

IEEE Std 100-1993

The IEEE Standard
Dictionary of Electrical and
Electronics Terms

IEEE Std 100-1993, IEEE Standard Dictionary of Electrical and Electronics Terms

IEEE Std 100-1993



Published by the
Institute of Electrical and
Electronics Engineers, Inc.

IEEE Std 100-1996

The IEEE Standard Dictionary of Electrical and Electronics Terms

Sixth Edition

Standards Coordinating Committee 10, Terms and Definitions
Jane Radatz, Chair

This standard is one of a number of information technology dictionaries being developed by standards organizations accredited by the American National Standards Institute. This dictionary was developed under the sponsorship of voluntary standards organizations, using a consensus-based process.

ISBN 1-55937-833-6



end-of-tape marker (EOT) A marker on a magnetic tape used to indicate the end of the permissible recording area. *Note:* It might be a photoreflexive strip, a unique data pattern, or a transparent section of tape. *Contrast:* beginning-of-tape marker. (C) 610.10-1994

end of transfer status A handshake status that indicates the last data transfer of the transfer operation. *See also:* handshake status. (C/MM) 1296-1987s

end of transmission block character A transmission control character that indicates the end of a transmission block of data. *Synonyms:* block character; transmission block character. (C) 610.7-1995

end-of-volume label (EOV) (1) An internal label that precedes and initiates the beginning of the data contained in that volume. *Synonym:* volume label. (C) 610.5-1990

(2) An internally-recorded label that indicates the end of the recording area contained in a volume. *Contrast:* beginning-of-volume label. (C) 610.10-1994

endogenous variable A variable whose value is determined by conditions and events within a given model. *Synonym:* internal variable. *Contrast:* exogenous variable. (C) 610.3-1989

end-on armature relay *See:* relay.

endorder traversal *See:* postorder traversal.

endothermic Characterized by or formed with the absorption of heat. (DEI) 1221-1993

end plate, rotor (rotating machinery) An annular disk (ring) fitted at the outer end of the retaining ring. (PE) [9]

end-play washers (rotating machinery) Washers of various thicknesses and materials used to control axial position of the shaft. (PE) [9]

end point (1) A point at each end of a channel, line, or a circuit. (C) 610.7-1995

(2) A measurable response of interest in a biological experiment. (PE/T&D) 539-1990

(3) *See also:* terminal node.

end-point criterion (evaluation of thermal capability) (thermal classification of electric equipment and electrical insulation) A value of property or property degradation (either absolute or percentage change) that defines failure in a functional test. 1-1986r

end rail (rotating machinery) A rail on which a bearing pedestal can be mounted. *See also:* bearing. (PE) [9]

end ring, rotor (rotating machinery) The conducting structure of a squirrel-cage or amortisseur (damper) winding that short-circuits all of the rotor bars at one end. *See also:* rotor. (PE) [9]

end-scale value (electric instruments) The value of the actuating electrical quantity that corresponds to end-scale indication. *Notes:* 1. When zero is not at the end or at the electrical center of the scale, the higher value is taken. 2. Certain instruments such as power-factor meters, ohmmeters, etc., are necessarily excepted from this definition. 3. In the specification of the range of multiple-range instruments, it is preferable to list the ranges in descending order, as 750/300/150. *See also:* accuracy rating; instrument. (EEC) [102]

end shield (1) (rotating machinery) A solid or skeletal structure, mounted at one end of a machine, for the purpose of providing a specified degree of protection for the winding and rotating parts or to direct the flow of ventilating air. *Note:* Ordinarily, a machine has an end shield at each end. For certain types of machine, one of the end shields may be constructed as an integral part of the stator frame. The end shields may be used to align and support the bearings, oil deflectors, and, for a hydrogen-cooled machine, the hydrogen seals. (PE) [9]

(2) (magnetrons) A shield for the purpose of confining the space charge to the interaction space. *See also:* magnetron. (ED) 161-1971w

end-shift frame (rotating machinery) A stator frame so constructed that it can be moved along the axis of the machine

shaft for purposes of inspection. *See also:* stator.

(PE) [9]

end termination The termination applied to the end of the heating cable, opposite the power supply end.

(IA) 515.1-1995

endurance (1) (metal-nitride-oxide field-effect transistor) The number of write-high write-low cycles accumulated before any defined unacceptable changes in device properties occur. (ED) 581-1978w

(2) (metal-nitrite-oxide semiconductor arrays) The minimum number of data alteration cycles possible without catastrophic failure or degradation beyond the specified performance characteristics of any memory cell within an array. (ED) 641-1987w

endurance limit The maximum stress a metal can withstand without failure during a specified large number (usually 10 million) cycles of stress. (IA) [59], [71]

endurance test An experiment carried out to investigate how the properties of an item are affected by the application of stresses and the elapse of time. (R) [29]

end user *See:* user.

end user computing The performance of system development and data processing tasks by the user of a computer system. *Synonym:* user-driven computing. (C) 610.2-1987

end winding (rotating machinery) That portion of a winding extending beyond the slots. *Note:* It is outside the major flux path and its purpose is to provide connections between parts of the winding within the slots of the magnetic circuit. *See also:* asynchronous machine; direct-current commutating machine; rotor; stator. (PE) [9]

end-winding cover (rotating machinery) (winding shield) A cover to protect an end winding against mechanical damage and/or to prevent inadvertent contact with the end winding. (PE) [9]

end-winding support (rotating machinery) The structure by which coil ends are braced against gravity and electromagnetic forces during start-up (for motors), running, and abnormal conditions such as sudden short-circuit, for example, by blocking and lashings between coils and to brackets or rings. *See also:* stator. (PE) [9]

end-window counter tube (radiation) A counter tube designed for the radiation to enter at one end. *See also:* anticoincidence. (ED) [45]

end-wire insulation (rotating machinery) Insulation members placed between the end wires of individual coils such as between main and auxiliary windings. *See also:* rotor; stator. (PE) [9]

end wire, winding (rotating machinery) The portion of a random-wound winding that is not inside the core. *See also:* rotor; stator. (PE) [9]

energization test Any test requiring that system voltage be applied to the equipment. (PE/SUB) 1303-1994

energized (1) (conductor stringing equipment) (power line maintenance) Electrically connected to a source of potential difference, or electrically charged so as to have a potential different from that of the ground. *Synonyms:* alive; hot; live. *See also:* alive. (PE/T&D) 1048-1990, 516-1995, 524-1992, 524a-1993, C2.2-1960

(2) Electrically connected to a source of potential difference, or electrically charged so as to have a potential significantly different from that of earth in the vicinity. *Synonyms:* alive; live. (NESC) C2-1997

energized background noise level (1) (dry-type transformers) (liquid-filled power transformers) Stated in pC (one pC = 10^{-12} Coulombs), the residual response of the partial discharge measurement system to background noise of any nature after the test circuit has been calibrated and the test object is energized at 50% of its nominal operating voltage. (PE) [125], C57.113-1988s, C57.124-1991r