

Electromagnetic compatibility (EMC) —

Part 4-17: Testing and measurement techniques — Ripple on d.c. input power port immunity test

ICS 33.100.20

National foreword

This British Standard is the UK implementation of EN 61000-4-17:1999+A2:2009. It is identical with IEC 61000-4-17:1999, incorporating amendments 1:2001 and 2:2008. It supersedes BS EN 61000-4-17:1999, including amendment A1:2004, which will be withdrawn on 1 February 2012.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated in the text by **A1** **A1**.

The UK participation in its preparation was entrusted by Technical Committee GEL/210, Electromagnetic compatibility, to Subcommittee GEL/210/8, EMC – Low frequency disturbances.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Amendments/corrigenda issued since publication

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15274	26 July 2004	Implementation of IEC amendment 1:2001 with CENELEC endorsement A1:2004
	31 May 2010	Implementation of IEC amendment 2:2008 with CENELEC endorsement A2:2009

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English version

**Electromagnetic compatibility (EMC) —
Part 4-17: Testing and measurement techniques —
Ripple on d.c. input power port immunity test**

(IEC 61000-4-17:1999)

Compatibilité électromagnétique (CEM)
Partie 4-17: Techniques d'essai et de
mesure — Essai d'immunité à l'ondulation
résiduelle sur entrée de puissance à
courant continu
(CEI 61000-4-17:1999)

Elektromagnetische Verträglichkeit (EMV)
Teil 4-17: Prüf- und Meßverfahren —
Prüfung der Störfestigkeit gegen
Wechselanteile der Spannung an
Gleichstrom-Netzanschlüssen
(IEC 61000-4-17:1999)

This European Standard was approved by CENELEC on 1999-08-01. 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.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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 77A/271/FDIS, future edition 1 of IEC 61000-4-17, prepared by SC 77A, Low-frequency phenomena, of IEC TC 77, Electromagnetic compatibility, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61000-4-17 on 1999-08-01.

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) 2000-05-01
- latest date by which national standards conflicting with the EN have to be withdrawn (dow) 2002-08-01

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 the International Standard IEC 61000-4-17:1999 was approved by CENELEC as a European Standard without any modification.

Foreword to amendment A1

The text of amendment 1:2001 to the International Standard IEC 61000-4-17:1999, prepared by SC 77B, High frequency phenomena, of IEC TC 77, Electromagnetic compatibility, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to EN 61000-4-17:1999 on 2004-05-01 without any modification.

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) 2005-05-01
- latest date by which national standards conflicting with the amendment have to be withdrawn (dow) 2007-05-01

Endorsement notice

The text of the amendment 1:2001 to the International Standard IEC 61000-4-17:1999 was approved by CENELEC as an amendment to the European Standard without any modification.

Foreword to amendment A2

The text of document 77A/632/CDV, future amendment 2 to IEC 61000-4-17:1999, prepared by SC 77A, Low frequency phenomena, of IEC TC 77, Electromagnetic compatibility, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 61000-4-17:1999 on 2009-02-01.

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) 2009-11-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2012-02-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of amendment 2:2008 to the International Standard IEC 61000-4-17:1999 was approved by CENELEC as an amendment to the European Standard without any modification.

CONTENTS

INTRODUCTION	4
1 Scope	5
2 Normative references	6
3 General.....	6
4 Definitions.....	6
5 Test levels and waveform.....	7
6 Test generator	8
6.1 Characteristics and performance of the generator	8
6.2 Verification of the characteristics of the generator	8
7 Test set-up	9
8 Test procedure.....	9
8.1 Laboratory reference conditions	9
8.1.1 Climatic conditions	9
8.1.2 Electromagnetic conditions.....	9
8.2 Execution of the test	9
9 Evaluation of test results	10
10 Test report.....	11
Annex A (informative) Information on the phenomenon	13
Annex ZA (normative) Normative references to international publications with their corresponding European publications	15
Figure 1 – Examples of ripple voltage waveforms.....	12
Figure A.1 – Example of generator based on a rectifier system	14
Figure A.2 – Example of generator based on programmable instrumentation.....	14
Table 1 – Test levels	7

INTRODUCTION

This standard is part of the IEC 61000 series, according to the following structure:

Part 1: General

- General considerations (introduction, fundamental principles)
- Definitions, terminology

Part 2: Environment

- Description of the environment
- Classification of the environment
- Compatibility levels

Part 3: Limits

- Emission limits
- Immunity limits (in so far as they do not fall under the responsibility of the product committees)

Part 4: Testing and measurement techniques

- Measurement techniques
- Testing techniques

Part 5: Installation and mitigation guidelines

- Installation guidelines
- Mitigation methods and devices

Part 6: Generic standards

Part 9: Miscellaneous

Each part is further subdivided into several parts, published either as International Standards or technical reports, some of which have already been published as sections. Others will be published with the part number followed by a dash and a second number identifying the subdivision.

This part is an International Standard which gives test procedures related to ripple on d.c. input power port.