

Standard Information

Standard Number: UL 763

Standard Name: Motor-Operated Commercial Food Preparing Machines

Standard Edition and Issue Date: 4th Edition Dated January 31, 2012

Date of Previous Revision to Standard: July 22, 2010

Effective Date of New/Revised Requirements

Effective Date (see Schedule below): **October 29, 2015**

Impact, Overview, Fees and Action Required

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes: UL 763 4th edition was issued to incorporate new requirements for commercial wand-type mixers (sections 15.1.1, 28, 33.22 and 39), blender covers (sections 40, 57.6.1.2 and 57.6.1.3), class F&H motor insulation (Table 33.1), and commercial juicers (sections 33.23 and 33.24). Specific details of new/revised requirements are found in table below.

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.

Description of New/Revised Technical Requirements

Clause	Verdict	Comment
15	Info	Grounding
15.1.1 (d)		<p><i>Additions to existing requirements are <u>underlined</u>:</i></p> <p>The following types of machines shall have provision for grounding:</p> <ul style="list-style-type: none"> a) A machine for use in damp or wet locations, b) A machine intended to be used on a circuit operating at more than 150 V to ground, c) A machine intended for permanent connection to the supply source, and <u>d) A hand-held machine that is partially immersed in liquid during normal use, for example, a wand-type mixer.</u>
28		<p>New section added;</p> <p>Wand-type Mixers</p>
28.1		<p>A hand-held wand-type mixer shall be provided with a momentary contact ON/OFF switch having the following features:</p> <ul style="list-style-type: none"> a) A distinct and separate motion, in addition to gripping the product, shall be required to energize the unit; b) The motion shall not be easily defeatable; c) A single motion shall be required to de-energize the unit; and d) The switch shall not be capable of locking in the ON position.
28.2		<p>A wand-type mixer is considered to comply with 21.1 if it is provided with top and side blade guarding that affords the necessary protection for the blade against contact with sides/bottom of bowl surfaces, and the user against inadvertent blade contact. Any openings in the top and side blade guarding shall not permit the entrance of the flat end of a 3/8 inch (9.5 mm) diameter rod, when placed perpendicular to the guard. As an alternate means of evaluation, any openings in the guarding shall not permit contact of the flat end of a 5/16 inch (8 mm) diameter rod of unlimited length with the blades, when placed at an angle of 45 degrees to the drive shaft. The bottom circular opening shall not be guarded in a manner that would interfere with the intended operation of the appliance.</p>
28.3		<p>If the blades are removable, the slicing/cutting assemblies provided with wand-type mixers shall be provided with a means to minimize the risk of a cut-type injury (such as stems, finger holes, grips handles and the like) during insertion and removal.</p>

Standards Update Notice (SUN)

Issued: April 29, 2015

Clause	Verdict	Comment
33	Info	Normal Temperature Test
33.22		New section added; Wand-type mixers
33.22.1		A wand-type mixer is operated at high speed for 5 cycles consisting of 3 minutes on and 1 minute off. The carrot/water mixture described in 33.20.4 is to be added into a flat bottomed cylindrical bowl having a diameter of 4 inches (100 mm). The bowl shall be filled to 3/4 of the height of the shaft portion of the wand-type mixer or to the maximum immersion level, if marked. The mixture shall be changed and replaced with a fresh mixture after each of the five cycles. <i>Exception: If the loading recommended in the instruction manual may be more severe, additional input and temperature tests utilizing the loading outlined in the instruction manual shall be conducted.</i>
33.23		New section added; Centrifugal juicers
33.23.1		The input to a centrifugal juicer shall be measured extracting the juice from the foods recommended by the manufacturer, such as carrots, celery and spinach.
33.23.2		For the temperature test, a centrifugal juicer for fruits and vegetables shall be operated juicing the food load resulting in the highest inputs until temperatures stabilize. If, during the operation of the unit, the juicer becomes so clogged that it begins to vibrate excessively, the appliance shall be turned off and cleaned. Then it shall be turned on and the juicing operation shall be continued until temperatures stabilize.
33.23.3		With the agreement of all concerned, a centrifugal juicer shall be operated with no load until temperatures stabilize and then begin the extraction operation outlined in 33.23.2.
33.24		New section added; Reamer (citrus) juicers
33.24.1		The input to a reamer juicer shall be measured extracting juice from oranges which have been cut approximately in half.
33.24.2		For the temperature test, a reamer juicer shall be operated for 1/4 minute of the actual extraction operation or its equivalent, followed by a 1/4 minute idling period, with the motor on but without added load on the reamer, until temperatures stabilize. A reamer juicer with a momentary-contact switch shall be deenergized between extractions.
33.24.3		With the agreement of all concerned, a reamer juicer shall be operated with no load until temperatures stabilize and then begin the extraction operation outlined in 33.24.2.

Standards Update Notice (SUN)

Issued: April 29, 2015

Clause	Verdict	Comment
39		New section added; Wand-type Mixer Moisture Resistance Test
39.1		After exposure as described in 39.2, a wand-type mixer shall comply with the requirement in 35.1 in a repeat leakage current test, except that the test shall be discontinued when the leakage current stabilizes.
39.2		A wand-type mixer is to be connected to a supply circuit as described in 36.1 and the shaft is to be immersed in a salt water solution (1/2 gram of sodium chloride per liter of distilled water) and then tilted upward appropriately 105 degrees to allow the water to run down the shaft toward the enclosure. Twenty-five such operations are to be conducted at the rate of 10 operations per minute. This test is to be repeated on a second sample with the wand-type mixer not operating.
40		New section added; Blender Cover Opening Splash Test
40.1		To determine compliance with the exception to 27.4(b) for a blender provided with an opening that is not located in the center of the cover, the blender is to be tested in accordance with 40.2 and 40.3 in order to determine the ability of the blender cover to keep the contents of the blender container from splashing out.
40.2		The container of a representative blender is to be filled to the maximum fill line (or maximum recommended level) with hot tap water at a temperature not exceeding $93.3 \pm 5.5^{\circ}\text{C}$ ($200 \pm 10^{\circ}\text{F}$). The exterior of the blender is to be wiped dry. The blender container is to be mounted on the blender and the blender is to be placed on a horizontal work surface that is dry. The cover opening intended for pouring is then to be opened and the blender operated for 15 seconds at the highest speed setting available. This operation is to be repeated two more times.
40.3		No water shall be observed splashing out of the cover opening. The work surface and blender exterior shall remain dry.
57.6	Info	Specific machine markings
57.6.1.2		New clause added; In accordance with the exception to 27.4(a), the cover or blending jar shall be marked where visible during operation with the following, or equivalent: "CAUTION – Do Not Blend Hot Liquids".
57.6.1.3		New clause added; In accordance with the Exception to 27.4, an open-top blender jar provided with a one-piece cover without a center opening shall include the following markings on the cover: a) "CAUTION: Do Not Blend Hot Liquids" b) "CAUTION: Always Operate With Cover In Place. Do Not Open Or Remove Cover When Blades Are Moving."

Clause	Verdict	Comment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Table 33.1 (10-13)		<i>Addition of Class F & H Motor Insulation System Temperature Limits (items 10 through 13 in Table 33.1);</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Maximum temperature rises																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Materials and component parts	Degrees		C	F	10. Class 155 (F) insulation systems on coil windings on an a-c motor having a frame diameter of 7 in (178 mm) or less, not including a universal motor, and on a vibrator coil ^a			a) In an open motor: Thermocouple or resistance method	120	216	b) In a totally enclosed motor: Thermocouple or resistance method	125	225	11. Class 155 (F) insulation on coil windings of a-c motors having a frame diameter of more than 7 in (178 mm), and of a d-c motor, and a universal motor ^a			a) In open motors: Thermocouple method	110	198	Resistance method	120	216	b) In totally enclosed motor: Thermocouple method	115	207	Resistance method	125	225	12. Class 180 (H) insulation on coil windings of a-c motors having a frame diameter of 7 in (178 mm) or less - not including a universal motor - and on a vibrator coil ^a			a) In open motors: Thermocouple or resistance method	135	243	b) In totally enclosed motors: Thermocouple or resistance method	140	252	13. Class 180 (H) insulation on coil windings of a-c motors having a frame diameter of more than 7 in (178 mm), and of a d-c motor, and a universal motor ^a			a) In open motors: Thermocouple method	125	225	Resistance method	135	243	b) In totally enclosed motor: Thermocouple method	130	234	Resistance method	140	252	^a The temperature rise on insulating material integral with the enclosure of an electrolytic capacitor that is physically integral with or attached to a motor may be not more than 65°C (117°F).																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			Materials and component parts	Degrees																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		C		F																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		10. Class 155 (F) insulation systems on coil windings on an a-c motor having a frame diameter of 7 in (178 mm) or less, not including a universal motor, and on a vibrator coil ^a																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		a) In an open motor: Thermocouple or resistance method	120	216																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		b) In a totally enclosed motor: Thermocouple or resistance method	125	225																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		11. Class 155 (F) insulation on coil windings of a-c motors having a frame diameter of more than 7 in (178 mm), and of a d-c motor, and a universal motor ^a																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		a) In open motors: Thermocouple method	110	198																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		Resistance method	120	216																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		b) In totally enclosed motor: Thermocouple method	115	207																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		Resistance method	125	225																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		12. Class 180 (H) insulation on coil windings of a-c motors having a frame diameter of 7 in (178 mm) or less - not including a universal motor - and on a vibrator coil ^a																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		a) In open motors: Thermocouple or resistance method	135	243																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		b) In totally enclosed motors: Thermocouple or resistance method	140	252																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		13. Class 180 (H) insulation on coil windings of a-c motors having a frame diameter of more than 7 in (178 mm), and of a d-c motor, and a universal motor ^a																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
a) In open motors: Thermocouple method	125	225																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Resistance method	135	243																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
b) In totally enclosed motor: Thermocouple method	130	234																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Resistance method	140	252																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
^a The temperature rise on insulating material integral with the enclosure of an electrolytic capacitor that is physically integral with or attached to a motor may be not more than 65°C (117°F).																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											