IEC 61076-8-108

Edition 1.0 2023-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Connectors for electrical and electronic equipment – Product requirements – Part 8-108: Power connectors – Detail specification for 2P 250 A, 1 000 V plus 2P 5 A 50 V rectangular housing shielded connectors with IP65/IP68 degree of protection when mated and locked, and IPXXB when unmated

Connecteurs pour équipements électriques et électroniques – Exigences de produit –
Partie 8-108: Connecteurs d'alimentation – Spécification particulière pour les connecteurs blindés rectangulaires à 2 pôles de 250 A et 1 000 V plus 2 pôles de 5 A et 50 V, avec un degré de protection IP65/IP68 lorsqu'ils sont accouplés et verrouillés, et IPXXB lorsqu'ils sont désaccouplés, logés dans un boîtier

IEC 61076-8-108:2023(en-fr)

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 31.220.10

ISBN 978-2-8322-6944-2

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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IEC 61076-8-108 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/2950/CDV	48B/2995/RVC

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.

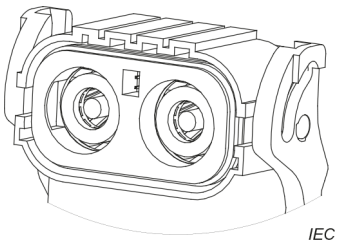
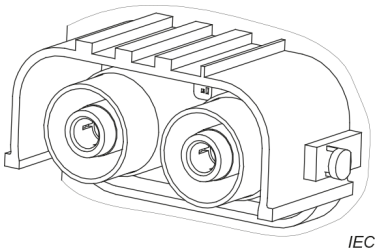
This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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 61076-8-108**
Detail specification in accordance with IEC 61076-8		
Free connector	 *IEC* Free connector	For rated current of 250 A DC; 2P power plus 2P signal; Female contacts for power; First break last make male contacts for signal; Straight insertion and withdrawal; 360° shielding; Four codings.
Fixed connector	 *IEC* Fixed connector	For rated current of 250 A DC 2-pole; Male contacts for power; Female contacts for signal; Straight insertion and withdrawal; 360°shielding; Four codings.

CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 8-108: Power connectors – Detail specification for 2P 250 A, 1 000 V plus 2P 5 A 50 V rectangular housing shielded connectors with IP65/IP68 degree of protection when mated and locked, and IPXXB when unmated

1 Scope

This part of IEC 61076-8 describes free and fixed rectangular connectors with:

– 2P power plus 2P signal contacts;
– plastic housing with locking lever and four possible codings;
– 250 A rated current, 1 000 V DC rated voltage on the power section;
– 5 A rated current, 50 V DC rated voltage on the signal section;
– individual shielding around each power contact with relevant shielding termination;
– IP65/IP68 degree of protection when mated and locked, and IPXXB on both plug and receptacle parts when unmated,

hereinafter referred to as a connector, for use in electrical and electronic equipment, including overall dimensions, interface dimensions, technical characteristics, performance requirements and test methods.

Connectors according to this document are intended for use in class II equipment. Hence, they are not equipped with PE contact.

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

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

IEC 60228:2004, *Conductors of insulated cables*

IEC 60352-1, *Solderless connections – Part 1: Wrapped connections – General requirements, test methods and practical guidance*

IEC 60352-2, *Solderless connections – Part 2: Crimped connections – General requirements, test methods and practical guidance*

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