

Two-Stage Control

TSC

Elite Series

Simply the Best Two-Stage Set Point Control Around With

- 2-Stage Heating, Cooling, or Heat/Cool (Change-Over Control (COC)) Applications
- Independent or Continuous Sequencing
- Optional 24-Hour Rotation
- Built-in External Activation

DiGi-SPAN®



The TSC-Elite Provides accurate control for two set points.

The TSC-Elite is ideal whenever two stages of control are needed to maintain your set point. This applies to dual control of boilers, water heaters, fans, refrigeration units, chillers, as well as other equipment used in heating, cooling, vacuum, or humidity. It can also be used to control any 2-stage device. In addition, the TSC-Elite can control a single-stage and one alarm point. In this type of application, if the system drifts above or below a critical set point, the control will activate an alarm.

- **Heat, Cool, or Change-Over (Heat/Cool) option.** One TSC-Elite provides these options using field selectable menus. Each with a set of parameters that will customized the TSC-Elite for your specific application.
- **Each TSC comes with a built-in rotation option,** which allows you to rotate equipment on a 24-hour basis. This option evens out wear and tear on individual components, helping to prolong equipment life.

- **A New Continuous Operating Mode** is added for the control of two units that are not equal in size. A Large unit can bring the system to the second set point. Then, a smaller unit will take over and gets the system to the first set point. In this configuration a maximum of one stage will be active at any point in time.
- **The TSC is now equipped with External Activation** that allows a remote device to enable or disable the TSC-Elite operation.
- **Two Set Points.** Unlike other Two-Stage Controls, the TSC-Elite has two set points to ease setting and avoid calculation errors. Each set point can be set independently from the other.
- **Can be Powered by 120VAC or 24VAC.** The TSC-Elite is normally powered by 120VAC. However, it has an alternative 24VAC power input. No transformers are required.
- **English or Metric.** The same TSC-Elite can be configured to follow either standard. Each with an array of sensor options for versatility.
- **Mounts on a 1900 Box or an Extension Skirt.** The flexibility of mounting the control and the use of the supplied skirt, makes this control fit any application need and most tight spaces.
- **Sensor Fault Output Option.** The TSC-Elite offers the option of switching the On or Off when a fault condition occurs.

Typical Applications

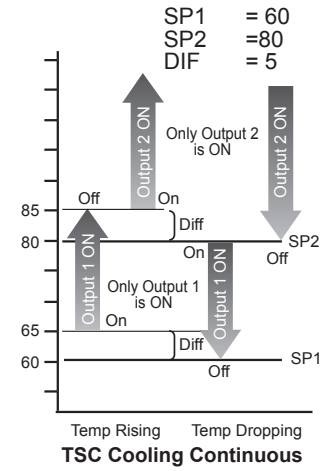
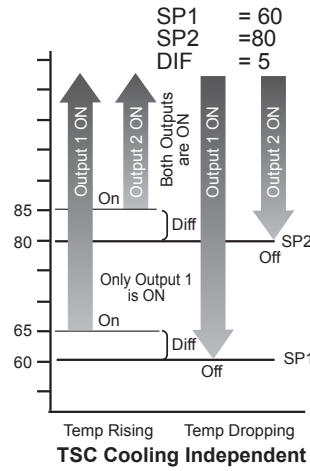
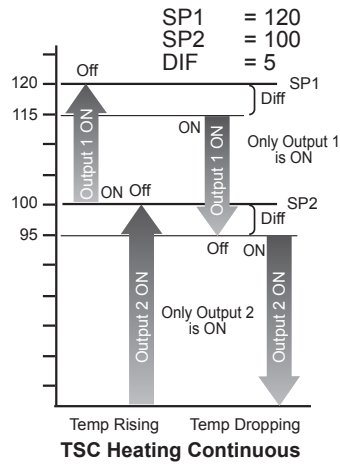
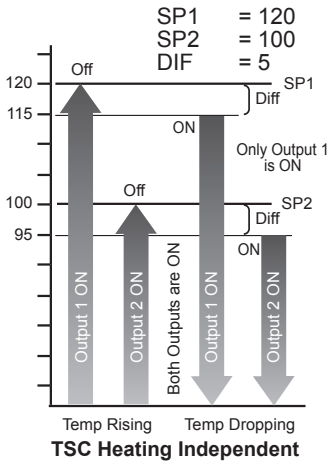
- **Industrial or Commercial Change-Over Control (COC).**
- **Residential Heat/Cool Thermostat.**
- **2-Stage Boiler or Two Individual Boilers Control.**
- **Processes involving Temperature, Pressure, Vacuum, or Humidity Control.**
- **Alarm Systems for temperature, Pressure, or Humidity.**
- **Domestic Hot Water Applications.**
- **Vacuum System control.**

ISO 9001:2000
CERTIFIED

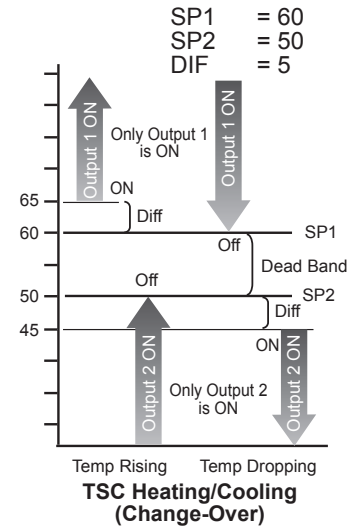


HEAT-TIMER®
CORPORATION

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Item Description	Part #
TSC Elite (Sensor ordered Separately)	929155-UA
Brass Tube Temperature Sensor	904015-00
Immersion Type Temperature	904024-00
Humidity Sensor	904035-00
Vacuum Sensor (0 - 30 Hg)	904317-00
Pressure Sensor (0 - 30 PSI)	904310-00
Pressure Sensor (0 - 100 PSI)	904312-00
Pressure Sensor (0 - 200 PSI)	904311-00
Pressure Sensor (0 - 300 PSI)	904313-00



TSC Elite Specifications:

- Voltage Input:** 120 VAC 60 Hz/24VAC 60 Hz (Only One Power Source)
- Power Consumption:** 3 VA Max
- Operating Temperature:** 20°F/-7°C to 120°F/49°C
- Operating Humidity:** 20% to 80%
- Dimensions:** 4"W x 4"H x 2½"
- Weight:** 2.5 pounds
- Output:** 2 S.P.S.T (White= N.O. Output1), (Blue= N.O. Output1)
- Output Relay Ratings:** 1 Amp inductive, 6 Amp resistive at 120 VAC 60 Hz
- Control Modes:** Heat (Break on Rise), Cool (Make on Rise), Change-Over (Heat/Cool)
- Operating Modes:** Independent and Continuous (A maximum of one stage can be on at one time)
- Rotation:** On (Every 24 hours) or Off (Available in Independent Mode Only)
- Sensor Fault Operating Options:** Output On or Output Off
- Temperature Ranges:** -30°F (-34°C) to 250°F (121°C)
- Pressure Ranges:** PSI (0-30PSI, 0-100 PSI, 0-200PSI, 0-300PSI) or MPa (0.25MPa, 0.60MPa, 1MPa, 1.6MPa)
- Vacuum Ranges:** 30Hg or 760mm
- Humidity Ranges:** 0% to 100% RH
- Display:** Alphanumeric (2 rows x 16 char. each)
- LED:** 1 representing each Output relay
- Buttons:** 3 (Set, Up, Down)
- Enable/Disable:** Terminals EXT+, EXT- (Dry Contact only)