CUES – Chilled Unit Energy Saver Installation Guide

SCAN BELOW OR CLICK HERE FOR INSTALL VIDEO



CUES, our Chilled Unit Energy Saver is designed to reduce the energy consumption of commercial refrigeration by providing conditions that mimic the temperature properties of food.

A refrigerator thermostat (probe) monitors air temperature in the refrigerator. Opening of the access door invariably causes the incoming warm air to momentarily raise the temperature in the walk-in cooler or freezer causing the compressor to cycle, to reduce the temperature.

CUES is scientifically engineered to simulate the properties of food. The food safe, lightweight, ABS housing surrounds a high-tech wax, which simulates a typical food product in a pre-packed condition. Patented* food safe wax food simulator design mimics thermal properties of food. *Patent pending no: GB 1305236.0.



Installation Guide – CUES should be installed by a professional.

- 1. **BEST PRACTICE**: Place CUES unit(s) into applicable refrigeration space 12-24 hours before beginning installation procedures below. The CUES will reach desired temperature prior to installation and this should ensure compressors do not run too long after initial installation.
- 2. Check your target application is not listed on the unsuitable applications listed below*.
- 3. Locate the position of the sensors (thermostat / probe) within the refrigerator. They will normally be at the back of the unit at the end of a copper line attached to the temperature control near the evaporator.





4. Insert the thermostat/probe through the blue membrane cap at the end of the CUES unit (If necessary, it may be helpful to pierce a very small opening in the membrane to ease entry). You should slide it all the way in; the internal guides will ensure that it is positioned within the center of the internal chamber. The end stop will prevent you from pushing it in too far; however, you should avoid forcing the probe in too far as you may damage the refrigeration probe. Note: be careful not to be too forceful with the copper line attached to the probe. When possible, grip the probe itself when inserting it into CUES.



 The refrigeration unit should now be working more efficiently, resulting in a lower core food temperature (typical temperature drop of 2 - 3° F) because of the fewer but longer, deeper cooling cycles.

Post Installation – should be performed under supervision of your refrigeration professional. To achieve optimal energy saving results you should monitor the refrigeration temperature for a period 1 – 2 weeks following installation.

6. In almost all cases you will now be able to adjust the refrigeration temperature setting upwards to achieve the original operating 'core' temperature. From experience this has proven to be an important beneficial element of the CUES installation, resulting in significant additional energy savings.

CUES is not intended to monitor the air temperature of the refrigerated location in which it is being used. *Unsuitable applications:

- CUES is not suitable for applications where the thermostat is in direct contact with or internal to the evaporator.
- CUES should not be fitted to blast chillers, icemakers, or domestic units.
- CUES is not suitable for probes exceeding 10mm in diameter.

The Practicalities of Installing CUES

- 1. The thermostat must be inserted as far as possible into the CUES unit. The more or the body of the thermostat that is visible the less effective CUES will be.
- 2. CUES will have a greater effect on refrigeration units where the thermostat is positioned close to the door. This is simply because the thermostat will be influenced to a greater extent by the ambient air rushing in when the door opens.
- 3. If the thermostat is positioned furthest away from the door CUES will have a lesser effect.
- 4. Thermostats can be inaccurate by as much as 5% and keep the refrigerator within its design temperature range. To overcome this, we suggest that a CUES is placed in the refrigerator before installation. After 24 hours the probe would have stabilized, and the real food temperature will be displayed. This may enable you to reset the thermostat by the difference between the thermostat setting and the true reading given by the probe.

CUES complies with NSF P235 and all applicable requirements. Products appearing in the NSF official listing are authorized to bear the NSF Mark. Certificate #: C0148027 - 01 Certificate #: C0148027 - 01. *Patent pending no: GB 1305236.0.