

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Connectors for electrical and electronic equipment – Product requirements – Part 8-101: Power connectors – Detail specification for 2-pole or 3-pole power plus 2-pole signal shielded and sealed connectors with plastic housing for rated current of 40 A**

**Connecteurs pour équipements électriques et électroniques – Exigences de produit –**

**Partie 8-101: Connecteurs électriques – Spécification particulière pour connecteurs blindés étanches à 2 pôles ou 3 pôles pour la transmission de puissance et à 2 pôles pour la transmission de données avec boîtier plastique pour courant assigné de 40 A**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –  
PRODUCT REQUIREMENTS –**
**Part 8-101: Power connectors – Detail specification for 2-pole or 3-pole  
power plus 2-pole signal shielded and sealed connectors with plastic  
housing for rated current of 40 A**

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International Standard IEC 61076-8-101 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

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

FDIS	Report on voting
48B/2784/FDIS	48B/2801/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.

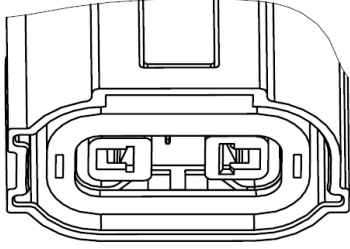
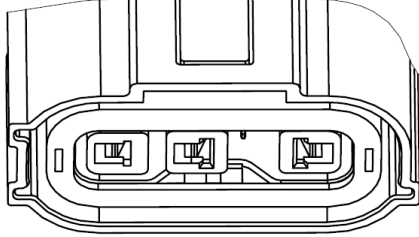
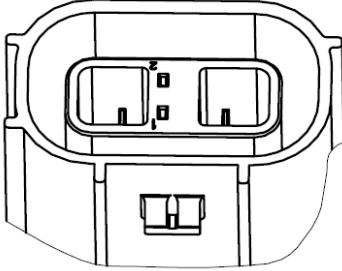
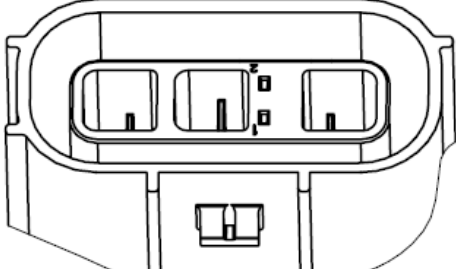
This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61076 series, published 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.

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

The International Electrotechnical Commission IEC SC 48B—Electrical connectors		IEC 61076-8-101 Ed. 1
Detail specification in accordance with IEC 61076-1		
Free connector	 <p>2-pole 40 A free connector</p>	<p>For rated current of 40 A d.c.;</p> <p>2-pole;</p> <p>Female contact for power;</p> <p>First break last make male signal contact;</p> <p>Straight insertion and withdrawal;</p> <p>360° shielding;</p> <p>Four codings.</p>
	 <p>3-pole 40 A free connector</p>	<p>For rated current of 40 A a.c.;</p> <p>3-pole;</p> <p>Female contact for power;</p> <p>First break last make male signal contact;</p> <p>Straight insertion and withdrawal;</p> <p>360° shielding;</p> <p>Four codings.</p>
Fixed connector	 <p>2-pole 40 A fixed connector</p>	<p>For rated current of 40 A d.c.;</p> <p>2-pole;</p> <p>Female contact for signal;</p> <p>Male contact for power;</p> <p>Straight insertion and withdrawal;</p> <p>360° shielding;</p> <p>Four codings.</p>
	 <p>3-pole 40 A fixed connector</p>	<p>For rated current of 40 A a.c.;</p> <p>3-pole;</p> <p>Female contact for signal;</p> <p>Male contact for power;</p> <p>Straight insertion and withdrawal;</p> <p>360° shielding;</p> <p>Four codings.</p>

## CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

### Part 8-101: Power connectors – Detail specification for 2-pole or 3-pole power plus 2-pole signal shielded and sealed connectors with plastic housing for rated current of 40 A

#### 1 Scope

This part of IEC 61076 describes 2-pole or 3-pole power plus 2-pole signal shielded and sealed connectors with plastic housing (hereinafter referred to as a connector) for electrical and electronic equipment, including overall dimensions, interface dimensions, technical characteristics, performance requirements and test methods.

This document is applicable to electrical connectors with sealing and shielding requirements meeting this document, with a rated voltage up to and including 750 V a.c. or 1 000 V d.c. and a current rating of 40 A, 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 60050-581:2008, *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: 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*