

## Characteristics of the TH115 controller

Conventional electromechanical thermostats can have a temperature differentials of 4 °C, whereas the Model TH115 has a temperature differential of only 0.5 °C. This slight oscillation eliminates the discomfort often found with conventional electromechanical thermostats. The thermostat determines the amount of power required by the heating system to maintain the temperature. To see this process, the display shows in real time the percentage of power that will be applied to the heating system for the upcoming cycle.

| Percentage (100% = 1 cycle) |       |       |       |        |        |
|-----------------------------|-------|-------|-------|--------|--------|
|                             | 1     | 2     | 3     | 4      | 5      |
| Cycles                      | 20%   | 40%   | 60%   | 80%    | 100%   |
| 15 min                      | 3 min | 6 min | 9 min | 12 min | 15 min |

When the LCD displays 1 flame, the heating system will be ON for 3 minutes and OFF for 12 minutes.

Similarly if the LCD displays 2 flames, the heating system will be ON for 6 minutes and then OFF for 9 minutes. The heating indicators refresh when a new cycle begins.

In view of the above, the example below will help you understand how your heating works. If a heating element of 1500 watts has been installed in your kitchen and the heating is ON for 24 hours, the approx monthly cost to heat your kitchen can be calculated as below:

Cost per hour x Number of hours x No. of days in a month

= (0.12 x wattage/1000) x 24 hrs x 30 days

= 0.12 x 1500/1000 x 24 x 30 = \$ 129.60

If there were only 2 flames showing most of the time, then the heating would have been working for only 40% of the 15 minute cycle.

If we assume this to be 50% of the total time on manual, it would equate to around \$ 129.60 less 50% = \$ 64.80.

Hence the approximate operating cost per month for your kitchen is \$ 64.80.