

Consumer Product Safety Commission

§ 1211.5

§ 1211.2 Definition.

As used in this part 1211: *Residential garage door operator* means a vehicular door operator which:

- (a) Serves a residential building of one to four single family units;
- (b) Is rated 600 volts or less; and
- (c) Is intended to be employed in ordinary locations in accordance with the National Electrical Code, NFPA 70, 1999 edition. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, Mass. 02269-9101, tel. 1-800-344-3555. Copies may be inspected at the Consumer Product Safety Commission, Office of the Secretary, 4330 East West Highway, Bethesda, Maryland or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

[57 FR 60455, Dec. 21, 1992, as amended at 62 FR 46667, Sept. 4, 1997; 65 FR 70657, Nov. 27, 2000]

§ 1211.3 Units of measurement.

If a value for measurement is followed by a value in other units, in parentheses, the second value may be only approximate. The first stated value is the requirement.

[57 FR 60455, Dec. 21, 1992, as amended at 65 FR 70657, Nov. 27, 2000]

§ 1211.4 General requirements for protection against risk of injury.

- (a) If an automatically reset protective device is employed, automatic restarting of a motor shall not result in a risk of injury to persons.
- (b) A residential garage door operator is considered to comply with the requirement in paragraph (a) of this section if some means is provided to prevent the motor from restarting when the protector closes.
- (c) An electronic or solid-state circuit that performs a back-up, limiting, or other function intended to reduce the risk of fire, electric shock, or injury to persons, including entrapment protection circuits, shall comply with the requirements in the Standard for Safety for Tests for Safety-Related Controls Employing Solid-State De-

vices, UL 991, second edition, dated June 23, 1995, including environmental and stress tests appropriate to the intended usage of the end-product. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112, Telephone (800) 854-7179 or Global Engineering Documents, 7730 Carondelet Ave., Suite 470, Clayton, MO 63105, Telephone (800) 854-7179. Copies may be inspected at the Consumer Product Safety Commission, Office of the Secretary, 4330 East West Highway, Bethesda, Maryland or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

[57 FR 60455, Dec. 21, 1992, as amended at 62 FR 46667, Sept. 4, 1997; 65 FR 70657, Nov. 27, 2000]

§ 1211.5 General testing parameters.

(a) The following test parameters are to be used in the investigation of the circuit covered by §1211.4(c) for compliance with the Standard for Safety for Tests for Safety-Related Controls Employing Solid-State Devices, UL 991, second edition, dated June 23, 1995, as incorporated by reference in paragraph (b)(3) of this section:

- (1) With regard to electrical supervision of critical components, an operator being inoperative with respect to downward movement of the door meets the criteria for trouble indication.
- (2) A field strength of 3 volts per meter is to be used for the Radiated EMI Test.
- (3) The Composite Operational and Cycling Test is to be used for 14 days at temperature extremes of minus 35 °Celsius (minus 31 °F) and 70 °C (158 °F).
- (4) Exposure Class H5 is to be used for the Humidity Test.
- (5) A vibration level of 5g is to be used for the Vibration Test.
- (6) When a Computational Investigation is conducted, λ_p shall not be greater than 6 failures/10⁶ hours for the entire system. For external secondary entrapment protection devices that are sold separately, λ_p shall not be greater than 0 failures/10⁶ hours. For internal