

Electromagnetic compatibility — Generic emission standard —

Part 2: Industrial environment

The European Standard EN 50081-2:1993 has the status of a British Standard

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Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the national committees of the following countries:

Austria	Italy
Belgium	Luxembourg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard, having been prepared under the direction of the General Electrotechnical Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 January 1994

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National foreword

This British Standard has been prepared under the direction of the General Electrotechnical Standards Policy Committee and is the English language version of EN 50081-2, *Electromagnetic compatibility — Generic emission standard Part 2: Industrial environment*, published by the European Committee for Electrotechnical Standardization (CENELEC).

This standard is one of a number of generic standards related to European Council Directive 89/336/EEC, dated 3 May 1989 (referred to as the Electromagnetic Compatibility (EMC) Directive), which applies to apparatus (equipment) liable to cause electromagnetic disturbance or the performance of which is liable to be affected by such disturbance. It defines the protection requirements, and related conformity procedures. The protection requirements state that apparatus within the scope of the Directive are to be so constructed that:

- a) the electromagnetic disturbance it generates does not exceed a level allowing radio and telecommunications equipment and other apparatus to operate as intended;
- b) the apparatus has an adequate level of intrinsic immunity to electromagnetic disturbance to enable it to operate as intended.

Member States of the EC are required to presume compliance with the protection requirements where apparatus is in conformity with the relevant national standard implementing the harmonized standard (in this case EN 50081-2).

Attention is drawn to the following:

The factor which determines, for EMC purposes, whether an apparatus is deemed to be “Industrial” or “Residential, commercial and light industrial”, is given in clause 1 as follows: “Apparatus covered by this standard is not intended for connection to a public mains network but is intended to be connected to a power network supplied from a high or medium-voltage transformer dedicated for the supply of an installation feeding manufacturing or similar plant.”

NOTE Apparatus intended for direct connection to a public mains network is covered by relevant product or product family standards or generic standards BS EN 50081-1 (Emission) and BS EN 50082-1 (Immunity).

The following guidance is given to manufacturers intending to make a declaration of conformity with the protection requirements of Directive 89/336/EEC.

- 1) Where a declaration of conformity is to be based exclusively on standards, a manufacturer should apply all of the standards which have been listed in the *Official Journal of the European Communities* where the scopes of the standards are appropriate to the product.
- 2) Where the scopes of the product or product family standards are not appropriate to a particular product, the generic standards should be applied.

Guidance on the use and applicability of generic EMC standards is given in PD 6582:1993 which implements CENELEC Report R110-002:1993 *Guide to Generic Standards* (see note to clause 1).

- 3) Where, for whatever reason, a manufacturer chooses not to apply the standards, or to apply them only in part (see note 1 to the table), the technical construction file route, as described in Article 10(2) of Directive 89/336/EEC, can be followed in order to make a declaration of conformity.

The examples of typical equipment given in the table, which is not exhaustive, show which standards should be applied if it is intended to make a declaration of conformity which is based exclusively on standards.

Although the Member States of the EC were required to implement the EMC Directive on 1 January 1992, Amending Directive 92/31/EEC provides for a transitional period ending on 31 December 1995, during which manufacturers of electrotechnical products have the option either to:

- a) comply with the requirements of the EMC Directive; or
- b) to continue to comply with existing national regulations which were in force at 30 June 1992.

Products manufactured in one Member State which do not conform to the Directive are required to conform to the regulations of the Member State in which they are marketed.

Types of Product (see note 1)	Standards which should be applied to make a declaration of conformity		
	Emission		Immunity
	Harmonics and voltage fluctuations	Radio disturbance (interference)	All aspects
Industrial, Scientific and Medical (ISM) equipment designed to generate radio frequency energy	See note 2	BS EN 55011	EN 50082-2 See note 3
Industrial electronic power and control equipment	See note 2	BS EN 50081-2	EN 50082-2 See note 3
Industrial non-electronic equipment	See note 2	BS EN 50081-2 See note 4	
NOTE 1 Manufacturers are advised to consult both the scope and definitions contained in a particular standard for further guidance in determining what individual items of equipment may be covered.			
NOTE 2 Where no requirements covering a particular phenomenon are specified, the equipment should be designed to meet the supply authority requirements.			
NOTE 3 In preparation.			
NOTE 4 Only applied if the product produces radio frequency disturbances (interference)			

For information on the basic standards listed in annex A and PD 6582:1993, write to Customer Services, BSI, 389 Chiswick High Road, London W4 4AL.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, the EN title page, pages 2 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.