



BAPI Thermistor Recertification Guidelines

Application Note

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Many customers ask; How often do I have to recertify thermistor sensors?

BAPI researched specifications at ASHRAE, NIST, UL and ANSI. We did not find any standards, guidelines or published recommendations that dealt with peripheral sensor recertification from any of these standards associations.

During qualification testing the thermistors that BAPI uses were aged at 100°C for one year. After the year was over, none of the thermistors had drifted more than 0.2°C from their starting point. The equivalent drift at 25°C is on the order of 0.004°C in five years. BAPI feels very comfortable with specifying 0.2°C in five years.

BAPI discussed thermistor recertification with the person in charge of Industrial Thermometry, National Institute of Standards and Technology, Gaithersburg, Maryland. The NIST researcher informed BAPI that a thermistor is the most stable thermometer available. Her opinion is “Thermistors are more stable than RTDs or mercury in glass thermometers.” NIST has tested thermistors of equivalent construction to BAPI products that were in service for eight years and found no measurable drift.

BAPI understands that it may be good practice to inspect thermistor sensors on a periodic basis. We are not concerned that the thermistor sensor will drift, but we are concerned that other environmental factors may physically damage the sensor, careless workmen dropping tools for example. Each facility is unique and has its own requirements. BAPI’s technical service representatives will be happy to consult with you and make recommendations based on your requirements.

BAPI’s NIST-traceable Blu-Test Wireless Test Instruments can be used to recertify thermistor sensors. For more information on Blu-Test and how to recertify thermistors, check out Blu-Test on our website at www.bapihvac.com

If you have any questions contact your BAPI representative.