

I.S. EN 50125-2:2003

IRISH STANDARD

ICS 29.280

National Standards Authority of Ireland Dublin 9 Harit

Tel (01) 307 3800 Tel (01) 807 3838

**RAILWAY APPLICATIONS -**

**ENVIRONMENTAL CONDITIONS FOR** 

**EQUIPMENT** 

PART 2: FIXED ELECTRICAL

**INSTALLATIONS** 

This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on February 28, 2003

NO COPYING WITHOUT NSAI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

© NSAI 2003

Price Code F

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

### **EUROPEAN STANDARD**

EN 50125-2

### NORME EUROPÉENNE

## **EUROPÄISCHE NORM**

December 2002

ICS 29,280

English version

# Railway applications Environmental conditions for equipment Part 2: Fixed electrical installations

Applications ferroviaires -Conditions d'environnement pour le matériel Partie 2: Installations électriques fixes Bahnanwendungen -Umweltbedingungen für Betriebsmittel Teil 2: Ortsfeste elektrische Anlagen

This European Standard was approved by CENELEC on 2002-07-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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

EN 50125-2:2002

-2-

#### Foreword

This European Standard was prepared by SC 9XC, Electric supply and earthing systems for public transport equipment and ancillary apparatus (fixed installations), of Technical Committee CENELEC TC 9X, Electrical and electronic applications for railways.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50125-2 on 2002-07-01.

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

2003-07-01 (dop)

- latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2005-07-01

Annexes designated "informative" are given for information only. In this standard, Annex A is informative.

#### Contents

			Page
1	Scope		4
2	Norma	tive references	4
3	Definit	ions	5
4	Environmental conditions		
	4.1	General	6
	4.2	Altitude	6
	4.3	Air temperature and humidity	
	4.4	Air movement	
	4.5	Rain	
	4.6	Hail	
	4.7	Snow and ice	
	4.8	Solar radiation	
	4.9	Vibration and shocks	
	4.10	Pollution	
	4.11	Lightning	
	4.12	Electromagnetic compatibility	
	4.13	Fire protection	
	4.14	Environmental conditions in tunnels	12
Annev	Δ (info	mative) Conditions relating to tunnels	13
	-		
Biblio6	rapny .		10
Figure		atio of reference wind velocity corresponding to a yearly probability $p$ wind velocity with a probability of $0.02$	9
	10	Wild Volodity With a probability of 0,02	
Table	1 - Al	titude relative to sea level	7
Table	2 - Re	eference wind velocities (V <sub>ref,0,0,2</sub> )	9
Table		ind velocities	
Table	4 - Ice	e loads	10
Table	5 - Sc	olar radiation	11
Table	6 - Pa	ollution type	12

EN 50125-2:2002

-4-

#### 1 Scope

This European Standard takes into account environmental conditions within Europe.

This European Standard deals with the environmental influences on fixed electrical installations for traction power supply and equipment essential to operate a railway

- in open air;
- in covered areas:
- in tunnels:
- within enclosures placed in above areas.

Escalators, lifts, fire protection, lighting in tunnels and on platforms, ticket machines, ventilation systems and non-essential functions are not included.

Such influences include altitude, temperature and humidity, air movement, rain, snow, hail, ice, sand, solar radiation, lightning, pollution, vibration, shocks and EMC.

This standard does not specify the test requirements for equipment.

In case of environmental conditions not covered by the standard the data to be adopted for a specific project should be clearly stipulated when preparing a specification.

This standard is not intended to apply to cranes, installations in underground mines, suspended cable cars and funicular railways.

Nuclear radiation is excluded.

Signalling and telecommunications systems are not considered in this standard.

Fixed installed signalling and telecommunication equipment shall comply with EN 50125-3.

#### 2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate place in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the last edition of the publication referred to applies (including amendments).

EN 50121-5	Railway applications – Electromagnetic compatibility Part 5: Emission and immunity of fixed power supply installations and apparatus
EN 50124-1	Railway applications - Insulation coordination Part 1: Basic requirements - Clearances and creepage distances for all electrical and electronic equipment

EN 50124-2 Railway applications - Insulation coordination

Part 2: Overvoltages and related protection



The is a new provider i arenade and chare publication at the limit below	This is a free preview.	Purchase the	entire publication	at the link below:
--	-------------------------	--------------	--------------------	--------------------

**Product Page** 

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