

# Micro Thermo Technologies

## Case Control



### Product Benefits:

- **Never Set Superheat Again**  
Advanced valve profiling and algorithms ensure excellent superheat control right out of the box.
- **Energy Savings**  
A system using the Case Controller can realize up to 8% savings on total refrigeration related energy costs.
- **Food Quality**  
Estimates show that the improved temperature control of the case can reduce food loss (shrink) costs by up to 2% per store / per year.

Accurate control of temperature is a key component to controlling food quality and ultimately food loss. Using highly accurate valve profiles coupled with advanced control algorithms, the Micro Thermo Technologies Case Controller can prevent significant under / over shoot. This can reduce temperature shocks to food and provide up to an estimated two percent impact (savings) on food loss. Better control of electric expansion valves results in lower energy usage, while better maintaining temperature and food quality.

The Micro Thermo Technologies Case Controller uses advanced alarm



schemes to safeguard food. In addition to standard alarm thresholds, the Case Controller monitors cumulative temperature fluctuations over time. These additional alarms can provide early warnings that help protect food quality and intelligently predict system failures.

The Case Controller features control of an electric expansion valve, fans, defrost, anti-sweat, and lighting for complete case control. It is also easily integrated into the Micro Thermo Technologies Alliance Platform, which provides a simple user interface for easy setup, comprehensive data recording, and local / remote oversight.

The Micro Thermo Technologies Case Controller also features:

- Compatibility with all of today's common refrigerants, including CO<sub>2</sub>
- Windows® interface with built-in tools to ease start-up
- Smart fan control
- Multiple control schemes, including true pressure-temperature superheat control
- Built-in dual temperature case control capability



ENGINEERING YOUR SUCCESS.

# Specifications:

## Electrical

- Supply Voltage:  
120-240VAC 50/60Hz  
2A fused
- Digital Inputs:  
(2) 0-5VDC max range, interface to dry contact
- Analog Inputs:  
(4) temperature sensors  
(1) pressure transducer .5 - 4.5V
- Digital Output:  
12V bipolar stepper motor output (for EEV control)
- Fan Relay\* Output:  
(1) SPDT 240 VAC, fuse protected @ 5A
- Defrost Relay\* Output:  
(1) SPDT 240 VAC, fuse protected @ 5A
- Lighting Relay\* Output:  
(1) SPDT 240 VAC, fuse protected @ 5A
- Anti-Sweat Output:  
(1) pulsed solid state relay (ssr) 5V/15mA max

## Mechanical

- Operating Temperature:  
-40°F to 168°F (-40°C to 75°C)
- Humidity:  
0-95%RH (non-condensing)
- Enclosure: PC - dark gray
- Wiring: screw and push terminals
- Mounting: SnapTrack panel, wall mounting or DIN rail

## Dimensions

- 12.50"W x 4.56"H x 2.15"D

## Compliance

- Environmental: RoHS, WEEE
- Safety:  
CE, UL/CUL (Recognized per 873)

\*Relays are UL Recognized components up to 10A.

# Wiring Diagram:

