

# OWNER'S MANUAL

## BREEZAIRE SENTRY III Plus Controller

This wine cooler controller is a specially designed state-of-the-art microprocessor product which provides the user many flexible capabilities, plus a degree of built-in safety features and "user friendliness" to provide a maximum of utility and reliable operation for your wine storage benefit for years to come.



### FEATURES OVERVIEW:

1. Adjustable storage temperature
2. Built-in compressor protection timing functions
3. Special alarm display features
4. Permanent retention of user adjustments during power outage
5. Independent selectable evaporator fan operation
6. Automatic Over-Heat protection
7. User-selectable operating and temperature display conditions
8. Automatic sensor error monitoring
9. Emergency manual operation

**When the unit is first powered up**, the display will momentarily show "°F" (or "°C"), then the current wine storage temperature. If the temperature is above the desired set-point, the unit will start cooling.

**NOTE:** During the initial power-up of the unit, you should leave the door to your wine cellar or cabinet closed, in order to allow the unit to effectively cool the storage space before storing your wines. If the initial temperature is above 75°F and insufficient cooling is detected by the temperature sensor in the unit within the first 45 minutes of operation, the unit will automatically shut off, and the display will flash alternately "E1" and the temperature. You may re-start the unit by (1) a manual RESET (see below), or (2) unplugging it for 10 minutes or more.

A "call for cooling" will cause the right-hand decimal of the display to **flash**, then will be **on steady** when the chiller actually runs. The chiller will run for a minimum of 1 minute, for the compressor to stabilize.

### The above numbered features are described below:

1. **The storage temperature factory setting is 55°F (13°C).** To change the desired wine storage temperature (set-point), press and hold the SET button. Within five seconds, press either the WARMER or COOLER button to raise or lower the set-point, within the range of **45°-65°F (7-18°C)**, then release the SET button to return to normal storage temperature display.
2. When the unit shuts off, or if there is a momentary power outage, there is an automatic delay of 5 minutes before it will be enabled to re-start. This is to protect your compressor from possible damage due to "short-cycling". Upon a "call for cooling" during this delay, the lower right-hand dot on the display will blink, as explained above.
3. As an alert to you, the display will alternately flash "AL" and the **temperature** if the storage temperature rises above a preset alarm temperature. **The alarm factory setting is 62°F (17°C).** You may adjust this alarm setting (see 7, below). The unit will continue to operate while in the alarm mode, unless the temperature rises to 75°F (24°C), as described in 6, below.

4. The computer memory will retain all settings currently in use (see 7, below) if there is a power interruption for any period of time, or if the unit is unplugged. There is no need to “re-program” the controller in such an event.

5. When the compressor shuts off, the evaporator fan will continue to run for 45 seconds in order to “harvest” all possible cooling, as an energy-saving feature.

6. In the unlikely event that the storage temperature rises above 75°F (24°C) after the first cooling shut-off for 1 minute or more, the unit will automatically shut off after 20 minutes, and the display will alternately flash “OH” and the **temperature**. The unit will remain shut off for a minimum of 30 minutes, after which you may attempt to re-start the unit with a manual RESET (see below). Or, during the 30 minute delay, a re-start of the unit may be attempted by unplugging and re-plugging the power to the unit for any amount of time. Re-start will only occur if the temperature is below 75°. If the same shut-off occurs, contact your Breezaire dealer.

7. You may adjust several operating conditions of the controller; namely, (a) the desired storage temperature (set-point), (b) the units of temperature display, (c) the degrees above and below the set-point for the unit to turn on and off (bandwidth), (d) the alarm temperature desired, and (e) the desired operating mode of the evaporator fan. Proceed as follows:

(a) Press and hold the SET button to adjust the **set-point**, as described in (1) above. **(Factory setting is 55°F)**.

**Note:** If the SET button is held more than 5 seconds while adjusting set-point, the display will enter the control’s user-adjustable setting mode, as described next.

For other user-adjustable settings:

Hold the SET button for **more than 5 seconds**, until it changes to:

(b) **Temperature display units** (°F or °C), then **let go** of the SET button. **(Factory setting is °F)**. Change the display mode by alternately pressing either the WARMER or COOLER button. After making this setting (or not), you may proceed to the next setting by pressing the SET button once until the display changes to:

(c) **Bandwidth setting: (Factory setting is +/- 3°F)**. You may reduce this setting to +/- 1°F by pressing the COOLER button. You may increase the setting to +/- 5°F by pressing the WARMER button. The equivalent changes will apply if the temperature units are °C. After making this setting (or not), you may proceed to the next setting by pressing the SET button once until the display changes to:

(d) **Alarm setting: (Factory setting is 62°F)**. The display will flash “AL”, then the setting. You may adjust this higher or lower by pressing the WARMER or COOLER button. After making this setting (or not), you may proceed to the next setting by pressing the SET button once until the display changes to:

(e) **Evaporator Fan mode: (Factory setting is Automatic “Au”)**. You may change this to always “On” by pressing either the WARMER or COOLER button, and vice versa. After making this setting (or not), pressing the SET button once will return the display to normal, showing the storage temperature.

**NOTE:** After any of the setting steps above, if no further action is taken after one minute, the display will revert to normal. The prior setting adjustments will be retained in memory, until further change(s). If necessary, the **factory default settings** may be re-set by simultaneously holding the WARMER and COOLER button down for more than 5 seconds. The display will indicate “Fr”.

8. If the temperature falls below 43°F (6°C), the display will flash the temperature to draw your attention. If the temperature sensor inputs below 32°F (0°C) the display will flash “LO”, and if above 99°F (37°C) it will flash “HI”.

9. A faulty sensor will be indicated by a display of “Er”. The unit will shut off, but may be manually operated with the COOLER button to turn ON, allowing for the “call for cooling” 5-minute delay. The WARMER button may be used to turn the unit OFF, which will be followed by a 5-minute delay before the unit may be re-activated.

**RESET:** The controller may be manually RESET by pressing and holding the WARMER button for at least 5 seconds. The display will momentarily show “8.8.”, then the current version of software, then “°F”, then the storage temperature. If this action is taken before the unit has been OFF for about 7-8 minutes, it will not re-start for five minutes, regardless of storage temperature at the time of RESET. **NOTE:** All user settings and parameters will be retained in memory upon a manual RESET operation.