
Changing the Setpoint:

1. Turn the On/Off Switch “On.”
2. Press the Up and Down Arrow keys to choose the new setpoint.
3. Press the Enter key. The display will briefly show Lod (load), then the new setpoint will reappear.

Selecting CYCLE SENTRY or Continuous Mode:

1. Turn the On/Off Switch “On.” Clear all alarms.
2. Press the SELECT key (cycling arrows) until the display shows CYCLS and YES or NO.
3. Press the UP or DOWN keys to choose YES or NO. YES operates the unit in CYCLE-SENTRY. NO operates the unit in Continuous Run.
4. Press the ENTER key (equals sign) when the desired mode is shown in the display. The return air temperature will be displayed on the screen.
5. The display will briefly show Lod (load) and then the new mode will appear.

Starting the Engine:

1. Turn the On/Off Switch “On.” If no key is pressed, engine will automatically preheat and start in about 10 sec.
2. If the unit is in CYCLE-SENTRY mode and cooling, heating or defrosting is required, engine will automatically preheat and start.

Manual Defrost Cycle:

1. The unit must be running in Continuous or CYCLE-SENTRY mode or be in CYCLE-SENTRY Null mode and the coil temperature must be below 45 F (7 C).
2. Press the SELECT key until the dEF (defrost) prompt appears in the display.
3. Press the ENTER key to enter a Defrost cycle. The display will briefly show Lod (load). Unit will then enter a Defrost cycle. Defrost cycle will terminate automatically.

Running a Unit Self Check:

1. Turn the On/Off Switch “On.”
2. The engine must be running. Clear any alarm codes.
3. Press and hold the TK key for at least 3 seconds. USC (Unit Self Check) will appear on the display.
4. Press the ENTER key while USC is displayed.
5. Lod (load) will appear on the display and the Unit Self Check will start.
6. The test is fully automatic. At the completion of the Unit Self Check, the check results will appear on the display. They will remain until any key on the controller is pressed. Check results are shown as either PASS, CHEC or FAIL.

Viewing Prompt and Display Screens:

SELECT Key: Scrolls through the following screens in the Standard Display mode:

[Pnt]: Print latest trip report. Displays only if DAS is connected and Print Shortcut is enabled.

[Alr]: Alarm codes, if any.

[DEF]: Defrost prompt.

[CYCLS]: CYCLE-SENTRY mode. Upper display shows [CYCLS], lower display shows [YES] if on, [no] if off.

[dIS]: Discharge air temperature.

[tLH]: Total unit hours.

[EnH]: Diesel engine hours.

Hr4]: : Hourmeter 4 hours.

Hr5]: : Hourmeter 5 hours

[Hr6]: : Hourmeter 6 hours.

[oIL]: Engine oil pressure.

[EnT]: Engine coolant temp.

[rPn]: Engine revolutions per minute.

[bAt]: Battery voltage.

[coL]: Coil temperature.

[dS1]-[dS6]: Up to six DAS sensors.

[dFI]: Defrost interval in range.

[dFn]: Defrost interval not in range

[ddr]: Defrost duration..

Viewing and Clearing Alarm Codes:

1. Turn the On/Off Switch "On." If the alarm symbol is displayed on the screen, press the SELECT key.
2. The Alarm Screen and alarm code will appear. If more than one alarm is present, each will be displayed for several seconds. Always record any alarm codes show.
3. To reset the alarm system, press the Select key to display the alarm screen. Press the ENTER KEY to clear the alarm. Enter must be pushed to clear each alarm if more than one alarm is present.
4. After all alarms are cleared, the alarm symbol will disappear. After about ten seconds, the standard display will appear.

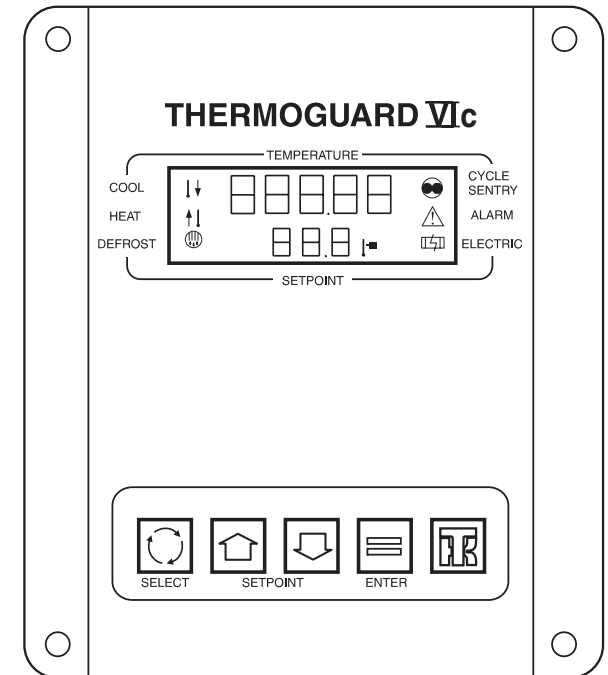
Alarm Codes:

- | | |
|----|--------------------------------------|
| 00 | No Fault |
| 02 | Evaporator Coil Sensor |
| 03 | Return Air Sensor |
| 04 | Discharge Air Sensor |
| 06 | Engine Water Temp Sensor |
| 07 | Engine RPM Sensor |
| 08 | Remote Return Air Sensor |
| 09 | High Evaporator Temperature |
| 10 | High Discharge Pressure or Temp |
| 11 | Unit Controlling on Alternate Sensor |
| 12 | Sensor Shutdown |
| 16 | Manual Start Not Completed |
| 17 | Engine Failed to Crank |

Alarm Codes:

- | | |
|----|---|
| 18 | High Engine Water Temperature |
| 19 | Low Engine Oil Pressure |
| 20 | Engine Failed to Start |
| 21 | Cooling Cycle Check |
| 22 | Heating Cycle Check |
| 23 | Cooling Cycle Fault |
| 24 | Heating Cycle Fault |
| 25 | Alternator Check |
| 28 | Pretrip or Self-check Abort |
| 31 | Oil Pressure Switch |
| 32 | Refrigeration Capacity Low |
| 33 | Check Engine RPM |
| 34 | Modulation Circuit |
| 35 | Run Relay Circuit |
| 37 | Check Engine Water Level |
| 39 | Water Valve Circuit |
| 40 | High Speed Circuit |
| 52 | Heat Circuit |
| 54 | Test Mode Time-out |
| 61 | Low Battery Volts |
| 63 | Engine Stopped |
| 66 | Low Engine Oil Level |
| 70 | Hourmeter Failure |
| 71 | Hourmeter 4 Exceeds Set Limit |
| 72 | Hourmeter 5 Exceeds Set Limit |
| 73 | Hourmeter 6 Exceeds Set Limit |
| 74 | Microprocessor Reverted to Default Settings |
| 77 | Internal Fault Code, Dealer Resettable |

Operating the Thermoguard TG-V1c Microprocessor



Used on the SB-200TG

CAUTION: This is a quick reference guide. Always refer to the operating manual for detailed instructions.

 **THERMO KING**

TK 53699-1-PC (Rev. 0, 01/07)