

PUBLICLY
AVAILABLE
SPECIFICATION

IEC
PAS 61076-3-116

Pre-Standard

First edition
2005-11

Connectors for electronic equipment –

Part 3-116:

**Rectangular connectors – Protective housings
for use with 8-way shielded and unshielded
connectors for frequencies up to 600 MHz
for industrial environments incorporating
the IEC 60603-7 series interface –
Variant 13 related to IEC 61076-3-106 –
Bayonet coupling with spring clamp**

IEC PAS 61076-3-116:2005

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR ELECTRONIC EQUIPMENT –

Part 3-116: Rectangular connectors – Protective housings for use with 8-way shielded and unshielded connectors for frequencies up to 600 MHz for industrial environments incorporating the IEC 60603-7 series interface – Variant 13 related to IEC 61076-3-106 – Bayonet coupling with spring clamp

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IEC-PAS 61076-3-116 has been processed by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document

Draft PAS	Report on voting
48B/1519/NP	48B/1548/RVN

Following publication of this PAS, which is a pre-standard publication, the technical committee or subcommittee concerned will transform it into an International Standard.

This PAS shall remain valid for an initial maximum period of three years starting from 2005-10. The validity may be extended for a single three-year period, following which it shall be revised to become another type of normative document or shall be withdrawn.

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1 General data

1.1 Scope

This Publicly Available Specification (PAS) covers protective housings for upgrading existing 8-way shielded and unshielded connectors utilizing the interface described in IEC 60603-7-2, IEC 60603-7-3, IEC 60603-7-4, IEC 60603-7-5, and IEC 60603-7-7 to IP65 and IP67 ratings, according to IEC 60529, for use in industrial environments.

The housings cover a variety of different locking mechanisms according to this PAS and a variety of different mounting configurations and termination types which are detailed in IEC 60603-7.

Common mating configuration for all variants are defined in IEC 60603-7. The mating dimensions for the housings under Clause 3 allow the mating conditions under IEC 60603-7 to be fulfilled.

The fully assembled variants (connectors) described in this document incorporate fixed and free connectors which are fully compliant with IEC 60603-7.

1.2 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 60050-581: 1978, *International Electrotechnical Vocabulary (IEV) – Chapter 581: Electro-mechanical components for electronic equipment*

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

IEC 60068-2-14, *Environmental testing – Part 2: Tests – Test N: Change of temperature*

IEC 60068-2-30, *Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 h + 12 h) cycle*

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

IEC 60512-100, *Connectors for electronic equipment – Tests and measurements – Part 1-100: Applicable publications²*

IEC 60529, *Degree of protection provided by enclosure (IP Code)*

² The various parts of IEC 60512 are listed in IEC 60512-1-100.

IEC 60603-7, *Connectors for frequencies below 3 MHz for use with printed boards – Part 7: Detail specification for connectors, 8-way, including fixed and free connectors with common mating features, with assessed quality*

IEC 60603-7-1, *Connectors for electronic equipment – Part 7-1: Detail specification for 8-way, shielded free and fixed connectors with common mating features, with assessed quality*

IEC 60603-7-2, *Connectors for electronic equipment – Part 7-2: Detail specification for 8-way, unshielded, free and fixed connectors for data transmission with frequencies up to 100 MHz³*

IEC/PAS 60603-7-3, *Connectors for electronic equipment – Part 7-3: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 100 MHz*

IEC 60603-7-4, *Connectors for electronic equipment – Part 7-4: Detail specification for 8-way, unshielded, free and fixed connectors for data transmission with frequencies up to 250 MHz*

IEC 60603-7-5, *Connectors for electronic equipment – Part 7-5: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz⁴*

IEC 60603-7-7, *Connectors for electronic equipment – Part 7-7: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 600 MHz*

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

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

IEC 61156-2, *Multicore and symmetrical pair/quad cables for digital communications – Part 2: Horizontal floor wiring – Sectional specification*

IEC 61156-3, *Multicore and symmetrical pair/quad cables for digital communications – Part 3: Work area wiring – Sectional specification*

IEC 61156-4, *Multicore and symmetrical pair/quad cables for digital communications – Part 4: Riser cables – Sectional specification*

1.3 IEC type designation

Protective housings and connectors in protective housings according to this standard shall be designated by the following system.

³ To be published.

⁴ To be published.

IEC-61076-3-116		L	N	L	N	
Reference to this standard						
Letters denoting the housing type						
Fixed version	A					
Panel mounted						
Free version	B					
Cable mounted						
Number denoting the protective housing variants						
Variant 01	01					
Variant 02	02					
Variant 03	03					
Variant 04	04					
Variant 05	05					
Variant 06	06					
Variant 07	07					
Variant 08	08					
Variant 09	09					
Variant 10	10					
Variant 11	11					
Letter denoting type of contact						
Female	F					
Male	M					
Number denoting internal interface conformance type						
0	Housing without insert					
2	IEC 60603-7-2					
3	IEC 60603-7-3					
4	IEC 60603-7-4					
5	IEC 60603-7-5					
6	IEC 60603-7-6					

NOTE "L" stands for letter
"N" stands for number

Example:

IEC 61076-3-116 A1F5A1B2: Fixed protective housing panel mounted, housing variant 01, female version, insert according to IEC 60603-7-5 (250 MHz shielded).