

# TECHNICAL SPECIFICATION

BASIC SAFETY PUBLICATION

**Electromagnetic compatibility (EMC) –  
Part 1-2: General – Methodology for the achievement of functional safety of  
electrical and electronic systems including equipment with regard to  
electromagnetic phenomena**



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ELECTROTECHNICAL  
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## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope and object.....	9
2 Normative references.....	10
3 Definitions and abbreviations.....	10
4 General considerations.....	15
5 The achievement of functional safety.....	16
5.1 General.....	16
5.2 Safety life cycle.....	17
5.3 Safety integrity.....	17
5.4 EMC specific steps for the achievement of functional safety.....	19
5.5 Management of EMC for functional safety.....	19
6 The electromagnetic environment.....	20
6.1 General.....	20
6.2 Electromagnetic environment information.....	21
6.3 Methodology to assess the electromagnetic environment.....	22
6.4 Deriving test levels and methods.....	22
7 EMC aspects of the design and integration process.....	23
7.1 General.....	23
7.2 EMC aspects on system level.....	24
7.3 EMC aspects on equipment level.....	25
8 Verification/validation of immunity against electromagnetic disturbances for functional safety.....	26
8.1 The verification and validation processes.....	26
8.2 Verification.....	28
8.3 Validation.....	29
8.4 Performance criteria.....	29
8.4.1 Performance criterion for safety applications.....	29
8.4.2 Application of the performance criterion FS.....	30
8.4.3 Test philosophy for equipment intended for use in safety-related systems.....	30
8.4.4 Test philosophy for safety-related systems.....	31
9 EMC testing with regard to functional safety.....	31
9.1 Electromagnetic test types and electromagnetic test levels with regard to functional safety.....	31
9.1.1 Considerations on testing.....	31
9.1.2 Types of immunity tests.....	31
9.1.3 Testing levels.....	32
9.2 Determination of test methods with regard to functional safety.....	32
9.3 Considerations on test methods and test performance with regard to systematic capability.....	33
9.3.1 General.....	33
9.3.2 Testing period.....	35
9.3.3 Number of tests with different test set-ups or test samples.....	35
9.3.4 Variation of test settings.....	36
9.3.5 Environmental factors.....	36

9.4 Testing uncertainty.....	37
10 Documentation .....	37
Annex A (informative) Examples of electromagnetic disturbance levels.....	38
Annex B (informative) Measures and techniques for the achievement of functional safety with regard to electromagnetic disturbances.....	43
Annex C (informative) Information concerning performance criteria.....	67
Annex D (informative) Considerations on the relationship between safety-related system, equipment and product, and their specifications.....	72
Annex E (informative) Considerations on electromagnetic phenomena and safety integrity level .....	75
Annex F (informative) EMC safety planning .....	78
Bibliography.....	81
Figure 1 – Relationship between IEC 61000-1-2 and the simplified lifecycle as per IEC 61508 .....	8
Figure 2 – Basic approach to achieve functional safety only with regard to electromagnetic phenomena .....	16
Figure 3 – EMC between equipment M and equipment P .....	25
Figure 4 – V representation of the life cycles demonstrating the role of validation and verification.....	28
Figure A.1 – Emission/immunity levels and compatibility level, with an example of emission/immunity levels for a single emitter and susceptor, as a function of some independent variable (e.g. the frequency) .....	38
Figure D.1 – The relationships between the safety-related system, equipment and products .....	72
Figure D.2 – The process of achieving the electromagnetic specification in the SRS, using commercially available products .....	74
Figure E.1 – Emission/immunity levels and compatibility level, with an example of emission/immunity levels for a single emitter and susceptor, as a function of some independent variables (e.g. burst amplitudes or field strength levels).....	75
Figure F.1 – EMC safety planning for safety-related systems .....	78
Table 1 – Safety requirements specification, interfaces and responsibilities according to IEC 61508.....	7
Table 2 – Safety integrity levels .....	18
Table 3 – Overview of types of electromagnetic phenomena .....	21
Table 4 – Design, design management techniques and other measures.....	25
Table 5 – Applicable performance criteria and observed behaviour during test of equipment intended for use in safety-related systems .....	31
Table 6 – Examples for methods to increase level of confidence.....	35
Table A.1 – Example of selection of electromagnetic phenomena for functional safety in industrial applications .....	39
Table A.2 – Estimates of maximum electromagnetic disturbance levels .....	42
Table B.1 – Overview of measures and techniques for the achievement of functional safety with regard to electromagnetic disturbances .....	43
Table C.1 – Allowed effects during immunity tests on functions of equipment .....	68
Table C.2 – Allowed effects during immunity tests on functions of a system.....	70

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROMAGNETIC COMPATIBILITY (EMC) –****Part 1-2: General –  
Methodology for the achievement of functional safety  
of electrical and electronic systems including equipment  
with regard to electromagnetic phenomena**

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Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC/TS 61000-1-2, which is a technical specification, has been prepared by technical committee 77: Electromagnetic compatibility. It has the status of a basic safety publication in accordance with IEC Guide 104.

This second edition cancels and replaces the first edition published in 2001 and constitutes a technical revision.

The main changes are the following.

- For safety-related systems that use electrical, electronic or programmable electronic technologies, the technical information, definitions, terminology and text of this second edition have been aligned to IEC 61508.
- Risk assessment requirements and methodologies have been deleted from this document, so as not to duplicate or clash with IEC 61508.
- It now makes a clear distinction between complete safety-related systems and items of equipment that might be used in such systems, and clarifies its application by the different types of end-users.
- This technical specification focuses more on appropriate design methods, and their verification and validation.
- The methodology for assessing and specifying electromagnetic environments has been extended.
- The combination of electromagnetic and physical/climatic influences are taken into account.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
77/356/DTS	77/359A/RVC

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- transformed into an International standard,
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- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.