Irish Standard
I.S. EN 50289-1-1:2017

Communication cables - Specifications for test methods - Part 1-1: Electrical test methods - General requirements

I.S. EN 50289-1-1:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 50289-1-1:2017 is the adopted Irish version of the European Document EN 50289-1-1:2017, Communication cables - Specifications for test methods - Part 1-1: Electrical test methods - General requirements

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50289-1-1

March 2017

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Supersedes EN 50289-1-1:2001

English Version

Communication cables - Specifications for test methods - Part 1-1: Electrical test methods - General requirements

Câbles de communication - Spécifications des méthodes d'essai Partie 1-1: Méthodes d'essais électriques - Prescriptions generals

Kommunikationskabel - Spezifikationen für Prüfverfahren Teil 1-1: Elektrische Prüfverfahren - Allgemeines

European Committee for Electrotechnical Standardization
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European foreword

This document [EN 50289-1-1:2017] has been prepared by CLC/TC 46X "Communication cables".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2017-09-16
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2019-12-16

This document supersedes EN 50289-1-1:2001.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

EN 50289-1, Communication cables — Specifications for test methods, is currently composed with the following parts:

— *Part 1-1: Electrical test methods — General requirements*;

— *Part 1-2: Electrical test methods — DC resistance*;

— *Part 1-3: Electrical test methods — Dielectric strength*;

— *Part 1-4: Electrical test methods — Insulation resistance*;

— *Part 1-5: Electrical test methods — Capacitance*;

— *Part 1-6: Electrical test methods — Electromagnetic performance*;

— *Part 1-7: Electrical test methods — Velocity of propagation*;

— *Part 1-8: Electrical test methods — Attenuation*;

— *Part 1-9: Electrical test methods — Unbalance attenuation (longitudinal conversion loss, longitudinal conversion transfer loss)*;

— *Part 1-10: Electrical test methods — Crosstalk*;

— *Part 1-11: Electrical test methods — Characteristic impedance, input impedance, return loss*;

— *Part 1-12: Electrical test methods — Inductance*;

— *Part 1-13: Electrical test methods — Coupling attenuation or screening attenuation of patch cords / coaxial cable assemblies / pre-connectorised cables*;

— *Part 1-14: Electrical test methods — Coupling attenuation or screening attenuation of connecting hardware*;

— *Part 1-15: Electromagnetic performance — Coupling attenuation of links and channels (Laboratory conditions)*;

— *Part 1-16: Electromagnetic performance — Coupling attenuation of cable assemblies (Field conditions)*;

— *Part 1-17: Electrical test methods — Exogenous Crosstalk ExNEXT and ExFEXT*.

1 Scope

This European Standard specifies the electrical test methods for cables used in analogue and digital communication systems.

Part 1 of EN 50289 consists of the following documents:

– Part 1-1 General requirements

– Part 1-2 DC resistance

– Part 1-3 Dielectric strength

– Part 1-4 Insulation resistance

– Part 1-5 Capacitance

– Part 1-6 Electromagnetic performance

– Part 1-7 Velocity of propagation

– Part 1-8 Attenuation

– Part 1-9 Unbalance attenuation (longitudinal conversation loss, longitudinal conversion transfer loss)

– Part 1-10 Crosstalk

– Part 1-11 Characteristic impedance, input impedance, return loss

– Part 1-12 Inductance

– Part 1-13 Coupling attenuation or screening attenuation of patch cords / coaxial cable assemblies / pre-connectorised cables

– Part 1-14 Coupling attenuation or screening attenuation of connecting hardware

– Part 1-15 Coupling attenuation of links and channels (Laboratory conditions)

– Part 1-16 Coupling attenuation of cable assemblies (Field conditions)

– Part 1-17 Exogenous Crosstalk ExNEXT and ExFEXT

Further test details (e.g. temperature, duration) and/or test requirements are given in the relevant cable standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50289-1-9, *Communication cables - Specifications for test methods - Part 1-9: Electrical test methods - Unbalance attenuation (longitudinal conversion loss, longitudinal conversion transfer loss)*

EN 50290-1-2, *Communication cables - Part 1-2: Definitions*

EN 61169-16, *Radio-frequency connectors - Part 16: Sectional specification - RF coaxial connectors with inner diameter of outer conductor 7 mm (0,276 in) with screw coupling - Characteristic impedance 50 ohms (75 ohms) (type N)(IEC61169-16)*