

## Přímo ohřívané termistory se záporným teplotním součinitelem – Část 1: Kmenová specifikace

ČSN  
EN 60539-1  
ed. 3  
**OPRAVA 1**  
35 8145

idt IEC 60539-1:2016/Cor.1:2017-09

Corrigendum

Tato oprava ČSN EN 60539-1 ed. 3:2016 přejímá anglickou verzi opravy EN 60539-1:2016/AC:2017-09. Má stejný status jako oficiální verze.

This Corrigendum to ČSN EN 60539-1 ed. 3:2016 implements the English version of the Corrigendum EN 60539-1:2016/AC:2017-09. It has the same status as the official version.

### Národní předmluva

#### Vypracování opravy normy

Zpracovatel: Úřad pro technickou normalizaci, metrologii a státní zkušebnictví, IČ 48135267

Technická normalizační komise: TNK 102 Součástky a materiály pro elektroniku a elektrotechniku

Pracovník Úřadu pro technickou normalizaci, metrologii a státní zkušebnictví: Ing. Milan Dian



English Version

Directly heated negative temperature coefficient thermistors -  
Part 1: Generic specification  
(IEC 60539-1:2016/COR1:2017)

Thermistances à coefficient de température négatif à  
chauffage direct - Partie 1: Spécification générique  
(IEC 60539-1:2016/COR1:2017)

Direkt geheizte temperaturabhängige Widerstände mit  
negativem Temperaturkoeffizienten - Teil 1:  
Fachgrundspezifikation  
(IEC 60539-1:2016/COR1:2017)

This corrigendum becomes effective on 22 September 2017 for incorporation in the English language version of the EN.



European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

**Endorsement notice**

The text of the corrigendum IEC 60539-1:2016/COR1:2017 was approved by CENELEC as EN 60539-1:2016/AC:2017-09 without any modification.

INTERNATIONAL ELECTROTECHNICAL COMMISSION  
COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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**IEC 60539-1**  
Edition 3.0 2016-04

DIRECTLY HEATED NEGATIVE TEMPERATURE  
COEFFICIENT THERMISTORS –  
Part 1: Generic specification

**IEC 60539-1**  
Édition 3.0 2016-04

THERMISTANCES À COEFFICIENT DE  
TEMPÉRATURE  
NÉGATIF À CHAUFFAGE DIRECT –  
Partie 1: Spécification générique

**C O R R I G E N D U M   1**

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

**5.12 Thermal time constant by ambient temperature change ( $\tau_a$ )**

*Replace with this new subclause 5.12:*

**5.12 Thermal time constant by ambient temperature change ( $\tau_a$ )**

**5.12.1 The hot to cold thermal time constant for ambient temperature change**

**5.12.1.1 General**

The method of test shall be as described below.

**5.12.1.2 Initial measurements**

The zero-power resistance shall be measured as prescribed in 5.6 at the temperature  $T_i$  followed by the same measurement at  $T_a$ . The temperature  $T_i$  is calculated as follows:

$$T_i = T_b - (T_b - T_a) \times 0,632$$

where

$T_b$  is  $(273,15 + 85)$  K, unless otherwise specified in the detail specification;

$T_a$  is  $(273,15 + 25)$  K, unless otherwise specified in the detail specification.

Measurements shall be recorded.

**5.12.1.3 Preconditioning**

The thermistor shall be immersed in a medium with a temperature  $T_b$  and allowed to reach the medium temperature.

#### 5.12.1.4 Test methods

The thermistor shall be transferred rapidly to a medium with a temperature  $T_a$ . The time it takes for the thermistor to reach the zero-power resistance at  $T_i$  shall be measured.

The resulting time is the thermal time constant by ambient temperature change.

#### 5.12.2 The cold to hot thermal time constant for ambient temperature change

##### 5.12.2.1 General

The method of test shall be as described below.

##### 5.12.2.2 Initial measurements

The zero-power resistance shall be measured as prescribed in 5.6 at the temperature  $T_i$  followed by the same measurement at  $T_a$ . The temperature  $T_i$  is calculated as follows:

$$T_i = T_a + (T_b - T_a) \times 0,632$$

where

$T_b$  is  $(273,15 + 85)$  K, unless otherwise specified in the detail specification;

$T_a$  is  $(273,15 + 25)$  K, unless otherwise specified in the detail specification.

Measurements shall be recorded.

##### 5.12.2.3 Preconditioning

The thermistor shall be immersed in a medium with a temperature  $T_a$  and allowed to reach the medium temperature.

##### 5.12.2.4 Test methods

The thermistor shall be transferred rapidly to a medium with a temperature  $T_b$ . The time it takes for the thermistor to reach the zero-power resistance at  $T_i$  shall be measured.

The resulting time is the thermal time constant by ambient temperature change.

#### 5.12.3 Final measurements and requirements

The thermal time constant by ambient temperature change shall be within the limits specified in the detail specification.

#### 5.12.4 Requirements

The medium used in 5.12.1.2, 5.12.1.3, 5.12.2.2 and 5.12.2.3, the temperature tolerance on  $T_a$  and  $T_b$ , air (flow rate) or liquid (flow rate and viscosity) shall be defined in the detail specification.

NOTE This method is not suitable for miniature thermistors because the change of temperature during transfer from the first to the second medium can lead to a considerable measuring error.



**U p o z o r n ě n í :** Změny a doplňky, jakož i zprávy o nově vydaných normách jsou uveřejňovány ve Věstníku Úřadu pro technickou normalizaci, metrologii a státní zkušebnictví.

Vaše názory, podněty a připomínky týkající se technických norem a zájem o možnou účast v procesech technické normalizace lze zaslat na e-mailovou adresu [info@unmz.cz](mailto:info@unmz.cz).

## **ČSN EN 60539-1 ed. 3 OPRAVA 1**

Vydal Úřad pro technickou normalizaci, metrologii a státní zkušebnictví, Praha  
Rok vydání 2018, 8 stran

**504182** Cenová skupina 998

