



INTERPRETING MEGGER READINGS **GUIDE**

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To correct insulation resistance readings to the reference temperature, use the following formula:

$$R_c = R_t \times K_t$$

Where:

R_c = insulation resistance (in megohms) corrected to 40° C

R_t = measured insulation resistance (in megohms) at temperature t (° C)

K_t = insulation resistance temperature coefficient at temperature t (° C)

Example: Winding temperature t = 68° F = 20° C

Measured resistance R_t = 800 megohms

Referring to Figure 1, find the insulation resistance temperature coefficient:

$$K_t = 0.25$$

Multiply 800 megohms times 0.25 to find the corrected resistance:

$$R_c = R_t \times K_t$$

$$= 800 \times 0.25$$

$$= 200 \text{ megohms}$$

Plot the corrected insulation resistance readings for each test on a chart for reference and trending. The corrected reading of 200 megohms from the above example is shown at "0 months" in Figure 2.

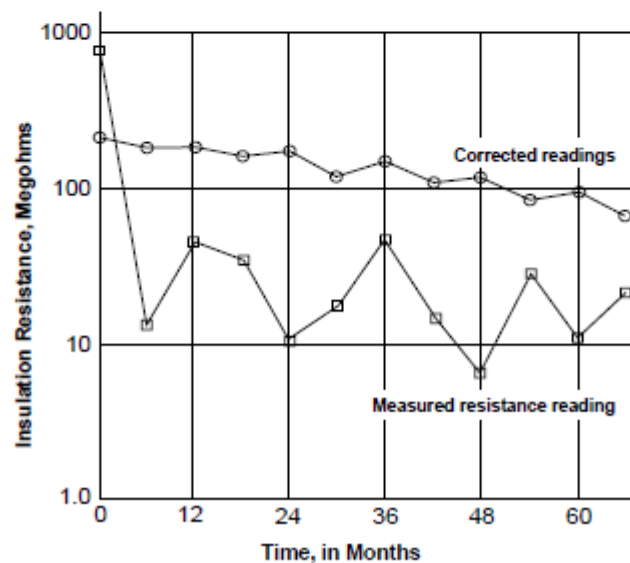


Figure 2. Corrected Insulation Resistance Readings



Source: How to Get the Most Out of Your Electric Motors
Electrical Apparatus Service Association



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