



I.S./EN 60801-2:1993

IRISH STANDARD

**ELECTROMAGNETIC COMPATIBILITY FOR  
INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL  
EQUIPMENT. PART 2: ELECTROSTATIC DISCHARGE  
REQUIREMENTS (IEC 801-2:1991)**

*REVOKED*

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## **DECLARATION**

**OF  
SPECIFICATION  
ENTITLED**

**ELECTROMAGNETIC COMPATIBILITY FOR INDUSTRIAL-PROCESS MEASUREMENT  
AND CONTROL EQUIPMENT. PART 2: ELECTROSTATIC DISCHARGE REQUIREMENTS  
(IEC 801-2:1991)**

**AS  
THE IRISH STANDARD SPECIFICATION FOR**

**ELECTROMAGNETIC COMPATIBILITY FOR INDUSTRIAL-PROCESS MEASUREMENT  
AND CONTROL EQUIPMENT. PART 2: ELECTROSTATIC DISCHARGE REQUIREMENTS  
(IEC 801-2:1991)**

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EOLAS - The Irish Science and Technology Agency in exercise of the power conferred by section 20 (3) of the Industrial Research and Standards Act, 1961 ( No. 20 of 1961 ) and the Science and Technology Act, 1987 (No. 30 of 1987), and with the consent of the Minister for Enterprise and Employment, hereby declares as follows:

1. This instrument may be cited as the Standard Specification (Electromagnetic Compatibility for Industrial-Process Measurement and Control Equipment. Part 2: Electrostatic Discharge Requirements (IEC 801-2:1991)) Declaration, 1993.

2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Electromagnetic Compatibility for Industrial-Process Measurement and Control Equipment. Part 2: Electrostatic Discharge Requirements (IEC 801-2:1991). The Schedule comprises the text of EN 60801-2 : 1993.

(2) The said standard specification may be cited as Irish Standard/EN 60801-2:1993 or as I.S./EN 60801-2:1993.

UDC 621.3.011-5

Supersedes HD 481.2 S1:1987

Descriptors: Industrial-process measurement and control, electromagnetic compatibility, electrostatic interference, test protocol with respect to electrostatic interference, severity levels with respect to electrostatic interference

**ENGLISH VERSION**

**Electromagnetic compatibility for  
industrial-process measurement and control  
equipment  
Part 2: Electrostatic discharge requirements  
(IEC 801-2:1991)**

**Compatibilité électromagnétique  
pour les matériels de mesure et  
de commande dans les processus  
industriels  
Partie 2: Prescriptions  
relatives aux décharges  
électrostatiques  
(CEI 801-2:1991)**

**Elektromagnetische  
Verträglichkeit von  
Meß-, Steuer- und  
Regeleinrichtungen in der  
industriellen  
Prozeßtechnik  
Teil 2: Störfestigkeit gegen  
die Entladung statischer  
Elektrizität  
(IEC 801-2:1991)**

This European Standard was approved by CENELEC on 1992-12-09. 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, 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 CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 801-2:1991 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as European Standard.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60801-2 on 9 December 1992

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1993-12-01
- latest date of withdrawal of conflicting national standards (dow) 1993-12-01

For products which have complied with HD 481.2 S1:1987 before 1993-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1998-12-01.

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given only for information. In this standard, annex A is informative and annexes B and ZA are normative.

## **ENDORSEMENT NOTICE**

The text of the International Standard IEC 801-2:1991 was approved by CENELEC as a European Standard without any modification.

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**ANNEX ZA (normative)****OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD  
WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS**

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

IEC Publication	Date	Title	EN/HD	Date
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50(161)	1990	International Electrotechnical Vocabulary (IEV) Chapter 161: Electromagnetic compatibility	-	-

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# INTERNATIONAL STANDARD

**IEC  
801-2**

Second edition  
1991-04

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## **Electromagnetic compatibility for industrial- process measurement and control equipment**

### **Part 2: Electrostatic discharge requirements**

*Compatibilité électromagnétique pour les  
matériels de mesure et de commande dans  
les processus industriels*

*Partie 2:  
Prescriptions relatives aux décharges  
électrostatiques*

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROMAGNETIC COMPATIBILITY FOR  
INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL EQUIPMENT

## Part 2: Electrostatic discharge requirements

## FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

This part of International Standard IEC 801 has been prepared by IEC Technical Committee No. 65: Industrial-process measurement and control.

It forms Part 2 of IEC 801 and supersedes the first edition, IEC 801-2 (1984). It has the status of a basic EMC publication, in accordance with IEC Guide 107.

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

DIS	Reports on Voting
65(C0)49 65(C0)52	65(C0)51 65(C0)54

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

Annex A is for information only.

Annex B forms an integral part of this part of IEC 801.

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## **ELECTROMAGNETIC COMPATIBILITY FOR INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL EQUIPMENT**

### **Part 2: Electrostatic discharge requirements**

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#### **1 Scope and object**

This part 2 of the International Standard defines the immunity requirements and test methods for equipment which must withstand electrostatic discharges, from operators directly, and to adjacent objects. Several severity levels are defined which relate to different environmental and installation conditions.

These requirements are primarily developed for, and are applicable to, industrial-process measurement and control instrumentation.

Most aspects of the standard, such as simulation parameters and test set-ups, may apply to other equipment, yet other aspects such as severity levels and performance criteria may not apply to other equipment.

This document is intended to be identified as a basic EMC publication, in accordance with IEC Guide 107.

The object of this Part 2 is to establish a common reference for evaluating the performance of industrial-process measurement and control instrumentation when subjected to electrostatic discharges. In addition, it includes electrostatic discharges which may occur from personnel to objects near vital instrumentation.

#### **2 Normative reference**

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 50(161): 1990, International Electrotechnical Vocabulary - Chapter 161: Electromagnetic compatibility.

#### **3 General**

This part relates to equipment, systems, sub-systems and peripherals which may be involved in static electricity discharges owing to environmental and installation conditions, such as low relative humidity, use of low conductivity (artificial fibre) carpets, vinyl garments, etc. which may exist in all locations classified in standards relevant to industrial process measuring and control instrumentation (for more detailed information, see clause A.1 of annex A).



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