



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 61557-1:2007**

ICS 17.220.20  
29.080.01  
29.240.01

**ELECTRICAL SAFETY IN LOW VOLTAGE  
DISTRIBUTION SYSTEMS UP TO 1 000 V A.  
C. AND 1 500 V D.C. - EQUIPMENT FOR  
TESTING, MEASURING OR MONITORING  
OF PROTECTIVE MEASURES -- PART 1:  
GENERAL REQUIREMENTS (IEC 61557  
-1:2007 (EQV))**

National Standards  
Authority of Ireland  
Glasnevin, Dublin 9  
Ireland

Tel: +353 1 807 3800  
Fax: +353 1 807 3838  
<http://www.nsai.ie>

**Sales**

<http://www.standards.ie>

*This Irish Standard was  
published under the authority  
of the National Standards  
Authority of Ireland and  
comes into effect on:  
9 May 2007*

**NO COPYING WITHOUT NSAI  
PERMISSION EXCEPT AS  
PERMITTED BY COPYRIGHT  
.....**

© NSAI 2007

**Price Code L**

Údarás um Chaighdeáin Náisiúnta na hÉireann



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61557-1**

March 2007

ICS 17.220.20; 29.080.01; 29.240.01

Supersedes EN 61557-1:1997

English version

**Electrical safety in low voltage distribution systems  
up to 1 000 V a.c. and 1 500 V d.c. -  
Equipment for testing, measuring or monitoring  
of protective measures -  
Part 1: General requirements  
(IEC 61557-1:2007)**

Sécurité électrique dans les réseaux  
de distribution basse tension  
de 1 000 V c.a. et 1 500 V c.c. -  
Dispositifs de contrôle, de mesure  
ou de surveillance de mesures  
de protection -  
Partie 1: Exigences générales  
(CEI 61557-1:2007)

Elektrische Sicherheit  
in Niederspannungsnetzen  
bis AC 1 000 V und DC 1 500 V -  
Geräte zum Prüfen,  
Messen oder Überwachen  
von Schutzmaßnahmen -  
Teil 1: Allgemeine Anforderungen  
(IEC 61557-1:2007)

This European Standard was approved by CENELEC on 2007-03-01. 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 85/290/FDIS, future edition 2 of IEC 61557-1, 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 EN 61557-1 on 2007-03-01.

This European Standard supersedes EN 61557-1:1997.

The following changes were made with respect to EN 61557-1:1997:

- revision of the definitions;
- addition of influence quantities  $E_9$  and  $E_{10}$ ;
- the subclause on Electromagnetic compatibility was complemented;
- inclusion of performance monitoring devices in the introduction;
- addition of new requirements for operating instructions.

This Part 1 specifies the general requirements. Parts 2 to 8 of EN 61557, which are to be used in conjunction with this Part 1, comprise specific specifications for individual measuring equipment.

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) | 2007-12-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn   | (dow) | 2010-03-01 |

Annex ZA has been added by CENELEC.

---

## Endorsement notice

The text of the International Standard IEC 61557-1:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60359	NOTE	Harmonized as EN 60359:2002 (not modified).
IEC 60364-6	NOTE	Harmonized as HD 60364-6:2007 (modified).
IEC 61326-1	NOTE	Harmonized as EN 61326-1:2006 (not modified).

---

## 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60038 (mod)	1983	IEC standard voltages <sup>1)</sup>	HD 472 S1	1989
-	-		+ corr. February	2002
-	-		A1	1995
A1	1994			
A2	1997			
IEC 60364-6 (mod)	2006	Low voltage electrical installations - Part 6: Verification	HD 60364-6	2007
IEC 60664-1	- <sup>2)</sup>	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2003 <sup>3)</sup>
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
A1	1999		+ corr. May A1	1993 2000
IEC 61010-1	2001	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements	EN 61010-1 + corr. June	2001 2002
IEC 61010-2-030	200X <sup>4)</sup>	Safety requirements for electrical equipment - for measurement, control and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits	-	-
IEC 61326-2-2	2005	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-2: Particular requirements - Test configurations, operational conditions and performance criteria for portable test, measuring and monitoring equipment used in low-voltage distribution systems	EN 61326-2-2	2006

<sup>1)</sup> The title of HD 472 S1 is: Nominal voltages for low voltage public electricity supply systems.

<sup>2)</sup> Undated reference.

<sup>3)</sup> Valid edition at date of issue.

<sup>4)</sup> To be published.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61326-2-4	2006	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-4: Particular requirements - Test configurations, operational conditions and performance criteria for insulation monitoring devices according to IEC 61557-8 and for equipment for insulation fault location according to IEC 61557-9	EN 61326-2-4	2006
IEC 61557-2	- <sup>2)</sup>	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 2: Insulation resistance	EN 61557-2	2007 <sup>3)</sup>
IEC 61557-3	- <sup>2)</sup>	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 3: Loop impedance	EN 61557-3	2007 <sup>3)</sup>
IEC 61557-4	- <sup>2)</sup>	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 4: Resistance of earth connection and equipotential bonding	EN 61557-4	2007 <sup>3)</sup>
IEC 61557-5	- <sup>2)</sup>	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 5: Resistance to earth	EN 61557-5	2007 <sup>3)</sup>
IEC 61557-6	- <sup>4)</sup>	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 6: Effectiveness of residual current devices (RCD) in TT, TN and IT systems	EN 61557-6	200X <sup>5)</sup>
IEC 61557-7	- <sup>2)</sup>	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 7: Phase sequence	EN 61557-7	2007 <sup>3)</sup>
IEC 61557-8	- <sup>2)</sup>	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 8: Insulation monitoring devices for IT systems	EN 61557-8	200X <sup>5)</sup>

---

<sup>5)</sup> To be ratified.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-