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Office equipment — Minimum information to be included in specification sheets —

Part 2: Class 3 and Class 4 printers

Équipements de bureau — Information minimale devant figurer dans les notices techniques —

Partie 2: Imprimantes classe 3 et classe 4

Reference number
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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 28, *Office equipment*.

This third edition cancels and replaces the second edition (ISO/IEC 11160-2:2013), which has been technically revised.

The main changes compared to the previous edition are as follows:

— a reference to ISO/IEC 17629 has been added;

— a reference to ISO 9296 has been added.

A list of all parts in the ISO/IEC 11160 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Office equipment — Minimum information to be included in specification sheets —

Part 2: Class 3 and Class 4 printers

1 Scope

This document specifies the minimum information to be included in the specification sheets of Class 3 and Class 4 printers in order for users to compare the characteristics of different machines. The term "specification sheets" applies to documents which describe the performance characteristics of the printers to be included in instruction manuals, product brochures or on websites.

This document applies to printers that can be operated in an office environment. Printers requiring specially equipped rooms or specially instructed operators are not considered in this document.

NOTE This document is intended to facilitate users in selecting a printer which meets their requirements. The ISO/IEC 11160 series deals with different classes of printers, such as class 3 and class 4 printers shown in Table C.1 of (Annex C). Elements for classification of printers is given in Annex A. Detailed descriptions of class 3 and class 4 printers are specified in (3.4) and (3.5). Serial printers which are classified as class 1 or class 2 printers as defined and covered in ISO/IEC 11160-1:1997, Annex C.

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.

ISO 7779, *Acoustics — Measurement of airborne noise emitted by information technology and telecommunications equipment*

ISO 9295, *Acoustics — Determination of high-frequency sound power levels emitted by machinery and equipment*

ISO 9296, *Acoustics — Declared noise emission values of information technology and telecommunications equipment*

ISO/IEC 17629, *Information technology — Office equipment — Method for measuring first print out time for digital printing devices*

ISO/IEC 19752, *Information technology — Office equipment — Method for the determination of toner cartridge yield for monochromatic electrophotographic printers and multi-function devices that contain printer components*

ISO/IEC 19798, *Information technology — Office equipment — Method for the determination of toner cartridge yield for colour printers and multi-function devices that contain printer components*

ISO/IEC 24711, *Information technology — Office equipment — Method for the determination of ink cartridge yield for colour inkjet printers and multi-function devices that contain printer components*

ISO/IEC 24734, *Information technology — Office equipment — Method for measuring digital printing productivity*

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3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological database for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
printer
physical device which contains image transducer, marking process, paper transport mechanism device and hardcopies original electronic input image on paper

Note 1 to entry: This may also contain other functional unit, such as *raster image processor (RIP)* (3.2).

3.2
raster image processor
RIP
device which converts coded character data and/or vector data into raster data

3.3
unit of printing
size of a partition with which a source file can be partitioned into blocks of data that correspond to a mechanical unit

3.4
class3 printer
device which accept only "raster data" or "character data, encoded character data and raster data", and the minimum print unit is one page

Note 1 to entry: The source file from the user may have vector data if the system has a RIP, but the file sent to the printer does not contain any vector data.

Note 2 to entry: Input data may be compressed.

Note 3 to entry: Emulation of class 1 and/or class 2 printers may be supported.

Note 4 to entry: For example, a laser printer receives bit stream of Kanji characters that are generated in the host computer.

3.5
class4 printer
device which accept character data, coded character data, raster data, or vector data as input data, and the minimum printing unit is one page

Note 1 to entry: Emulation of class 1 and/or class 2 printers may be supported.

Note 2 to entry: Page Description Language (PDL) is supported.

Note 3 to entry: For example, a laser printer that accepts PDL input.

3.6
paper grammage
gram per square metre (g/m^2) of paper

Note 1 to entry: “paper weight” or “media weight” are also used.

4 Test and measurement conditions

Unless otherwise specified, all tests and measurements shall be conducted at the following conditions:

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