

Measuring relays and protection equipment —

Part 22-1: Electrical disturbance tests — 1 MHz burst immunity tests

ICS 29.120.70

National foreword

This British Standard is the UK implementation of EN 60255-22-1:2008. It is identical to IEC 60255-22-1:2007. It supersedes BS EN 60255-22-1:2005 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PEL/95, Measuring relays and protection systems.

A list of organizations represented on this committee 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 cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2008

© BSI 2008

ISBN 978 0 580 58079 6

Amendments/corrigenda issued since publication

Date	Comments

English version

**Measuring relays and protection equipment -
Part 22-1: Electrical disturbance tests -
1 MHz burst immunity tests
(IEC 60255-22-1:2007)**

Relais de mesure
et dispositifs de protection -
Partie 22-1: Essais d'influence électrique -
Essais d'immunité à l'onde oscillatoire
amortie 1 MHz
(CEI 60255-22-1:2007)

Messrelais und Schutzeinrichtungen -
Teil 22-1: Prüfungen der elektrischen
Störfestigkeit -
Prüfung der Störfestigkeit
gegen 1-MHz-Störgrößen
(IEC 60255-22-1:2007)

This European Standard was approved by CENELEC on 2008-02-01. 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, Bulgaria, 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

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

Foreword

The text of document 95/204/CDV, future edition 3 of IEC 60255-22-1, prepared by IEC TC 95, Measuring relays and protection equipment, was submitted to the IEC-CENELEC Parallel Unique Acceptance Procedure and was approved by CENELEC as EN 60255-22-1 on 2008-02-01.

This European Standard supersedes EN 60255-22-1:2005.

The main differences with respect to EN 60255-22-1:2005 are:

- this document is based on EN 61000-4-18;
- a capacitor was added for testing shielded communication lines when earthed at one end only;
- the test procedure for communication ports is clarified;
- the length of the communication cable for testing is fixed at 10 m;
- connection to earth removed in Figure 4 for test generator terminal.

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) | 2008-11-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2011-02-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60255-22-1:2007 was approved by CENELEC as a European Standard without any modification.

CONTENTS

1	Scope and object	4
2	Normative references.....	4
3	Terms and definitions	4
4	Test severity levels	6
5	Test equipment.....	6
6	Test set-up	9
7	Test procedure	10
8	Criteria for acceptance.....	11
9	Test report.....	12
Annex ZA (normative) Normative references to international publications with their corresponding European publications.....		13
Figure 1 – Ports for measuring relays and protection equipment		6
Figure 2 – Common mode test between each independent port and earth		7
Figure 3 – Common mode test between each independent port and all other independent ports coupled to earth.....		8
Figure 4 – Differential mode test.....		9
Figure 5 – Test set-up for communication ports with shielded and unshielded cables		11
Table 1 – Test voltages for the EUT ports.....		6
Table 2 – Criteria for acceptance.....		11