SLOVENSKI STANDARD

SIST EN 61915-2:2012

01-maj-2012

Nizkonapetostne stikalne in krmilne naprave - Profili naprav za industrijske naprave, vključene v omrežje - 2. del: Korenski profili naprav za starterje in podobno opremo (IEC 61915-2:2011)

Low-voltage switchgear and controlgear - Device profiles for networked industrial devices - Part 2: Root device profiles for starters and similar equipment (IEC 61915-2:2011)

Niederspannungsschaltgeräte - Geräteprofile für vernetzte industrielle Schaltgeräte - Teil 2: Grundlegende Geräteprofile für Starter und ähnliche Betriebsmittel (IEC 61915-2:2011)

Appareillage à basse tension - Profils d'appareil pour les appareils industriels mis en réseau - Partie 2: Profils racine pour les démarreurs et les équipements similaires (CEI 61915-2:2011)

Ta slovenski standard je istoveten z: **EN 61915-2:2012**

ICS:

29.130.20	Nizkonapetostne stikalne in krmilne naprave	Low voltage switchgear and controlgear

SIST EN 61915-2:2012 **en**

EUROPEAN STANDARD

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EN 61915-2

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English version

Low-voltage switchgear and controlgear - Device profiles for networked industrial devices - Part 2: Root device profiles for starters and similar equipment

(IEC 61915-2:2011)

Appareillage à basse tension - Profils d'appareil pour les appareils industriels mis en réseau - Partie 2: Profils racines d'appareil pour les démarreurs et les matériels similaires (CEI 61915-2:2011)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 61915-2:2012 E

Foreword

The text of document 17B/1752/FDIS, future edition 1 of IEC 61915-2, prepared by SC 17B, "Low-voltage switchgear and controlgear", of IEC/TC 17, "Switchgear and controlgear" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61915-2:2012.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2012-08-24
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2014-11-24

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Endorsement notice

The text of the International Standard IEC 61915-2:2011 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60947 series	NOTE	Harmonized in EN 60947 series.
IEC 60947-4-1:2009	NOTE	Harmonized as EN 60947-4-1:2010 (not modified).
IEC 60947-4-2:2011	NOTE	Harmonized as EN 60947-4-2:201X[1)] (not modified).
IEC 60947-4-3:1999 + A1:2006 + A2:2011	NOTE	Harmonized as EN 60947-4-3:2000 + A1:2006 + A2:2011 (not modified).
IEC 60947-6-2:2002 + A1:2007	NOTE	Harmonized as EN 60947-6-2:2003 + A1:2007 (not modified).
IEC 60947-8:2003 + A1:2006 + A2:2011	NOTE	Harmonized as EN 60947-8:2003 + A1:2006 + A2:201X[1)] (not modified).

[1)] To be published.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

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

Publication	Year	Title	EN/HD	Year
IEC 60947-1 + A1	2007 2010	Low-voltage switchgear and controlgear - Part 1: General rules	EN 60947-1 + A1	2007 2011
IEC 61915-1	2007	Low-voltage switchgear and controlgear - Device profiles for networked industrial devices - Part 1: General rules for the development of device profiles	EN 61915-1	2008

IEC 61915-2

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INTERNATIONAL STANDARD

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colour inside

Low-voltage switchgear and controlgear – Device profiles for networked industrial devices –
Part 2: Root device profiles for starters and similar equipment

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR – DEVICE PROFILES FOR NETWORKED INDUSTRIAL DEVICES –

Part 2: Root device profiles for starters and similar equipment

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.
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International Standard IEC 61915-2 has been prepared by the subcommittee 17B: Low-voltage switchgear and controlgear, of the IEC technical committee 17: Switchgear and controlgear.

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

FDIS	Report on voting
17B/1752/FDIS	17B/1755/RVD

Full information on the voting for the approval of this standard 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.

A list of all parts of the IEC 61915 series can be found, under the general title *Low-voltage switchgear and controlgear – Device profiles for networked industrial devices*, on the IEC website.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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.

INTRODUCTION

This International Standard follows the rules and uses the framework of IEC 61915-1, *Low-voltage switchgear and controlgear – Device profiles for networked industrial devices – Part 1: General rules for the development of device profiles*. This International Standard is to define the common set of functionality (data and behaviour) for motor starters and similar devices thereby allowing system designers, system integrators and maintenance personnel to handle profile-based devices without a special tool configuration.

This International Standard gives manufacturers and other organizations the common set of functionality to represent their network capable devices. Manufacturers or other organizations may use the root device profiles specified to add their manufacturer-specific extensions.

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR – DEVICE PROFILES FOR NETWORKED INDUSTRIAL DEVICES –

Part 2: Root device profiles for starters and similar equipment

1 Scope

This part of IEC 61915 specifies root device profiles as defined by IEC 61915-1 for starters and similar equipment covered by the following product standards:

– electromechanical contactors and motor-starters (IEC 60947-4-1),
– AC semiconductor motor controllers and starters (IEC 60947-4-2),
– AC semiconductor controllers and contactors for non-motor loads (IEC 60947-4-3),
– control and protective switching devices (or equipment) (CPS) (IEC 60947-6-2),
– control units for built-in thermal protection (PTC) for rotating electrical machines (IEC 60947-8).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including amendments) applies.

IEC 60947-1:2007, *Low-voltage switchgear and controlgear – Part 1: General rules*
Amendment 1 (2010)

IEC 61915-1:2007, *Low-voltage switchgear and controlgear – Device profiles for networked industrial devices – Part 1: General rules for the development of device profiles*

3 Terms, definitions and abbreviated terms

3.1 General

For the purposes of this document, the terms, definitions, abbreviations and symbols given in IEC 61915-1, as well as the following apply.

3.2 Terms and definitions

3.2.1
built-in thermal protection
protection of certain parts (called protected parts) of a rotating electrical machine against excessive temperatures resulting from certain conditions of thermal overload, achieved by means of a thermal protection system, the whole or part of which is a thermally sensitive device (thermal detector or protector) incorporated within the machine

[IEC 60947-8:2003, 3.1.1, modified]

3.2.2
thermal protection system
system intended to ensure the built-in thermal protection of a rotating electrical machine by means of a thermal detector (or thermal detectors) together with a control system, or by means of a thermal protector (or thermal protectors)

[IEC 60947-8:2003, 3.1.2, modified]

3.2.3
thermal detector
electrical insulated device (component), sensitive to temperature only, which will initiate a switching function in the control system when its temperature reaches a predetermined level

[IEC 60947-8:2003, 3.1.3]

3.2.4
control system
system to translate a particular point on the characteristic of a thermal detector to a switching function on the supply to the rotating electrical machine

NOTE The system is capable of being reset (either manually or automatically) when the temperature falls to the reset value.

[IEC 60947-8:2003, 3.1.5]

3.2.5
control unit
device which converts into a switching function the variation of the characteristic of a thermal detector

NOTE A control unit may be an electromechanical type, a static type or a combination of both.

[IEC 60947-8:2003, 3.1.15, modified]

3.2.6
manufacturer
any person, company or organisation with ultimate responsibility as follows:

– to verify compliance with the appropriate standard or standards;

– to provide the product information according to Clause 5 of IEC 60947-1:2007

NOTE For instance, in the case of “protected starters” assembled according to the instructions of the component providers, the manufacturer will be the entity that undertook the assembly.

[IEC 60947-1:2007, 2.1.21, modified]

3.2.7
switching device
device designed to make and/or break the current in one or more electric circuits

[IEC 60050-441:1984, 441-14-01, modified]

3.2.8
semiconductor switching device
switching device designed to make and/or break the current in an electric circuit by means of the controlled conductivity of a semiconductor

[IEC 60050-441:1984, 441-14-03, modified]

3.2.9
(mechanical) contactor
mechanical switching device having only one position of rest, operated otherwise than by hand, capable of making, carrying and breaking currents under normal circuit conditions including operating overload conditions

NOTE Contactors may be designated according to the method by which the force for closing the main contacts is provided.