



## Standard Terminology Relating to Electrical Protective Equipment for Workers<sup>1</sup>

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<sup>ε1</sup> NOTE—Terms approved May 10, 2000 were added in September 2000.

**arc duration**, *n*—time duration of the arc(s).

**arc energy (vi dt)**, *n*—sum of the instantaneous arc voltage values multiplied by the instantaneous arc current values multiplied by the incremental time values during the arc, (J).

**arc gap**—distance between the arc electrodes (inch).

**blanket roll-up**—a container made from fabric or similar material and specifically designed to protect the blanket from damage during storage or transportation.

**breakdown, electrical**—the electrical discharge or arc occurring between the electrodes and through the equipment being tested.

**bulk storage**—the storage of hose or covers together with one or more layers piled neatly, but without the benefit of spacers, supports, or special protective containers.

**compatible**—not injurious to or changing the physical or electrical characteristics of the blankets or affecting their application, use, or acceptability.

**cover**—an electrically insulated enclosure designed to be installed temporarily on various types of irregularly shaped electrical equipment to protect personnel and equipment working in close proximity.

**designated person**—an individual who is qualified by experience or training to perform an assigned task.

**distorted**—physically changed from the natural and original shape, caused by stress of any type.

**electrical testing facility**—a location with qualified personnel, testing equipment, and procedures for the inspection and electrical testing of electrical insulating protective equipment.

**electrode**—the energized or grounded conductor portion of electrical test equipment which is placed near or in contact with the material or equipment being tested.

**electrode clearance**—the shortest path from the energized electrode to the ground electrode.

**flashover**—the electrical discharge or arc occurring between electrodes and over or around, but not through, the equipment being tested.

**FRP insulating tubes and rods**—fiberglass reinforced plastic

(FRP) products manufactured so that the tubes and rods produced will meet the electrical and mechanical requirements in the standard.

**gauntlet**—the area of a glove between the wrist and the reinforced edge of the opening.

**heatflux**, *n*—the thermal intensity indicated by the amount of energy transmitted per unit area and time ( $\text{cal}/\text{cm}^2\text{s}$ )( $\text{W}/\text{cm}^2$ )

**hose**—an electrical insulating tube with a longitudinal slit designed to be installed temporarily on energized electrical wires.

**$i^2t$** , *n*—sum of the instantaneous arc current values squared multiplied by the incremental time values during the arc ( $\text{A}^2\text{s}$ ).

**ignition**, *n*—the initiation of combustion.

**incident energy ( $E_i$ )**, *n*—the amount of energy (total heat,  $\text{cal}/\text{cm}^2$ ) received at a surface as a direct result of an electric arc discharge as measured by temperature rise on copper calorimeters.

**insulated**—separated from other conducting surfaces by a dielectric substance (including air space) offering a high resistance to the passage of current.

NOTE 1—When any object is said to be insulated, it is understood to be insulated in a suitable manner for the conditions to which it is subjected. Otherwise, it is, within the purpose of this definition, uninsulated. Insulating covering of conductors is one means of making the conductor insulated.

**interior foam-filled tube**—a tube filled with homogeneous unicellular thermosetting foam having closed cells blown with non-combustible gases, with the filling bonded to the interior wall.

NOTE 2—The foam filling should be free of voids, separations, holes, cracks, or the like.

**isolated**—an object that is not readily accessible to persons unless special means of access are used.

**ozone cutting and checking**—cracks produced by ozone in a material under mechanical stress.

**proof-test current**—the current measured during ac proof tests.

NOTE 3—This current is an indication of the validity of the dielectric constant of the type of material used and the thickness of the total contact area under test.

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**retest**—the tests given after the initial acceptance test, usually performed at regular periodic intervals or as required because of physical inspection.

**rubber**—a generic term that includes elastomers and elastomer compounds, regardless of origin.

**sleeve roll-up**—a sleeve carrier formed of flat canvas-like material in which a pair of sleeves is rolled lengthwise.

**sleeve shoulder roll**—the rolled or reinforced edge of an insulating sleeve nearest to the shoulder.

**test, acceptance**—one made at the option of the purchaser to verify that a product meets design criteria.

**test, design**—one made on a sample treated as representative of an industrial product. These tests will not generally be repeated in quantity production.

**test, routine**—a type of test made regularly on production material.

**unassigned blankets**—blankets that are in storage prior to being issued for use.

**visual inspection**—a visual check made to detect constructional defects.

**voltage, maximum retest**—voltage, either ac rms or dc average, that is equal to the proof test voltage for new protective equipment.

**voltage, maximum use**—the ac voltage (rms) classification of the protective equipment that designates the maximum nominal design voltage of the energized system that may be safely worked. The nominal design voltage is equal to phase-to-phase voltage on multiphase circuits.

NOTE 4—If there is no multiphase exposure in a system area, and the voltage exposure is limited to phase (polarity on dc systems) to ground potential, the phase (polarity on dc systems) to ground potential shall be considered to be the nominal design voltage.

NOTE 5—If electrical equipment and devices are insulated, or isolated, or both, such that the multiphase exposure on a grounded wye circuit is removed, then the nominal design voltage may be considered as the phase-to-ground voltage on that circuit.

**voltage, nominal design**—a nominal value consistent with the latest revision of ANSI C84.1, assigned to the circuit or system for the purpose of conveniently designating its voltage class.

**voltage, retest**—voltage, either ac rms or dc average, that used protective equipment must be capable of withstanding for a specific test period without breakdown.

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