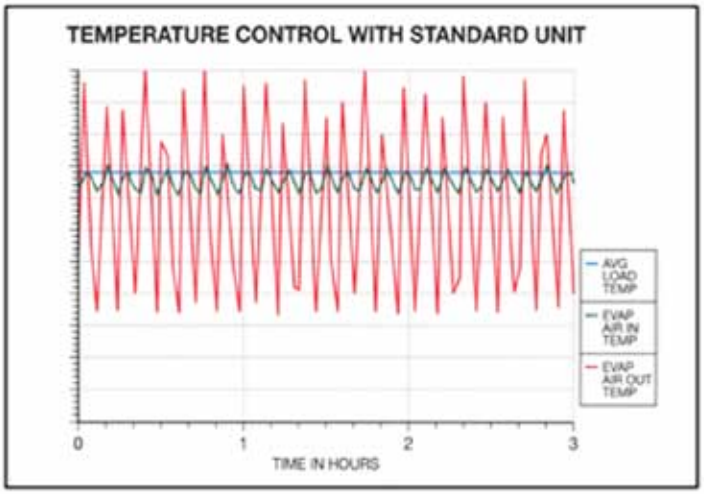
The Thermo King's ETV for trailer prevents temperature spikes, running a temperature no more than three degrees Fahrenheit from the set point. The running of a consistent temperature eliminates hot and cold spikes, preventing both top freeze and shrinkage caused by dehydration. With the ETV and modulation process from Thermo King, your load stays as fresh as possible, even over long distances, and will arrive at its destination an extended shelf life.

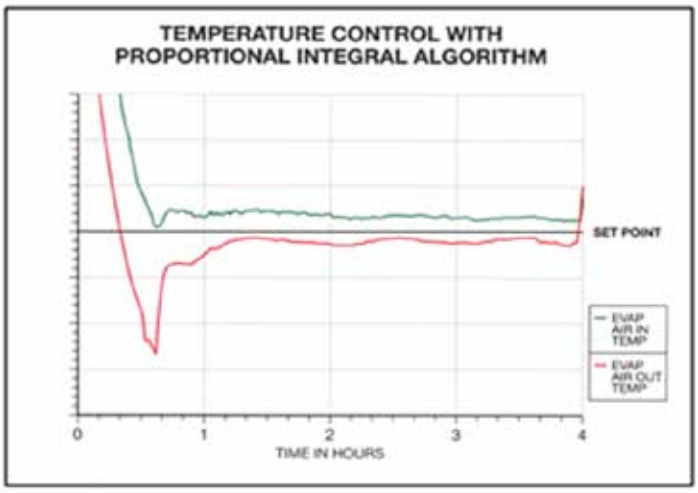
CYCLE-SENTRY™ Modulation

CYCLE-SENTRY Modulation offers a compromise between fuel savings and temperature control when used with fresh commodities with specific characteristics. It's important to remember that CYCLE-SENTRY Modulation is used at the customer's discretion and is set up using a customer designed named or numeric temperature profile in OptiSet™ Plus.

Some fresh commodities with the following characteristics may be candidates for Cycle Sentry Modulation.

- Fresh commodities with low heat of respiration
- Fresh commodities that do not ripen after harvest
- Fresh commodities that do not require continuous airflow





The Thermo King Advantage

Mode	Thermo King ETV	Competitive Throttling Valve
Cool Mode	Used to increase cooling capacity for faster pull down	No change in cooling capacity
Heat Mode	Enhances heat capacity for faster pull up	Throttle is not used in heat mode
Defrost Mode	Increases speed of defrost cycle	Throttle not used in defrost mode
Modulation Mode	No unloaders needed, and only one solenoid valve needed with no valves to pulse	Requires three unloaders and three pulsing solenoids, and pulsing valves wears them out.

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