

## West Over Temperature Controller – Type 20/40

### Step 1: Over Temperature Basic Configuration

\*Enter Configuration Mode

#### To Enter Configuration Mode:

- \* Press and hold **U** and **▲** together to enter select mode. The lower window will display **SLCt**.
- \* Press the **▲** button until the upper display shows **ConF**. Press to **U** enter.
- \* The lower display shows **LOC**. Press the **▲** button until the upper display shows the lock code (default is **20**). Press to **U** enter. Please note that this step will not be shown if the lock code is zero.

**NOTE: If the Overtemp is left in configuration mode with no front panel activity for about 2 minutes, the Overtemp will switch to Operator mode.**

#### Once you are in Configuration Mode,

- \*The lower window displays **inPt**.  
The upper window will display a thermocouple type.
- \*Press **▲** or **▼** to adjust the thermocouple to **P24C**.
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure the Range Upper Limit (the lower window should display **ruL**)
- \*Press **▲** or **▼** to toggle the upper widow to display **1815**
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure the Range Lower Limit (the lower window should display **rLL**)
- \*Press **▲** or **▼** to toggle the upper widow to display **100**
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure the Process Variable Offset (the lower window should display **OFFS**)
- \*Press **▲** or **▼** to toggle the upper widow to display **0**
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure High/Low Control (the lower window should display **Ctrl**)
- \*Press **▲** or **▼** to toggle the upper widow to display **Hi**
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure the Set Point Upper Limit (the lower window should display **SPuL**)
- \*Press **▲** or **▼** to toggle the upper widow to display **1815**
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure the Set Point Lower Limit (the lower window should display **SPLl**)
- \*Press **▲** or **▼** to toggle the upper widow to display **100**
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure Alarm 1 (the lower window should display **ALA1**)
- \*Press **▲** or **▼** until **None** (no alarm) is displayed
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure Alarm 2 (the lower window should display **ALA2**)
- \*Press **▲** or **▼** until **None** (no alarm) is displayed
- \*Press **RESET** to accept this value.
- \*Press **U** once to configure the Display Strategy (the lower window should display **diSP**)

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- \*Press ▲ or ▼ until **EnAb** is displayed
- \*Press RESET to accept this value.
- \*Press ⏸ once to configure the Configuration Lock Code (the lower window should display **CLoc**)
- \*Press ▲ or ▼ until the lock code is a desired value
- \*Press RESET to accept this value.
- \*Press ⏸ and ▲ together to exit Configuration Mode.

The Overtemp controller will now restart in Select Mode.

### Step 2: Over Temperature Set-Point and Display Setup

#### To Enter Set Up Mode:

- \* Press and hold ⏸ and ▲ together to enter select mode. The lower window will display **SLCt**.
- \* Press the ▲ button until the upper display shows **SEtP**. Press to ⏸ enter.
- \* The lower display shows **LOC**. Press the ▲ button until the upper display shows the lock code (default is **10**). Press to ⏸ enter. Please note that this step will not be shown if the lock code is zero.

#### Once you are in Set-Up Mode,

- \*The lower window displays **SP**. This is the set point limit for the furnace.
- \*Press ▲ or ▼ to adjust the temperature to **1815**.
- \*Press ⏸ once, the lower window should display **HySt** (hysteresis)
- \*Press ▲ or ▼ to adjust the upper window value to **1**
- \*Press ⏸ once, the lower window should display **FiLt** (filter)
- \*Press ▲ or ▼ to adjust the upper window value to 1 (1 second)
- \*Press ⏸ once, the lower window should display **SLoc** (Lock Code)
- \*Press ▲ or ▼ to adjust the upper window value to a desired lock code
- \*Press ⏸ once, operator mode is displayed
- \*A red **S** located on the right side of the lower display indicates the controller is still in set-up mode. Press ⏸ and ▲ together to exit Set-Up Mode

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### Routine Operation (Operator Mode):

#### Confirming Operator Mode Status:

The **Overtemp set point** should be displayed in the lower window.

If a red 's' is visible to the right of the lower window then the controller is in Set Up Mode. Press **⏏** until the Overtemp set point is displayed in the lower window, then press **⏏** and **▲**. The red 's' will turn off, returning you to Operator Mode.

#### Changing the Overtemp set point:

To change the **Over Temperature set point** follow the **Setup Procedure Step 2 - Over Temperature Set Point and Display Setup**.

#### Over Temperature Condition:

When the furnace initially exceeds the **Overtemp set point** the 'OUT' and 'EXCEED' indicators will light and the Overtemp output relay will switch, shutting off power to the furnace. The furnace will remain off until the Overtemp is reset -- even if the furnace drops below the **Overtemp set point**.

When the furnace temperature drops below the **Overtemp set point** the 'EXCEED' indicator will turn off. The 'OUT' indicator will remain lit, signifying that the furnace has been over temperature and that the Overtemp must be RESET to operate the furnace.

The **HiHd** and **ti** operation variables contain the furnace temperature and time data for the over temperature condition -- see **Operation Variables** for more information.

#### Resetting after Over Temperature Condition:

\*Press the RESET button after the 'EXCEED' indicator has turned off

The 'EXCEED' indicator lights when the furnace is above the **Overtemp set point**.

If the 'EXCEED' indicator is lit pressing RESET will have no effect.

#### Operation Variables:

In Operator Mode, pressing **⏏** cycles the display through the **operation variables**.

#### HiHd (High Temperature Hold)

\*Press **⏏** once, the lower window will display **HiHd** (High Temperature Hold)

The upper window displays the highest temperature recorded since the last reset of this variable.

**To Reset HiHd:** While viewing **HiHd**, press and hold either **▲** or **▼** for 5 seconds.

The display will blink 5 times. The upper window will then display '----', and then change to the current temperature. If the temperature is below the lower limit for the type thermocouple selected, **HiHd** will change to the thermocouple's low limit (example: 100 for a type B thermocouple displayed in EC)

#### ti (Time Exceeded)

\*Press **⏏** twice, the lower window will display **ti** (Time exceeded)

The upper window displays the cumulative time the furnace has been above the **Overtemp set point** since the last variable reset. After a variable reset **ti** reads 0.00.

**To Reset ti:** While viewing **ti**, press and hold either **▲** or **▼** for 5 seconds.

The display will blink 5 times. The upper window will then display '----', and then change to '0.00'.