Preferred diameters of wire terminations of capacitors and resistors

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60301:2012 sisaldab Euroopa standardi EN 60301:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 60301:2012 consists of the English text of the European standard EN 60301:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.10.2012.	Date of Availability of the European standard is 05.10.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 31.040, 31.060

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60301

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ICS 31.040; 31.060

Supersedes HD 349 S1:1977

English version

Preferred diameters of wire terminations of capacitors and resistors
(IEC 60301:2012)

Valeurs préférentielles des diamètres des fils de sorties des condensateurs et résistances
(CEI 60301:2012)

Bevorzugte Durchmesser für Anschlussdrähte an Kondensatoren und Widerständen
(IEC 60301:2012)

CENELEC

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

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Foreword

The text of document 40/2153/FDIS, future edition 3 of IEC 60301, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60301:2012.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2013-05-17
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2015-08-17

This document supersedes HD 349 S1:1977.

EN 60301:2012 includes the following significant technical changes with respect to HD 349 S1:1977:

- employment of SI units only in the normative part of this standard, causing transfer of all imperial dimensions from Table 1 to the informative Annex A;
- addition of two smaller diameters of wire terminations in Table 1; and
- tightening of the tolerance ranges defined by minimum and maximum diameters in Table 1.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60301:2012 was approved by CENELEC as a European Standard without any modification.

CONTENTS

PREFERRED DIAMETERS OF WIRE TERMINATIONS OF CAPACITORS AND RESISTORS

1 Scope

This International Standard gives a series of preferred diameters of the finished wire terminations of capacitors and resistors for use in electronic equipment.

2 Preferred diameters of wire terminations

A series of preferred diameters d of the finished wire terminations is given in Table 1.

Table 1 – Preferred diameters of wire terminations

Minimum diameter d_{min} mm	Nominal diameter d mm	Maximum diameter d_{max} mm
0,18	0,2	0,22
0,23	0,25	0,27
0,27	0,3	0,33
0,36	0,4	0,43
0,45	0,5	0,53
0,55	0,6	0,63
0,65	0,7	0,73
0,75	0,8	0,83
0,95	1,0	1,03
1,15	1,2	1,23

The nominal or mean diameter of actual wire terminations may deviate from the listed nominal diameter d, if the actual wire diameter with its tolerance is within the range as defined by the minimum and maximum diameters, d_{min} and d_{max}, in Table 1.

NOTE 1 The presented nominal diameters d are intended to apply to the wire terminations of finished products. The diameter of the supplied lead wire material may deviate from this recommendation since all processing applied to the wire material takes effect prior to assessment of the wire termination's diameter.

NOTE 2 The designer of components with wire terminations and the writer of specifications on such products may wish to consider the influence of a wide variation of the diameter of wire terminations on the performance of the respective products, e.g. through the thermal conductivity leading to differences in the thermal management of the component, which probably influences the result of endurance tests and also the functional lifetime of the respective component. Hence, the designer or writer may decide to prescribe a tighter tolerance window for the wire terminations of the respective product, preferably within the ranges given in this standard.