SUBMITTAL SHEET
Form Number TSLX7.2
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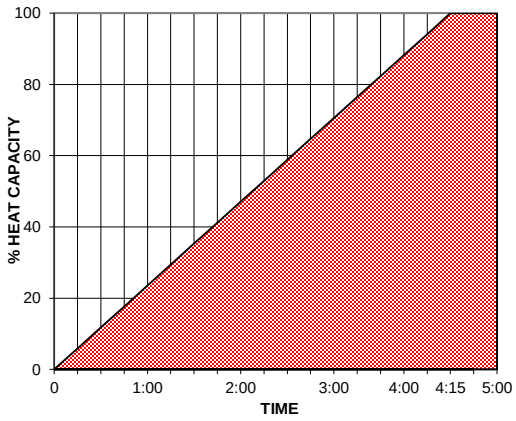
KRUEGER
Excellence in Air Distribution

LINEAHEAT CODE LX7 – 3 Point Floating "X" designates input power code

Proportional Electric Heat Controlled by Two 24Vac Outputs with Floating Control (Discharge Temperature Sensor Optional)

LX7 – Provides proportional electric heat from 0 to 100% for those controllers that have two 24Vac outputs available for supplemental heat control. This application does not provide proportional heat with pulsed input. This application mimics the use of hot water reheat controlled by a Three Point modulating valve and provides gradual heating cycling without occupant awareness. When 24Vac "open" signal is sent, the heater control board begins increasing heater output from 0 to 100% at a rate of 0.4% per second (4 minutes and 10 seconds). When desired room temperature has been met and the 24Vac "open" signal is removed or the 24Vac signal "close" is applied, the heater will decrease at a rate of 0.4% per 20 seconds as a safety precaution. When the 24Vac "close" signal is sent alone, the heater will decrease from present level at a rate of 0.4% per second. If the 24Vac "open" signal is again sent alone, the heater will again start increasing from current capacity.



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 and increase heater output until the maximum discharge temperature is reached. The time span to increase from the initial temperature to the maximum temperature setpoint is 4 minutes and 15 seconds. When signal for no more heating is given, heater output will decrease to zero over the same time span as the heater increased. 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.