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Environmental Engineering (EE);
Power distribution to telecommunications and datacom (ICT) equipment

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Contents

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This Technical Specification (TS) has been produced by ETSI Technical Committee Environmental Engineering (EE).

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Introduction

The present document gives guidance on installation, connection and operation of power supply systems for telecommunication / datacom (ICT) systems and equipment. Also are considered items of equipment with their own power supply, which are connected to form a complete system.

1 Scope

The present document gives guidance on installation, connection and operation of power supply systems for telecommunication / datacom installations and equipments. Also are considered items of equipment with their own power supply, which are connected to form a complete system installation.

The present document contains definitions for power supply and distribution systems in complement to power interfaces standards EN 300 132 series [5], [6], [7], [i.6] and [i.7].

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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2.1 Normative references

The following referenced documents are necessary for the application of the present document.

[1] IEC EN 60038: "IEC standard voltages".

[2] ETSI EN 300 386: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Telecommunication network equipment; ElectroMagnetic Compatibility (EMC) requirements".

[3] CENELEC EN 60950-1: "Information technology equipment - Safety - Part 1: General requirements".

[4] CENELEC EN 60896-21: "Stationary lead-acid batteries - Part 21: Valve regulated types - Methods of test".

[5] ETSI ETS 300 132-1: "Equipment Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 1: Operated by alternating current (AC) derived from direct current (DC) sources".

[6] ETSI EN 300 132-2: "Environmental Engineering (EE); Power supply interface at the input to telecommunications and datacom (ICT) equipment; Part 2: Operated by -48 V direct current (DC)".

[7] ETSI EN 300 132-3-1: "Environmental Engineering (EE); Power supply interface at the input to telecommunications and datacom (ICT) equipment; Part 3: Operated by rectified current source, alternating current source or direct current source up to 400 V; Sub-part 1: Direct current source up to 400 V".

[8] ETSI EN 302 099: "Environmental Engineering (EE); Powering of equipment in access network".

[9] ETSI EN 300 253: "Environmental Engineering (EE); Earthing and bonding of telecommunication equipment in telecommunication centres".

[10] Recommendation ITU-T K.20: "Resistibility of telecommunication equipment installed in a telecommunications centre to overvoltages and overcurrents".

[11] Recommendation ITU-T K.21: "Resistibility of telecommunication equipment installed in customer premises to overvoltages and overcurrents".