



SLOVENSKI STANDARD
SIST EN 60688:1995/A2:2002
01-november-2002

9`Y_f] b]`a Yf]b]`dfYhj cfb]_`nUdfYhj Uf`Ub^Y]na Yb] b]` `YY_f] b]` j Y]]b`j
UbUc[bYU]X][]HUbYg][bUY`E`8 cdc`b]c`5 &f197`* \$* , , .% - & &\$%L

Electrical measuring transducers for converting a.c. electrical quantities to analogue or digital signals

Elektrische Messumformer zur Umwandlung von Wechselstromgrößen in analoge oder digitale Signale

ITeH STANDARD PREVIEW
(standards.iteh.ai)

Transducteurs électriques de mesure convertissant les grandeurs électriques alternatives en signaux analogiques ou numériques

<https://standards.iteh.ai/catalog/standards/sist/7a8cfc37-eba3-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002>

Ta slovenski standard je istoveten z: EN 60688:1992/A2:2001

ICS:

17.220.20 T ^|b} b`Á|`dã} ãõã
 { æ } ^ç ãõ^|ã ã
Measurement of electrical and magnetic quantities

SIST EN 60688:1995/A2:2002 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60688:1995/A2:2002

<https://standards.iteh.ai/catalog/standards/sist/7a8cfc37-eba3-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002>

EUROPEAN STANDARD

EN 60688/A2

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2001

ICS 17.220.20

English version

**Electrical measuring transducers for converting
a.c. electrical quantities to analogue or digital signals
(IEC 60688:1992/A2:2001)**

Transducteurs électriques de mesure
convertissant les grandeurs électriques
alternatives en signaux analogiques
ou numériques
(CEI 60688:1992/A2:2001)

Elektrische Messumformer zur
Umwandlung von Wechselstromgrößen
in analoge oder digitale Signale
(IEC 60688:1992/A2:2001)

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

This amendment A2 modifies the European Standard EN 60688:1992; it was approved by CENELEC on 2001-09-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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 amendment 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 85/217/FDIS, future amendment 2 to IEC 60688:1992, prepared by IEC TC 85, Measuring equipment for electrical and electromagnetic quantities, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60688:1992 on 2001-09-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2002-06-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2004-09-01

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given for information only. In this standard, annex ZA is normative and annex A is informative. Annex ZA has been added by CENELEC.

Endorsement notice

The text of amendment 2:2001 to the International Standard IEC 60688:1992 was approved by CENELEC as an amendment to the European Standard without any modification.

(standards.iteh.ai)

SIST EN 60688:1995/A2:2002

<https://standards.iteh.ai/catalog/standards/sist/7a8cfc37-eba3-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002>

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
Replace the reference to IEC 61010-1:1990 by:				
IEC 61010-1	2001	Safety requirements for electrical equipment for measurement, control, and laboratory use Part 1: General requirements	EN 61010-1	2001
Add: IEC 60051-1	1997	Direct acting indicating analogue electrical measuring instruments and their accessories Part 1: Definitions and general requirements common to all parts	EN 60051-1	1998
IEC 61000-4	Series	Electromagnetic compatibility (EMC) Part 4: Testing and measurement techniques	EN 61000-4	Series

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60688:1995/A2:2002

<https://standards.iteh.ai/catalog/standards/sist/7a8cfc37-eba3-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002>

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
60688

1992

AMENDEMENT 2
AMENDMENT 2
2001-06

Amendement 2

**Transducteurs électriques de mesure
convertissant les grandeurs électriques
alternatives en signaux analogiques
ou numériques**

ITC STANDARD PREVIEW
(standards.iteh.ai)

Amendment 2

[SIST EN 60688:1995/A2:2002](https://standards.iteh.ai/catalog/standards/sist/7a8cf37-eba1-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002)

<https://standards.iteh.ai/catalog/standards/sist/7a8cf37-eba1-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002>

**Electrical measuring transducers
for converting a.c. electrical quantities
to analogue or digital signals**

© IEC 2001 Droits de reproduction réservés — Copyright - all rights reserved

International Electrotechnical Commission 3, rue de Varembe Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site <http://www.iec.ch>



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

E

*Pour prix, voir catalogue en vigueur
For price, see current catalogue*

FOREWORD

This amendment has been prepared by IEC technical committee 85: Measuring equipment for electrical and electromagnetic quantities.

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

FDIS	Report on voting
85/217/FDIS	85/218/RVD

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

The committee has decided that the contents of the base publication and its amendments will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

iTeh STANDARD PREVIEW (standards.iteh.ai)

Page 11

[SIST EN 60688:1995/A2:2002](https://standards.iteh.ai/catalog/standards/sist/7a8cfc37-eba3-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002)

2 Normative references

<https://standards.iteh.ai/catalog/standards/sist/7a8cfc37-eba3-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002>

Replace the existing reference to IEC 61010-1 (1990) by the following:

IEC 61010-1:2001, *Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements*

Insert the following new references in the list of publications:

IEC 60051-1:1997, *Direct acting indicating analogue electrical measuring instruments and their accessories – Part 1: Definitions and general requirements common to all parts*

IEC 61000-4, *Electromagnetic compatibility (EMC) – Part 4: Testing and measuring techniques*

Page 13

3.1.8 ripple content (of an analogue output signal)

Replace the text of the existing definition by the following:

with steady-state input conditions, the ratio of the peak-to-peak value of the fluctuating component of an analogue output signal, expressed in percentage, to the fiducial value

Page 19

3.4.8 measuring range

Replace the text of the existing definition by the following:

the range defined by two values of the measurand within which the performance complies with the requirements of this standard (see 2.4.3 of IEC 60051-1)

Page 31

5.4 Ripple (for analogue outputs)

Delete "(peak-to-peak measurement)".

Page 33

5.6 Variation due to over-range of the measurand

Replace the text of the first paragraph by the following:

If, by agreement, a **transducer** is required to operate with an input up to 150 % of the nominal value, the difference between the **intrinsic error** at 100 % and the error at 150 % (under reference conditions) of the **nominal value** of the input shall not exceed 50 % of the class index.

[SIST EN 60688:1995/A2:2002
https://standards.iteh.ai/catalog/standards/sist/7a8cfc37-eba3-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002](https://standards.iteh.ai/catalog/standards/sist/7a8cfc37-eba3-485b-b396-903a17ac295f/sist-en-60688-1995-a2-2002)

Page 39

6.2.1 Application

Replace the existing text by the following:

All **transducers** requiring a d.c. or an a.c. **auxiliary supply** except where this is obtained from the input voltage and the connections cannot be separated for testing purposes.

Page 47

6.8.2 Procedure

Replace the text of the existing subclause by the following:

Apply 50 % (5 %) of the **nominal value** of the input current at a power factor of 1,0 lag/lead respectively and record the two values of the **output signal** (R). At a constant value of the measurand, increase the input current to 100 % (10 %) of the **nominal value** and reduce the power factor to 0,5 lag/lead, respectively. Record the two values of the **output signal** (X).