

NTC Inrush Current Limiters

Climatic conditions

Date: April 2026

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1 Reliability data

For most measuring NTC thermistors and in particular for those featuring high measuring accuracy, reliability data are given in the data sheets. These data provide information on the deviation of rated resistance under high thermal, electrical or mechanical stress.

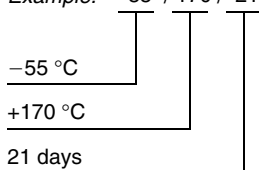
These resistance tolerances are in the range of a few percent and have therefore no relevance for coarsely tolerated NTC thermistors.

2 Climatic category

Thermistors are assigned to climatic categories according to the climatic conditions under which they have been tested.

The IEC climatic category is specified for all NTC thermistors in the data sheets. In accordance with IEC 60068-1 (Appendix A) the climatic category is made up of three sets of digits, which are decoded as shown in the following example:

Example: 55 / 170 / 21



1st group: Lower category temperature (temperature limit) denoting the test temperature for test A (cold) in accordance with IEC 60068-2-1.

2nd group: Upper category temperature (temperature limit) denoting the test temperature for test B (dry heat) in accordance with IEC 60068-2-2.

3rd group: Number of days, the duration of test Ca (damp heat, steady state) at a relative humidity of 93% +2/–3% and an ambient temperature of 40 °C, in accordance with IEC 60068-2-78.