

SLOVENSKI STANDARD SIST EN 62490-1:2010

01-november-2010

Merilna metoda ESL - 1. del: Kondenzatorji s priključnimi izvodi za elektronsko opremo (IEC 62490-1:2010)

ESL measuring method - Part 1: Capacitors with lead terminal for use in electronic equipment (IEC 62490-1:2010)

ESL-Messverfahren - Teil 1: Kondensatoren mit Anschlussdrähten zur Verwendung in Geräten der Elektrotechnik aqund Elektronik (IEC 62490-1:2010)

Méthode de mesure de l'ESL - Partie 1: Condensateurs à bornes de sortie utilisés dans les équipements électroniques (CEI 62490-1:2010)

https://standards.iteh.ai/catalog/standards/sist/8f2db1ae-bea0-4784-b3ed-

Ta slovenski standard je istoveten z: EN 62490-1-2010

ICS:

31.060.01 Kondenzatorji na splošno Capacitors in general

SIST EN 62490-1:2010 en

SIST EN 62490-1:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 62490-1:2010

https://standards.iteh.ai/catalog/standards/sist/8f2db1ae-bea0-4784-b3ed-d01e4e73b71d/sist-en-62490-1-2010

EUROPEAN STANDARD

EN 62490-1

NORME EUROPÉENNE EUROPÄISCHE NORM

September 2010

ICS 31.060.01

English version

ESL measuring method Part 1: Capacitors with lead terminal for use in electronic equipment (IEC 62490-1:2010)

Méthode de mesure de l'ESL -Partie 1: Condensateurs à bornes de sortie utilisés dans les équipements électroniques (CEI 62490-1:2010) ESL-Messverfahren Teil 1: Kondensatoren
mit Anschlussdrähten zur Verwendung
in Geräten der Elektrotechnik
aqund Elektronik
(IEC 62490-1:2010)

iTeh STANDARD PREVIEW

This European Standard was approved by CENELEC on 2010-09-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. 1:2010

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 40/2044/FDIS, future edition 1 of IEC 62490-1, prepared by IEC TC 40, Capacitors and resistors for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62490-1 on 2010-09-01.

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

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2011-06-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2013-09-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard/IEC 62490-1:2010 was approved by CENELEC as a European Standard without any modification.

(standards.iteh.ai)

SIST EN 62490-1:2010 https://standards.iteh.ai/catalog/standards/sist/8f2db1ae-bea0-4784-b3ed-d01e4e73b71d/sist-en-62490-1-2010

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

PublicationYearTitleEN/HDYearIEC 60384-12008Fixed capacitors for use in electronic equipment -EN 60384-12009

Part 1: Generic specification

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 62490-1:2010</u> https://standards.iteh.ai/catalog/standards/sist/8f2db1ae-bea0-4784-b3ed-d01e4e73b71d/sist-en-62490-1-2010 SIST EN 62490-1:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 62490-1:2010

https://standards.iteh.ai/catalog/standards/sist/8f2db1ae-bea0-4784-b3ed-d01e4e73b71d/sist-en-62490-1-2010



IEC 62490-1

Edition 1.0 2010-07

INTERNATIONAL **STANDARD**

NORME INTERNATIONALE

ESL measuring method-STANDARD PREVIEW

Part 1: Capacitors with lead terminal for use in electronic equipment

Méthode de mesure de l'ESL – <u>SIST EN 62490-1:2010</u>

Partie 1: Condensateurs à bornes de sortie utilisés dans les équipements d01e4e73b71d/sist-en-62490-1-2010 électroniques

INTERNATIONAL **ELECTROTECHNICAL COMMISSION**

COMMISSION **ELECTROTECHNIQUE** INTERNATIONALE

PRICE CODE CODE PRIX

ICS 31.060.01

ISBN 978-2-88912-068-0

CONTENTS

FΟ	REWO)RD		3		
1	Scope					
2	Normative references					
3	Terms and definitions					
4	Measurement jig, short compensation jig, and spacer					
	4.1	Measu	rement jig (test fixture)	5		
	4.2 Short compensation jig					
	4.3 Spacer					
5	Measuring method					
	5.1 Measuring instrument					
	5.2 Measurement conditions					
	5.3 Preparation of sample					
	5.4	Measu	rement points	8		
	5.5	5.5 Frequency and signal level				
	5.6 Measurement procedure		8			
		5.6.1	General	8		
		5.6.2	Open compensation			
		5.6.3	Short compensation.N.D.A.R.DP.R.E.V.I.E.W.			
		5.6.4	ESL measurement	9		
6			ndicated in test(result report rds.iteh.ai)			
Anr	nex A	(informa	ative) The basic concept on ESL measuring method	11		
			https://standards.iteh.ai/catalog/standards/sist/8f2db1ae-bea0-4784-b3ed-			
		.	d01e4e73b71d/sist-en-62490-1-2010	_		
_			compensation jig	6		
			ructional example of the short compensation spacer and the acer	7		
		•		1		
Fig boa	ure 3 · ard	– Meas	ure points: seating plane or flange of capacitor on the printed circuit	8		
	Figure 4 – Method of short compensation					
			ple in state where electrode of measurement jig shifted			
•			damental view of ESL measurement			

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ESL MEASURING METHOD –

Part 1: Capacitors with lead terminal for use in electronic equipment

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, EC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter
- https://standards.itch.ai/catalog/standards/sist/8f2db1ae-bea0-4784-b3ed5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62490-1 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

The text of this standard is based on the following documents:

FDIS	Report on voting
40/2044/FDIS	40/2056/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 62490 series, under the general title *ESL measuring method*, can be found on the IEC website.