

IEEE Standard Dictionary of Electrical and Electronics Terms

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geometrical forms into which nuclear fuel is contained for use in a reactor. 112

fuel-pressure electric gauge. A device that measures the fuel pressure (usually in pounds per square inch) at the carburetor of an aircraft engine. *Note:* It provides remote indication by means of a self-synchronous generator and motor. 328

fuel reprocessing, nuclear (nuclear power generating station). The processing of irradiated reactor fuel to recover the unused fissionable material, or fission products, or both. 112

fuel stop valve (gas turbines). A device that, when actuated, shuts off all fuel flow to the combustion system, including that provided by the minimum fuel limiter. *See:* **speed-governing system.** 98, 58

fulguration. *See:* **electrodesiccation.**

full automatic plating. Mechanical plating in which the cathodes are automatically conveyed through successive cleaning and plating tanks. 328

full availability (telephone switching systems). Availability that is equal to the number of outlets in the desired group. 55

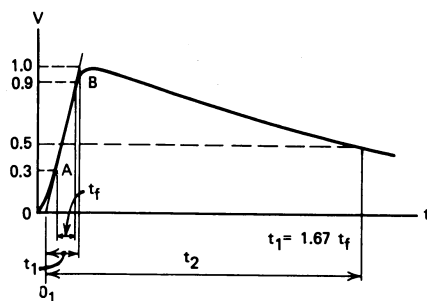
full-direct trunk group (telephone switching systems). A full trunk group between end offices. 55

full duplex (data transmission) (communication circuit) (telecommunication). Method of operation where each end can simultaneously transmit and receive. *Note:* Refers to a communications system or equipment capable of transmission simultaneously in two directions. 59

full-field relay (industrial control). A relay that functions to maintain full field excitation of a motor while accelerating on reduced armature voltage. *See:* **relay.** 206

full float operation (large lead storage batteries). Operation of a dc system with the battery, battery charger, and load all connected in parallel and with the battery charger supplying the normal dc load plus any self-discharge or charging current, or both, required by the battery. (The battery will deliver current only when the load exceeds the charger output.) 377

full impulse voltage. An aperiodic transient voltage that rises rapidly to a maximum value and falls, usually less rapidly, to zero. See the following figure. *See:* **test voltage and current; full-wave voltage impulse.** 307, 201



Full impulse voltage.

full-impulse wave (surge arresters). An impulse wave in which there is no sudden collapse. 244, 62

full lightning impulse (high voltage testing) (lightning impulse tests, general applicability). A full lightning impulse is a lightning impulse that is not interrupted by a disruptive discharge. See Section 1 ANSI/IEEE Std 4-1978 for definition of impulse and for distinction between lightning and switching impulses. 150

full load (test, measurement and diagnostic equipment). The greatest load that a circuit is designed to carry under specific conditions: any additional load is overload. 54, 59

full-load speed (electric drive) (industrial control). The speed that the output shaft of the drive attains with rated load connected and with the drive adjusted to deliver rated output at rated speed. *Note:* In referring to the speed with full load connected and with the drive adjusted for a specified condition other than for rated output at rated speed, it is customary to speak of the full-load speed under the (stated) conditions. *See:* **electric drive.** 206

full magnetic controller (1) (Electric installations on shipboard). An electric controller having all of its basic functions performed by devices, which are operated by electromagnets. 3

(2) (industrial control). An electric controller having all of its basic functions performed by devices that are operated by electromagnets. *See:* **electric controller.** 206, 3

full-pitch winding (rotating machinery). A winding in which the coil pitch is 100 percent, that is, equal to the pole pitch. *See:* **asynchronous machine; direct-current commutating machine.** 63

full scale (analog computers). In an analog computer, the nominal maximum value of a computer variable or the nominal maximum value at the output of a computing element. Also sometimes used to indicate the entire computing voltage range, such as 20V is full scale for a compute whose voltage ranges from +10V to -10V. The latter definition is generally used in manufacturers' specifications, that is, 0.01 percent of full scale. 9

full-scale value. The largest value of the actuating electrical quantity that can be indicated on the scale or, in the case of instruments having their zero between the ends of the scale, the full-scale value is the arithmetic sum of the values of the actuating electrical quantity corresponding to the two ends of the scale. *Note:* Certain instruments, such as power-factor meters, are necessarily excepted from this definition. *See:* **accuracy rating (instrument); instrument.** 280, 294

full span—max span (spectrum analyzer). A mode of operation in which the spectrum analyzer scans an entire selected frequency band. 390

full speed (data transmission). Referring to transmission of data in teleprinter systems at the full rated speed of the equipment. 59

full-trunk group (telephone switching systems). A trunk group, other than a final trunk group, that does not overflow calls to another trunk group. 55

full-voltage starter (industrial control). A starter that connects the motor to the power supply without