SLOVENSKI STANDARD
oSIST prEN IEC 61076-8-106:2022

01-julij-2022

Konektorji za električno in elektronsko opremo - Zahteve za izdelek - 8-106. del: Močnostni konektorji - Podrobna specifikacija za dvopolne pravokotne zaklepne konektorje z varovalkami za naznačeno enosmerno napetost 400 V in naznačeni tok 16 A

Connectors for electrical and electronic equipment - Product requirements - Part 8-106: Power connectors - Detail specification for 2-poles push-pull coupling rectangular connectors with fuses, for rated voltage of 400 V DC and rated current of 16 A

Connecteurs pour équipements électriques et électroniques - Exigences de produit - Partie 8-106: Connecteurs d’alimentation - Spécification particulière pour les connecteurs bipolaires rectangulaires à accouplement pousser-tirer équipés de coupe-circuits, pour une tension assignée de 400 V en courant continu et un courant assigné de 16 A

Ta slovenski standard je istoveten z: **prEN IEC 61076-8-106:2022**

ICS:

31.220.10	Vtiči in vtičnice, konektorji	Plug-and-socket devices. Connectors

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48B/2956/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: **IEC 61076-8-106 ED1**	
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IEC SC 48B : ELECTRICAL CONNECTORS	
SECRETARIAT: United States of America	SECRETARY: Mr Jeffrey Toran
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☐ SAFETY	
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Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	

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TITLE:

Connectors for electrical and electronic equipment– Product requirements - Part 8-106: Power connectors – Detail specification for 2-poles push-pull coupling rectangular connectors with fuses, for rated voltage of 400 V DC and rated current of 16 A

PROPOSED STABILITY DATE: 2025

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT– PRODUCT REQUIREMENTS
Part 8-106: Power connectors – Detail specification for 2-poles push-pull coupling rectangular connectors with fuses, for rated voltage of 400 V DC and rated current of 16 A

FOREWORD

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IEC 61076-8-106 Ed.1 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and enclosures for electrical and electronic equipment. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

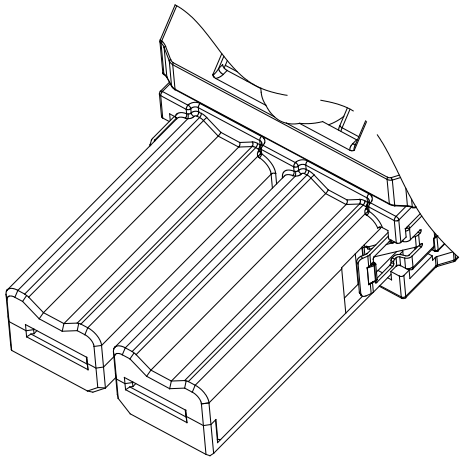
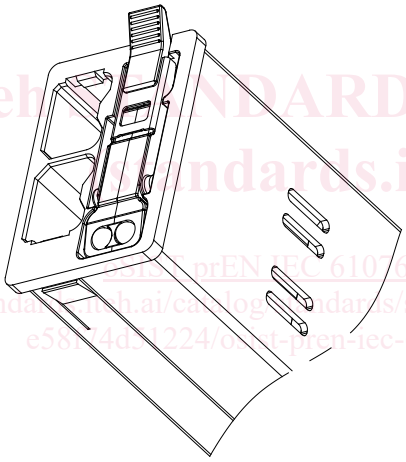
The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at

www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

The International Electrotechnical Commission **IEC SC 48B—Electrical connectors**		**IEC 61076-8-106 Ed.1**
Detail specification in accordance with IEC 61076-1		
Free connector	 2-pole 16 A free connector	Free rectangular connector; For rated voltage of 400 V DC. and rated current of 16 A; 2-pole; Receptacle contacts for power; Push-pull and snap locking I; Two codings.
Fixed connector	 2-pole 16 A fixed connector	Fixed rectangular connector; For rated voltage of 400 V DC and rated current of 16 A 2-pole; with two fuses Blade contacts for power; Push-pull and snap locking; Two codings.

CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT– PRODUCT REQUIREMENTS

Part 8-106: Power connectors – Detail specification for 2 poles push-pull coupling rectangular connectors with fuses, for rated voltage of 400 V DC and rated current of 16 A

1 Scope

This part of IEC 61076-8 applies to free and fixed, 2-pole push-pull and snap locking power rectangular connectors with fuses, with rated voltage of 400 V DC and rated current of 16 A. It includes overall dimensions, interface dimensions, technical characteristics, performance requirements, and test methods.

Connectors according to this document are connectors with breaking capacity (CBC) according to IEC 61984 which are mainly used in DC power conduction, in the field of electrical and electronic equipment.

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 60050-581:2008, *International Electrotechnical Vocabulary-Part 581: Electromechanical components for electronic equipment*

IEC 60068-1:2013, *Environmental testing – Part 1: General and guidance*

IEC 60127-1:2006, *Miniature fuses – Part 1: Definitions for miniature fuses andgeneral requirements for miniature fuse-links*

IEC 60228:2004, *Conductors of insulated cables*

IEC 60352-2, Solderless connections — *Part 2: Spring clamp connections-General requirements, test methods and practical guidance*

IEC 60352-3, Solderless connections – *Part 3: Solderless accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60352-4, Solderless connections – Part 4: *Solderless non-accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60352-5, Solderless connections – *Part 5: Press-in connections – General requirements, test methods and practical guidance*

IEC 60352-6, Solderless connections – *Part 6: Insulation piercing connections – General requirements, test methods and practical guidance*

IEC 60352-7, Solderless connections – *Part 7: Spring-clamp connections – General requirements, test methods and practical guidance*

IEC 60512-1-2, *Connectors for electronic equipment – Test and measurements – Part 1-2: General examination - Test 1b: Examination of dimension and mass*

IEC 60512-2-1, *Connectors for electronic equipment – Tests and measurements – Part 2-1: Electrical continuity and contact resistance tests – Test 2a: Contact resistance - Millivolt level method*

IEC 60512-3-1, *Connectors for electronic equipment – Tests and measurements – Part 3-1: Insulation tests - Test 3a: Insulation resistance*

IEC 60512-4-1, *Connectors for electronic equipment – Tests and measurements – Part 4-1: Voltage stress tests – Test 4a: Voltage proof*

IEC 60512-5-1, *Connectors for electronic equipment – Tests and measurements – Part 5-1: Current-carrying capacity tests – Test 5a: Temperature rise*

IEC 60512-6-3, Connectors for electronic equipment – Tests and measurements – Part 6-3: Dynamic stress tests – Test 6c: Shock

IEC 60512-6-4, *Connectors for electronic equipment – Tests and measurements – Part 6-4: Dynamic stress tests – Test 6d: Vibration (sinusoidal)*

IEC 60512-9-1, *Connectors for electronic equipment – Tests and measurements – Part 9-1: Endurance tests – Test 9a: Mechanical operation*

IEC 60512-9-2, *Connectors for electronic equipment – Tests and measurements – Part 9-2: Endurance tests – Test 9b: Electrical load and temperature*

IEC 60512-11-3, *Connectors for electronic equipment – Tests and measurements – Part 11-3: Climatic tests – Test 11c: Damp heat, steady state*

IEC 60512-11-4, *Connectors for electronic equipment – Tests and measurements – Part 11-4: Climatic tests – Test 11d: Rapid change of temperature*

IEC 60512-11-6, *Connectors for electronic equipment – Tests and measurements – Part 11-6: Climatic tests – Test 11f: Corrosion, salt mist*

IEC 60512-11-9, *Connectors for electronic equipment – Tests and measurements – Part 11-9: Climatic tests – Test 11i: Dry heat*

IEC 60512-11-10, *Connectors for electronic equipment – Tests and measurements - Part 11-10: Climatic tests - Test 11j: Cold*

IEC 60512-13-2, *Connectors for electronic equipment – Tests and measurements – Part 13-2:Mechanical operation tests –Test 13a: Insertion and withdrawal forces*

IEC 60512-13-5, *Connectors for electronic equipment – Tests and measurements – Part 13-5: Mechanical operation tests – Test 13e: Polarizing and keying method*

IEC 60512-15-1, *Connectors for electronic equipment – Tests and measurements – Part 15-1: Connector tests (mechanical) – Test 15a: Contact retention in insert*

IEC 60512-15-6, *Connectors for electronic equipment – Tests and measurements – Part 15-6: Connector tests (mechanical) – Test 15f: Effectiveness of connector coupling devices*

IEC 60512-16-5, *Connectors for electronic equipment – Tests and measurements – Part 16-5: Mechanical tests on contacts and terminations – Test 16e: Gauge retention force (resilient contacts)*

IEC 60529, *Degrees of protection provided by enclosures (IP code)*

IEC 60664-1:2007, *Insulation coordination for equipment within low-voltage systems – Part 1 : Principles, requirements and tests*

IEC 60695-2-12: *Fire hazard testing – Part 2-12: Glowing/hot-wire based test methods – Glow-wire flammability index (GWFI) test method for materials*

IEC 60999-1:1999, *Connecting devices – Electrical copper conductors – Safety requirements for screw – type and screwless – type clamping units – Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm^2 up to 35 mm^2 (included)*

IEC 61076-1:2006, *Connectors for electronic equipment – Part 1: Generic specification*

IEC 61076-3-001:2008, *Connectors for electronic equipment – Product requirements – Part 3-001: Rectangular connectors - Blank detail specification*

IEC 61076-3:2008, *Connectors for electronic equipment – Product requirements – Part 3: Rectangular connectors – Sectional specification*

IEC 61984:2008, *Connectors – Safety requirements and tests*

IEC Guide 109:2012, *Environmental aspects-Inclusion in electrotechnical product standards*

IEC 62430:2009, *Environmentally conscious design for electrical and electronic products*

ISO 1302:2002, *Metallic materials - Rockwell hardness test – Part 1: Test method*

ISO 6508-1:2015, *Geometrical Product Specifications (GPS) – Indication of surface texture in technical product documentation*

ISO 11469:2000, *Plastics-Generic identification and marking of plastic products*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-581 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

4 Technical information

4.1 Number of contacts and contact cavities

Number of contacts: power contacts: 2

Number of contact cavities: 2 (for removable contacts only)

Conductor cross-sectional area range: 4,0 mm^2.