INTERNATIONAL STANDARD

IEC 61076-4-114

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Connectors for electronic equipment –

Part 4-114:
Printed board connectors –
Detail specification for two-part connector with integrated shielding function having a grid of 1 mm × 1,5 mm

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CONTENTS

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FOREWORD

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International Standard IEC 61076-4-114 has been prepared by subcommittee 48B: Connectors, of IEC Technical Committee 48: Electromechanical components and mechanical structures for electronic equipment.

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

FDIS	Report on voting
48B/1287/FDIS	48B/1307/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.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated when new editions will be published.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

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- withdrawn;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

CONNECTORS FOR ELECTRONIC EQUIPMENT –

Part 4-114: Printed board connectors – Detail specification for two-part connector with integrated shielding function having a grid of 1 mm × 1,5 mm

<table>
<tr><td>IEC SC 48B: LF Connectors

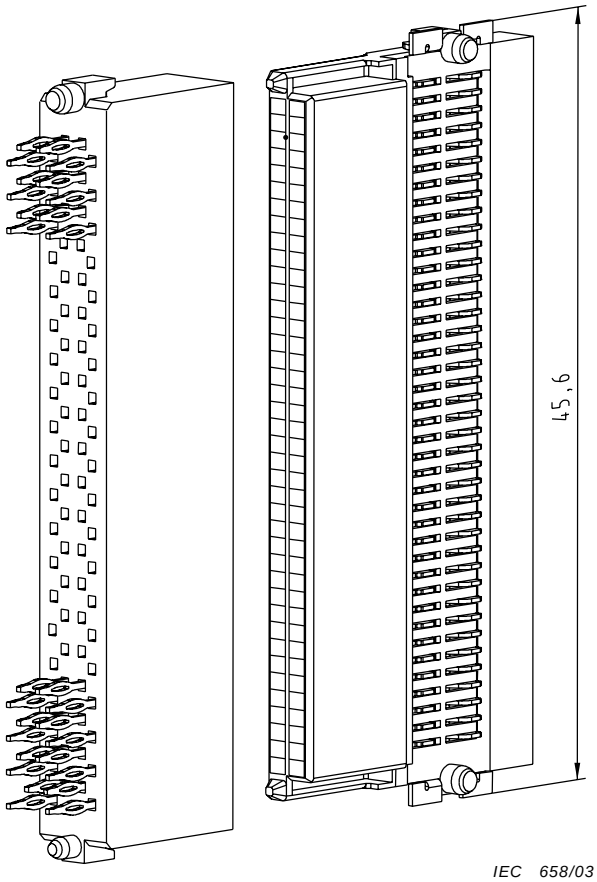
Specification available from:

IEC Central Office or from the addresses shown on the inside cover.

ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH:

- GENERIC SPECIFICATION IEC 61076-1:1995</td><td>Draft IEC 61076-4-114

Blank detail specification number 61076-4-001</td></tr>
<tr><td>See Clause 3 for dimensions

IEC 658/03</td><td>Two-part connector for printed boards and backplanes, grid of 1 mm × 1,5 mm in accordance with IEC 60917-1.

.</td></tr>
<tr><td colspan="2">Information on the availability of components qualified to this detail specification is given in the qualified product list.</td></tr>
</table>

1 General data

This detailed specification contains modular two-part connectors with integrated shielded function having a grid of 1 mm × 1,5 mm in accordance with IEC 60917-1.

1.1 Recommended method of mounting

The free board connectors are provided with contacts for surface mounting technique. Guiding pivots support positioning of the free board connector. The terminations of the free board connectors shall fit on solder pads on printed boards having a grid of 1 mm × 4 mm.

The fixed board connectors are provided with contacts, either with press-in or surface mount terminations.

The connector is fixed by the press-in terminations or by surface mounted terminations. Provided holes in the printed board (diameter 1,4 mm and 1,8 mm) are used for correct positioning and polarisation and are not necessary for secure connector mounting.

1.2 Ratings and characteristics

Rated voltage: Contact/contact for fully loaded connector

Table 1 – Rated voltage

Material group	Pollution degree	Rated voltage V
I, II, IIIa/b	1	200
II, IIIa/b	2	20
NOTE Reference is made to Table 15: Minimum creepage and clearance distances, of this specification, and Table 4 of IEC 60664-1 listing the relation between creepage distances, pollution degree and material groups versus voltages r.m.s.		

Current rating: 1 A at 50 °C for fully loaded connector

Insulation resistance: 10^4 MΩ min.

Climatic category: PL1: 55/125/56
PL2: 55/125/21

Printed board thickness: see Table 10

Contact spacing: 1 mm × 1,5 mm

1.3 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 any amendments) applies.

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*
Amendment 1 (1992)

IEC 60352-5:2001, *Solderless connections – Part 5: Solderless press-in connections – General requirements, test methods and practical guidance*

IEC 60512 (all parts), *Connectors for electronic equipment – Tests and measurements*

IEC 60512-1-100:2001, *Connectors for electronic equipment – Tests and measurements – Part 1-100: General – Applicable publications*

IEC 60664-1:2002, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60917 (all parts), *Modular order for the development of mechanical structures for electronic equipment practices*

IEC 60917-1:1998, *Modular order for the development of mechanical structures for electronic equipment practices – Part 1: Generic standard*

IEC 60917-2-2:1994, *Modular order for the development of mechanical structures for electronic equipment practices – Part 2: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice – Section 2: Detail specification – Dimensions for subracks, chassis, backplanes, front panels and plug-in units*

IEC 61076-1:1995, *Connectors with assessed quality, for use in d.c., low frequency analogue and in digital high speed data applications – Part 1: Generic specification*

IEC 61076-4:1995, *Connectors with assessed quality, for use in d.c., low-frequency analogue and in digital high-speed data applications – Part 4: Sectional specification – Printed board connectors*

ISO 1302:2002, *Geometrical product specifications (GPS) – Indication of surface texture in technical product documentation*