

This is a preview - click here to buy the full publication



IEC/TS 62771

Edition 1.0 2012-08

TECHNICAL SPECIFICATION



**Information model covering the contents of IEC 81346-1 and IEC 81346-2,
IEC 61175, IEC 61666 and IEC 81714-3**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE

S

ICS 01.040.01; 01.040.35

ISBN 978-2-83220-309-5

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 General	6
Annex A (normative) Reference information model	7
Annex B (normative) Data Element Type definitions.....	18
Bibliography.....	21
Figure 1 – Graphical presentation of the SCHEMA MODEL_FOR_DESIGNATION_OF_OBJECTS_AND_TERMINALS.....	17

INTERNATIONAL ELECTROTECHNICAL COMMISSION

INFORMATION MODEL COVERING THE CONTENTS OF IEC 81346-1 AND IEC 81346-2, IEC 61175, IEC 61666 AND IEC 81714-3

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

The main task of IEC technical committees is to prepare International Standards. In exceptional circumstances, a technical committee may propose the publication of a technical specification when

- the required support cannot be obtained for the publication of an International Standard, despite repeated efforts, or
- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

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

IEC 62771, which is a technical specification, has been prepared by IEC technical committee 3: Information structures, documentation and graphical symbols.

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

Enquiry draft	Report on voting
3/1080/DTS	3/1102/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 stability 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,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INFORMATION MODEL COVERING THE CONTENTS OF IEC 81346-1 AND IEC 81346-2, IEC 61175, IEC 61666 AND IEC 81714-3

1 Scope

This Technical Specification contains a formal reference information model of the concepts and methods established in IEC 81346-1, IEC 81346-2, IEC 61175, IEC 61666 and IEC 81714-3, which are its normative basis.

The information model is normative with respect to data exchange.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61175:2005, *Industrial systems, installations and equipment and industrial products – Designation of signals*

IEC 61360-1, *Standard data elements types with associated classification scheme for electric items – Part 1: Definitions – Principles and methods*

IEC 61360-DB, *IEC Common Data Dictionary*¹

IEC 61666, *Industrial systems, installations and equipment and industrial products – Identification of terminals within a system*

IEC 81346-1, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 1: Basic rules*

IEC 81346-2, *Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 2: Classification of objects and codes for classes*

IEC 81714-3, *Design of graphical symbols for use in the technical documentation of products – Part 3: Classification of connect nodes, networks and their encoding*

¹ At the next revision the title of the IEC 61360 series will be modified to: *Standard data element types with associated classification scheme for products and services*, with Part 1: *Definitions, principles and methods*, Part 2: *EXPRESS Dictionary schema*, Part 4: *IEC reference collection for products and services used in electrotechnology*, and Part 5: *Extensions to the EXPRESS dictionary schema*. Likewise the title of the database will be: IEC 61360-DB: *IEC Common Data Dictionary*.