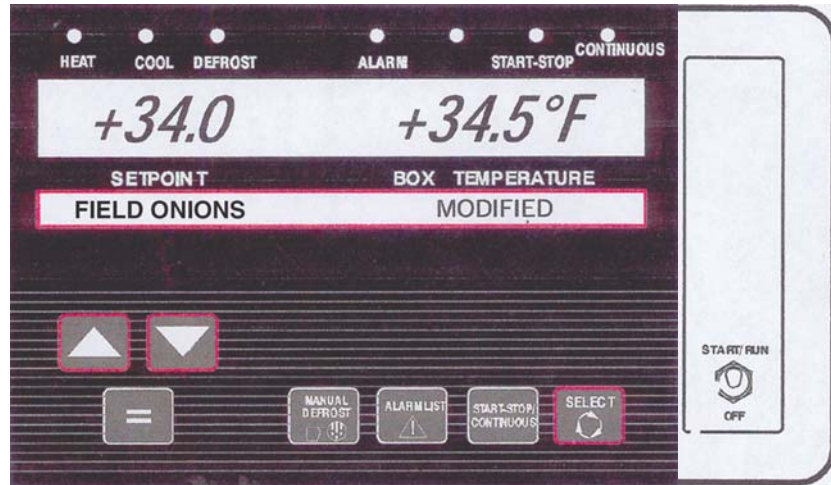




Carrier Ultima Refrigeration Unit Control Panel Overview

Union Pacific's ARMN fleet of refrigerated rail cars has been equipped with the Carrier Ultima Refrigeration Unit which includes a digital display and control panel for operating the unit. Starting and setting the refrigeration unit for your shipment is done from this control panel.



Intelliset Options

Default operation	Fresh 38 - 89° F	Fresh meat
Frozen cheese	Fresh 32 - 37° F	Processed meat
Carrots	Storage potatoes	Frozen 0 and below
Storage onions	Field potatoes	Frozen fries
Field onions	Fresh dairy/cheese	Frozen poultry/meat

Although a suggested set point temperature is part of the Intelliset parameters, the temperature setting for a given Intelliset option can be adjusted within minimum and maximum set point limits.

The refrigeration unit of the rail car should be started in advance of loading and allowed to run for a period of time to verify proper operation and to pre-chill or heat the lading compartment prior to loading. Once normal operations and settings for your shipment have been verified, loading can commence. During loading, and at all times when rail car door is open, the refrigeration unit must be OFF to ensure optimum unit performance and product integrity.

With Intelliset selections, the refrigeration unit will automatically shutdown when the door is open and then will restart automatically when the door is closed. Note: If utilizing the Default Intelliset option, the refrigeration unit must be manually turned OFF during loading and unloading operations.

The refrigeration unit must be operated in accordance with these instructions to ensure optimum performance. Any variation from these instructions could result in claim compromise or declination.

Any tampering or modifying the refrigeration unit and/or door sensors is strictly prohibited. Violators will be subject to surcharges and repair expenses.



Steps for Start-Up, Adjusting Setting & Shut Down

1.0 Starting the Refrigeration Unit

- 1.1 Start the unit by placing the START/RUN - off switch on the bottom right side of the control panel in the START/RUN position.
- 1.2 The control panel should start to display information and will perform a self-check. At the end of this self-check process, a warning buzzer will sound for five (5) seconds followed by engine start.
- 1.3 If the display on the control panel does not come on, or if the unit fails to start, leave the START/RUN - off switch in the START/RUN position and contact the UP Mechanical Perishable Desk at 1-800-303-3410.
- 1.4 Once the unit is on and running properly, all current settings will be displayed.

2.0 Setting the Refrigeration Unit Equipped with Intellisets

- 2.1 Press and hold the SELECT key at the bottom right corner of the control panel until the “press to view Intellisets” is displayed.
- 2.2 Press either the up or down arrow key on the left side of the panel to scroll through the list of settings. When the desired setting is displayed, press the equal (=) key to select.
- 2.3 The refrigeration unit will shutdown, reset, and go through a restart including the display of the selected Intellisets setting.
- 2.4 All operational parameters have been set for the operation of the unit for the selected product.
- 2.5 The set point displayed is the default setting for this product and can be accepted or modified within a minimum/maximum range.
- 2.6 To change the set point while the unit is running and the current set point is displayed, press the up or down arrow key until your desired temperature is displayed and flashing, then press the equal key (=) to select.
- 2.7 If the message “max (min) setpoint has been reached,” you have requested a set point outside the limits of the Intellisets configuration of the product you have selected and the unit will not allow a warmer or colder setting.
- 2.8 Intellisets setting process is now complete.

3.0 Shutting Down the Refrigeration Unit

- 3.1 Prior to unloading the rail car and opening the doors, turn the unit off by placing the START/RUN - off switch on the bottom right side of the control panel in the OFF position. Unit will shutdown and control panel will no longer display information.
- 3.2 If unit does not turn off, leave the START/RUN - off switch in the OFF position and contact the UP Mechanical Perishable Desk at 1-800-303-3410.
- 3.3 After unloading the car, shut and secure all rail car doors. If unit restarts automatically after closing doors, verify that the START/RUN - off switch is in the OFF position and contact the UP Mechanical Perishable Desk at 1-800-303-3410.