

Abstract

Temperature control apparatus for use e.g. in an air conditioner, utilises a thermistor (21) as a
5 temperature detection device. The thermistor has a non-linear temperature/voltage characteristic which is compensated for, by means of a processor (14). The voltage output developed across the thermistor (21) is converted to digital form, and the processor (14) is
10 pre-programmed with data concerning the non-linear relationship of the detector impedance versus temperature, which is used to compensate for the non-linearity of the thermistor. The stored relationship is of the form

$$t = \sum a_n x^n$$

15 where x is the impedance value, a is a constant, and t is the temperature, n being an integer; for example n = 3. As a result, the thermistor can be used over a much
20 larger sensing range than hitherto

This Sheet Has Been Replaced

