



Installing & Operating the CMS-100 Refrigeration Alert Model

Installation

- CMS-100 unit may be wall-mounted at any convenient indoor location.
- Maximum cable run from CMS-100 to condensing unit is 300'.
- Install N/C relay on condensing unit.
- Install high-temp alarm sensor inside refrigerated space.
- Install digital temperature indicator sensor inside refrigerated space.
- Furnish & install interconnecting wiring between CMS-100 and condensing unit. Follow wiring diagram.
- Optional- Furnish & install interconnecting wiring between CMS-100 and owner furnished remote phone dialer (or other fail-safe output).

Operation

Power for the CMS-100 is provided through the interconnecting wiring to the condensing unit. (Therefore, power to the condensing unit must be on in order to energize the CMS-100.) Digital temperature readout is constantly provided with LED numerals.

In addition, colored indicator lights show system status as follows:

- Green "Power" light indicates that power is being supplied to the CMS-100.
- Green "Cond. Unit Pwr. OK" light indicates power is being supplied to the condensing unit.
- Amber "Defrost Mode" light indicates refrigeration system is in the defrost mode of operation.
- Green "Refrigerate Mode" light indicates refrigeration system is in refrigerate (cooling) mode of operation.

NOTE: Either the amber "defrost mode" or the green "refrigerate mode" light will be illuminated, but never both at the same time. The refrigeration system itself will always be in one mode or the other.

- When in the refrigerate mode (only) a green light will also indicate either "compressor running" or "temperature satisfied." These lights will never both be on at the same time.
- Red "Low Oil Pressure" light indicates loss of compressor oil pressure and a resulting compressor shut down. (This feature is functional only on compressors having an oil protection control.)
- Red "Short-cycle Lock-out" light indicates a short cycling condition has occurred on the compressor. This indication is activated if the compressor makes 5 or more starts within a 10-minute time period.
- Red "High Temperature" light indicates the walk-in has warmed to a temperature exceeding the sensor set point.

Any red light identifies an alarm condition that requires corrective attention to the equipment. A loud horn is also sounded in these situations. The horn may be silenced by flipping the toggle switch from "normal" to "bypass" but the red-light indication will continue. After the condition that caused the alarm has been corrected, the CMS-100 must be reset to functional status by placing the toggle switch into the "normal" position and depressing the "reset" button. This action resets the unit by de-energizing the red light (s) and alarm horn and permits the Refrigeration Alert to resume all monitoring functions once again.

NOTE: Loss of power to the CMS-100 and/or the refrigeration equipment will de-energize the respective green indicator lights. This condition will not sound any alarm. However, if a user-supplied fail-safe device such as a phone-dialer is utilized, a loss of power or any "red light" alarm condition would activate the fail-safe (phone-dialer) device.