SSE Board – SD / Low Input Alarms

If you have a SD (smoke detector) Alarm on an SSE Board:

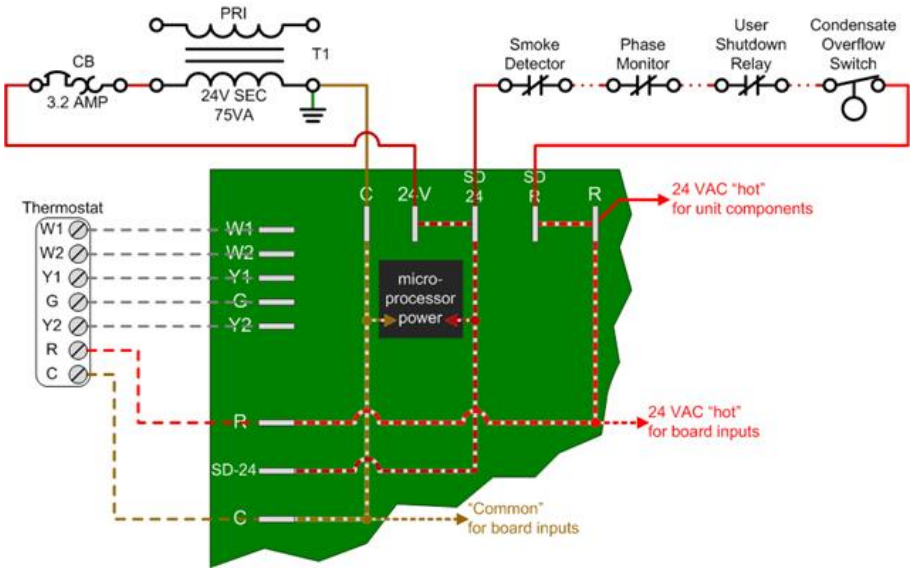
- Measure voltage on both SD R and SD 24 terminals to common (use C terminal on top left side of board) also measure R to C on your thermostat terminal strip.
  - If you measure 0 volts on SD R terminal to common, check your transformer for proper output voltage and connections from transformer to the SSE board.
  - If you measure 0 volts on SD 24 and/or R to common, you must find where the circuit is being interrupted.
  - If you measure > 19 volts on SD 24 and R to common and still have an active SD alarm, replace the board.
  - If you measure > 0 and < 19 volts on SD 24 and R to common, follow the next steps below.

IF you have a Low Input Alarm:

- Check your transformers and make sure the primary voltage is set correctly based on measured incoming voltage.
- On units above 7.5 ton there may be two low voltage transformers, one gives power to the SSE while the other also goes the SSE but it is for outputs from the board; make sure both transformers voltages are present and above the 19 volt threshold.
- Inspect the OCC / R jumper at the Tstat terminal and make sure it is installed (if a BAS system is not controlling Occupancy). If a remote smoke detector is being used and instead of connecting it to SD and SDR they are connecting it between R and OCC, or if they are breaking R with a smoke detector, the SSE board may show the Low Input or SD alarms.

Special Safety Note: *A smoke detector cannot be wired to break R if there is a smoke event; breaking R will shut down the unit, but the fan will continue to run until its run timer expires. This could create safety issues if there really is a fire because the fan (airflow) could help move the flames around the space.*

Low Voltage Input & SD Circuits



Test Points

"SD R", "SD 24" and "C "Terminals

"R" thermostat terminal

Nothing is to be connected to this SD terminal.