Cold winding resistance measurements are normally converted to a standard reference temperature *()* equal to the rated average winding temperature rise plus 20 °C. In addition, it may be necessary to convert the resistance measurements to the temperature at which the impedance loss measurements were made. The conversions are accomplished by Equation (3):

where(Ω)

is the measured resistance (Ω)

is the desired reference temperature (°C)

is the temperature at which resistance was measured (°C)

is 234.5 °C (copper) or 225 °C (aluminum)

NOTE – The value of may be as high as 230 °C for alloyed aluminum.