IEC 63249-1

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Waveguide to coaxial adapters –
Part 1: Generic specification – General requirements and test methods

Adaptateurs coaxiaux pour guide d'ondes –
Partie 1: Spécification générique – Exigences générales et méthodes d'essai

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Part 1: Generic specification – General requirements and test methods

FOREWORD

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The text of this International Standard is based on the following documents:

Draft	Report on voting
46F/511/CDV	46F/549/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/standardsdev/publications.

A list of all parts of the IEC 63249 series, under the general title *Waveguide to coaxial adapters* 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,
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- replaced by a revised edition, or
- amended.

WAVEGUIDE TO COAXIAL ADAPTERS –

Part 1: Generic specification – General requirements and test methods

1 Scope

This part of IEC 63249 defines general requirements and test methods for waveguide to coaxial adapters. It includes terms and definitions, design and construction, ratings and characteristics, climatic categories, IEC type designation, requirements and test methods, quality assessment, marking, etc.

It provides the basis for establishing the sectional specifications for various waveguide to coaxial adapters.

This specification applies to waveguide to coaxial adapters (short name adapter).

For the purpose of this specification, according to ends, adapters are classified as the following:

– Class I: Waveguide to coaxial connector adapter, waveguide at one end and coaxial connector at the other end;

– Class II: Waveguide to coaxial cable adapter, waveguide at one end, and coaxial cable at the other end;

– Class III: Waveguide to coaxial cabled connector adapter, waveguide at one end, and coaxial cabled connector at the other end.

According to whether the inner conductor probe of coaxial end is connected with the inner wall of waveguide cavity or not, adapters are classified as the following :

– Connected adapter: Inner conductor probe of coaxial end is connected with inner wall of waveguide cavity;

– Disconnected adapter: Inner conductor probe of coaxial end is disconnected with inner wall of waveguide cavity.

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 60050-726, *International Electrotechnical Vocabulary (IEV) – Part 726: Transmission lines and waveguides*

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

IEC 60068-2-6, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-11, *Environmental testing − Part 2-11: Tests − Test Ka: Salt mist*

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