

INTERNATIONAL STANDARD

**Connectors for electrical and electronic equipment – Product requirements
Part 8-112: Power connectors – Detail specification for 2-pole snap locking
rectangular connectors with IP65/IP67 plastic housing for rated current of 50 A**



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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 31.220.10

ISBN 978-2-8327-0004-4

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –
PRODUCT REQUIREMENTS –****Part 8-112: Power connectors –
Detail specification for 2-pole snap locking rectangular
connectors with IP65/IP67 plastic housing for rated current of 50 A**

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IEC 61076-8-112 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures 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
48B/3115/FDIS	48B/3133/RVD

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

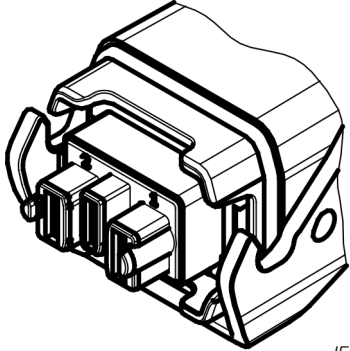
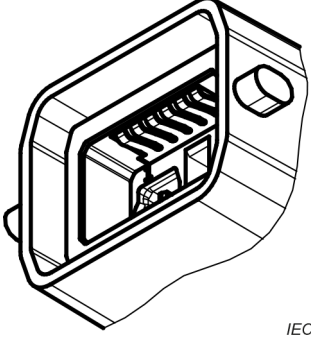
The language used for the development of this International Standard is English.

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/publications.

A list of all parts in the IEC 61076 series, published under the general title *Connectors for electrical and electronic equipment*, can be found on the IEC website.

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, or
- revised.

The International Electrotechnical Commission IEC SC 48B – Electrical connectors		IEC 61076-8-112 Ed.1
Detail specification in accordance with IEC 61076-1		
Free connector	 <p style="text-align: right;"><i>IEC</i></p> <p style="text-align: center;">2-pole 50 A free connector</p>	<p>Free rectangular connector; For rated current of 50 A; 2-pole; Female contacts for power; Straight insertion and withdrawal;</p>
Fixed connector	 <p style="text-align: right;"><i>IEC</i></p> <p style="text-align: center;">2-pole 50 A fixed connector</p>	<p>Fixed rectangular connector; For rated current of 50 A; 2-pole; Male contacts for power; Straight insertion and withdrawal;</p>

CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 8-112: Power connectors – Detail specification for 2-pole snap locking rectangular connectors with IP65/IP67 plastic housing for rated current of 50 A

1 Scope

This part of IEC 61076 describes 2-pole snap locking rectangular power connectors with IP65/IP67 plastic housing, for rated current of 50 A. It includes overall dimensions, interface dimensions, technical characteristics, performance requirements, test methods.

The products covered by this detail specification 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 are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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, *International Electrotechnical Vocabulary (IEV) – Part 581: Electromechanical components for electronic equipment*

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

IEC 60228, *Conductors of insulated cables*

IEC 60352, *Solderless connections (all parts)*

IEC 60512-1-1, *Connectors for electronic equipment – Tests and measurements – Part 1-1: General examination – Test 1a: Visual examination*

IEC 60512-1-2, *Connectors for electronic equipment – Tests 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 60512-2-5, *Connectors for electronic equipment – Tests and measurements – Part 2-5: Electrical continuity and contact resistance tests – Test 2e: Contact disturbance*

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*