

# SUBMITTAL SHEET

Form Number TSLX4.2  
Effective Date 06/16



## LINEAHEAT CODE LX4 – 2-10 Volt “X” designates input power code

Proportional Electric Heat Controlled by Analog 2-10 Vdc (4-20 mA) Output (Discharge Temperature Sensor Optional)

LX4 – Provides proportional electric heat from 0 to 100% for those controllers that have 2-10 Vdc (4-20 mA) available for supplemental heat control. Heater output is directly proportional to dc Volt signal over 2 Vdc. For example, 4 Vdc (6 mA) provides 25% (2Vdc/ 8Vdcs \* 100%) of the heater’s kW rating. For inputs below 2 Vdc (4 mA), heater will stay off.

If LineaHeat is used with optional discharge temperature sensor, the heater is set to modulate heat to a set discharge temperature. User defined maximum temperature and controller defined temperature desired are maintained independent of heater kW or incoming air temperature. The maximum discharge temperature produced by the heater is set by rotary dial on the LineaHeat control board. When the unit receives a signal to start heating, the board will take an initial temperature reading and modulate heat from that point to the maximum temperature. For example, if a thermostat requires only a 10% increase in heating of air that was initially 60°F, and has a maximum temperature setting of 90°F, the EHM will modulate the heater’s output temperature to 63°F (the additional 3 degrees coming from (90°-60°)\*10%). This option allows an increase of heater energy into occupancy by increasing discharge airflow while keeping an optimal discharge temperature. ASHRAE Fundamentals Handbook (Chapter 31) states that discharging air at a temperature more than 15°F above the room (90°F in a 75°F room) will likely result in significant unwanted air temperature stratification.

