## **Venstar T6850 Specification**

The thermostat shall be a 4.3" full color touch screen, capable of independently controlling an individual heating and cooling unit, with up to four stages of heating and two stages of cooling, fan, and reversing valve. The thermostat shall be dual setpoint with individually set heating and cooling temperatures.

The thermostat shall be 365 day programmable, with up to three occupied periods and one unoccupied period that can be individually programmed for each day of the week. There shall be free PC software for easy programming and selecting holidays. The program shall have an override mode to provide comfort on demand while in an unoccupied period. The unoccupied override shall be adjustable by pushing an override button and selecting thirty minute increments, up to four hours. The setback override shall be activated by a single button, and deactivated on demand. The thermostat shall also have a holiday programming mode for up to 5 years with PC software.

The thermostat shall be capable of operating the fan continuously during occupied periods and in auto mode during unoccupied periods.

The thermostat shall be capable of alternating compressor starting sequence with a built in lead-lag operating logic.

The thermostat shall have a Pre-Occupancy purge cycle that energizes the fan before the programmed occupancy time, adjustable from 0 to 3 hours in fifteen minute increments.

The thermostat shall be Wi-Fi controlled through local wireless internet routers. The thermostat shall have configurable terminals available for remote indoor, remote outdoor or remote supply air temperature sensing.

The thermostat shall include equipment protection options to prevent compressor short-cycling, and to limit the number of cycles per hour. These options shall be defeatable for use with zoning systems.

The thermostat shall display both room temperature and cooling and heating setpoints simultaneously, and shall indicate when cooling or heating and what stage is energized on the main screen. The thermostat will have multiple selections for active, idle and overnight illumination.

Setpoints shall be adjustable from 35 degrees F to 99 degrees F, with an adjustable deadband available. The thermostat shall maintain temperature to within 1 degree of setpoint. The thermostat shall include a remote mounted supply duct temperature sensor that shows high/low temperatures to allow for remote troubleshooting and diagnostics.

The thermostat shall have adjustable heating and cooling setpoint limits. The thermostat shall have adjustable auxiliary heat lockout temperature based on outdoor temperatures. The thermostat shall have a diagnostic testing mode for technicians to exercise all outputs at installation. The thermostat shall have an Emergency Heat switch when set in heat pump mode. The thermostat shall have a display that supports English, Spanish and French languages.

The thermostat will provide multiple security levels to limit access to programming and configuration and will allow for a custom 4-digit passcode. The various security levels will allow controlled access to programming, unoccupied override, and thermostat mode. The thermostat will provide adjustable setpoint limiting, and a locking feature that can disable the thermostat buttons. The thermostat will accept a standard SD card (not included) to upload photos, settings and dealer logo.

The thermostat shall have a service filter indicator, UV light indicator, contact screen for contractor's full color logo, phone number, website, e-mail address and physical address. Wi-Fi key shall multiple permission levels to allow remote monitoring, control of mode, temperature and setpoints thought the internet by PC or iPhone/Android devices.

All programming information, except time of day, shall reside in nonvolatile memory. During a power failure, the thermostat shall maintain its program indefinitely without the use of batteries. Time of day shall be will always be maintained with ACC0454 Wi-Fi key. The thermostat shall include a daylight saving option.

The thermostat provided shall be a Venstar T6850 thermostat.