



**Summary of Substantive Changes  
between the updates dated  
November 8, 2013 and September 24, 2014 of  
UL 763 “Motor-Operated Commercial Food Preparing Machines”  
(4<sup>th</sup> edition, dated January 31, 2012)**

**Presented to the IAPMO Standards Review Committee on November 10, 2013**

**General:** The changes to this standard might have an impact on currently listed products. The significant changes are:

- Added new testing for machines with filtered ventilation openings (see Sections 18A, 33.1.9, and 49A)
- Revised the allowable leakage current limit for stationary, cord-connected ice dispensers (see Section 35.1)
- Added requirement to include instructions with machines provided with filtered ventilation openings (see Section 59.1)

Section 6.11, Motor overload protection: Compliance with UL 1004-3 replaces compliance with referenced standard UL 2111 as follows:

*6.11.6 Thermal motor protection shall comply with the:*

- a) ~~Standard for Overheating Protection for Motors, UL 2111; or~~
- b) *Standard for Thermally Protected Motors, UL 1004-3; or*
- c) *Standard for Thermal Links – Requirements and Application Guide, UL 60691.*

*6.11.7 Impedance motor protection shall comply with the:*

- a) ~~Standard for Overheating Protection for Motors, UL 2111; or~~
- b) ~~Standard for Impedance Protected Motors, UL 1004-2.~~

Section 18A, Air Filters; Added new testing for machines with filtered ventilation openings as follows:

[Section 18A, Air Filters](#)

[18A.1 A machine incorporating an air filter over ventilation openings shall be evaluated to determine the effects of a partially or completely blocked air filter. See 33.1.9 and 49A.1.](#)

[18A.2 Air filters shall not be located within the electrical enclosure of the machine and shall be located such that propagation of flame from one area to another or bridging between a possible source of ignition and other ignitable parts is unlikely.](#)

[18A.3 An air filter intended to be replaced or cleaned by the user shall be readily visible and replaceable without making accessible live parts or mechanical parts that may cause injury to persons. The machine shall be provided with instructions as specified in 59.1 for replacement or cleaning of the filter.](#)



18A.4 An air filter not intended to be replaced or cleaned by the user need not be readily visible or accessible and the instructions of 59.1 need not be provided if the machine complies with the Normal Temperature Test with the filter completely (100%) blocked.

Section 33, Normal Temperature Test; Added new testing for machines with filtered ventilation openings as follows:

33.1.9 In accordance with 18A.1, a machine incorporating an air filter at ventilation openings shall be tested under maximum normal load with a clean filter in place. The test shall be repeated with the air filter blocked 50 percent. For the blocked condition, the 50 percent blockage is stated as a percentage of the total air flow of a new filter through the effective area of the filtered opening. The 50 percent air flow shall be maintained across the effective area of the filtered opening. The filter shall be of the type recommended by the manufacturer and installed in accordance with the instructions.

Exception: In accordance with 18A.4 and 49A.1, the test may be conducted with a clean filter and with the air filter completely (100%) blocked.

Section 35, Leakage Current Test: Revised the allowable leakage current limit for stationary, cord connected ice dispensers as follows:

35.1 When tested in accordance with 35.3 – 35.8, the leakage current of a cord- and plug-connected ice dispenser or counter-top, portable machine weighing 40 lbs or less, rated for a nominal 120- or 240-volt single-phase supply shall not exceed 0.5 mA.

Exception: Those conductive parts of a stationary ice dispenser that comply with all of the specifications in items (a) through (d) below shall have a leakage current from simultaneously accessible parts to the grounded supply conductor no greater than 3.5 mA. The leakage current between simultaneously accessible parts shall not exceed 0.5 mA.

a) The product is provided with electromagnetic interference (EMI) suppression filtering;

b) The product is equipped with a grounding-type supply cord and plug;

c) The product is not intended for outdoor installation; and

d) It is considered unlikely that high leakage conductive parts will be contacted during normal use.

1) The front of an ice dispenser is considered likely to be contacted in normal use.

2) The recessed area where ice or beverages are dispensed (backsplash surround) is considered an area unlikely to be contacted during normal use.

3) The sides of an ice dispenser are considered likely to be contacted in normal use, unless installation instructions are provided for installing in a manner that the sides are protected from unintentional contact, such as in a recessed area.

4) The cover of a manually-filled ice hopper is considered likely to be contacted in normal use when refilling the ice hopper.

Section 49A, Abnormal Filter Blockage Test; Added new testing for machines with filtered ventilation openings as follows:

49A Abnormal Filter Blockage Test

49A.1 A machine incorporating an air filter over ventilation openings shall be tested as described in 49A.2 – 49A.5, and as a result of the testing, there shall be no:

a) Emission of flame or molten metal;



- b) Glowing or flaming of the tissue paper covered supporting surface or the cheesecloth covering the machine;
- c) Opening of the 3 A fuse between accessible metal parts and ground;
- d) Dielectric breakdown;
- e) Exposure of live parts; or
- f) Exposure of a mechanical parts that could cause injury to persons.

Exception: The Abnormal Filter Blockage Test need not be conducted if the machine complies with the Normal Temperature Test with the filter completely (100%) blocked.

49A.2 A machine shall be operated as described in 49A.4 under each of the following conditions, in turn:

- a) Blocked 75%; and
- b) Blocked 100%.

49A.3 Each blockage is stated as a percentage of the total effective area of the filtered opening and shall be representative of the most severe and likely condition based upon the ventilation design.

49A.4 The machine shall be installed and operated as described in 33.1 – 33.21, as applicable. The machine shall be:

- a) Connected to a supply circuit as described in 30.1;
- b) Placed on a white tissue paper covered softwood surface;
- c) Draped with a double layer of cheesecloth over the whole machine with the cloth within 1/8 inch (3.2 mm) of the openings (if any) in the enclosure; and
- d) Grounded by means of a 3 A non-time-delay plug fuse connected between exposed metal parts and earth ground.

49A.5 Following operation as specified in 49A.4, the machine shall comply with Accessibility of Live Parts, Section 10, and Protection Against Injury to Persons, Sections 19, 20 and 21; and be subjected to the Dielectric Voltage-Withstand Test, Section 34.

Section 59, Instructions: Added new requirement to include instructions with machines provided with filtered ventilation openings as follows:

59 Instructions

59.1 In accordance with 18A.3, a machine provided with an air filter intended to be replaced or cleaned shall include instructions indicating how to:

- a) Determine when the filter needs replacement or cleaning;
- b) Obtain a proper replacement filter; and
- c) Replace or clean the filter.

Exception: The instructions need not be provided if the machine complies with the Normal Temperature Test with the filter completely (100%) blocked.