STANDARDS UPDATE NOTICE (SUN)
ISSUED: March 2, 2018

STANDARD INFORMATION

Standard Number: UL 1206
Standard Name: Standard for Electric Commercial Clothes-Washing Equipment
Standard Edition and Issue Date: 4th edition Dated April 22, 2003
Date of Revision: October 3, 2017
Date of Previous Revision of Standard: November 30, 2012

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: January 10, 2020

IMPACT, OVERVIEW, 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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:

- Modifications to update the motor overload protection requirements.
- Addition of New Section, 20A, Controls, to reflect current technology.

Specific details of new/revised requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.

STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		Additions to existing requirements are underlined and deletions are ~~shown lined~~ out below.
17	Info	**Overload Protection**
17.10		The overload protection required by 17.7 or 17.9 shall prevent the occurrence of the conditions specified in (a) and (b) of those paragraphs. Motor overload protection that complies with one of the following is ~~Motor protectors complying with the applicable requirements in the Standard for Overheating Protection for Motors, UL 2111 are~~ considered to comply with ~~these~~ the following requirements: a) Appliances having a device, which may be integral with the control of the appliance, responsive to motor current, as required by the National Electrical Code (NEC), for overload and overheating; b) Motors having inherent overheating protection in accordance with the requirements in the Standard for Thermally Protected Motors, UL 1004-3; c) Motors employing impedance protection complying with the locked-rotor requirements specified in the Standard for Impedance Protected Motors, UL 1004-2; or d) Motors employing electronic protection complying with the Standard for Electronically Protected Motors, UL 1004-7, or complying with the tests of UL 1004-3 and evaluated in accordance with Evaluation of Electronic Circuits, Supplement SA. See SA1.3.
20A		***New section added;*** **Controls**
20A.1		**General**
20A.1.1		Components, wiring, printed wiring assemblies, insulating material, potting materials, and the like, and associated circuitry employed in controls, shall be investigated and found acceptable for the application in accordance with the specified component standards with respect to a risk of fire, electric shock, and injury to persons.
20A.1.2		Controls shall be so located or protected that they are not subjected to mechanical damage, excessive moisture, or excessive collection of lint.
20A.1.3		The operating mechanism of controls shall not subject electrical parts to undue strain.

20A.1.4	Electronic circuits that manage a Safety Critical Function (SCF) shall be: a) Reliable as defined as being able to maintain the SCF in the event of single defined component faults; and b) Not susceptible to electromagnetic environmental stresses encountered in the anticipated environments where the appliance will operate.
20A.2.1	An operating control shall comply with: a) Evaluation of Electronic Circuits, Supplement SA; or b) The applicable requirements in the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1 and the relevant Part 2.
20A.2.2	The cycle selection control, water level detection, out of balance detection, temperature-regulating devices and any control not relied upon to provide a required safety function are considered and to be tested and evaluated as operating.
20A.2.3	The minimum test parameters for the evaluation of an operating control to the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1 and any applicable Part 2 are specified in Table 20A.1.
Table 20A.1	**Operating control correlation table** **Information** / **Operating control requirement** FMEA / Conduct a failure-mode and effect analysis (FMEA) to identify components the failure of which may result in a risk of fire or electric shock or injury to persons. Operating ambient / Determined in accordance with Section 36, Temperature Test, of the appliance Endurance testing for electromechanical devices / 6,000 cycles Overvoltage Category / Overvoltage Category II Pollution degree / See 23A.4
20A.3	**Controls that manage safety critical functions (protective controls)**
20A.3.1	A control that manages a SCF shall comply with the requirements of: a) Evaluation of Electronic Circuits, Supplement SA; or b) The requirements in the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1 and the relevant Part 2 applicable to a Protective Control.
20A.3.2	Controls that manage a SCF shall also be evaluated for reliability in accordance with: a) Evaluation of Electronic Circuits, Supplement SA; or b) The Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1 and any applicable Part 2.
20A.3.3	Electronic motor protection shall be evaluated in accordance with 17.10(d).

20A.3.4	Controls that manage a SCF and that does not rely on software shall comply with the standards specified in 20A.3.2 except for Controls Using Software, H.11.12, in the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1. If software is relied upon to perform the protective control function, it shall be considered Software Class B as indicated in Table 20A.2.
Table 20A.2	**Protective control correlation table** **Information** / **Protective control requirement** FMEA: Conduct a failure-mode and effect analysis (FMEA) identifying component failures which may result in a risk of fire, electric shock or injury and confirming the protective function continues to operate as intended. Operating ambient: Determined in accordance with Section 36, Temperature Test, of the appliance Endurance testing for electromechanical devices: a) 6, 000 cycles for controls as indicated in 20A.5, 20A.6, 20A.7, and b) 100,000 cycles, for temperature-limiting controls, combination temperature-limiting and regulating controls, and other protective controls Overvoltage category: Overvoltage Category II Pollution degree: See 23A.4 Radio-frequency electromagnetic field immunity to conducted disturbances: Test Level 3 Radio-frequency electromagnetic field immunity to radiated electromagnetic fields: Field strength of 3 V/m Fast transient bursts: Test Level 3 applied for 1 minute in each polarity Surge immunity: Installation Class 3 Electrostatic discharge: Severity Level 3 Thermal cycling for electronic devices: 14 days, Assumed temperature range: 10.0 +2 °C to the operating ambient Software class: Software Class B (See 20A.3.4)
20A.3.5	A door or lid interlock, secondary function control, electronic braking means, motor overload protection, temperature-limiting devices, combination temperature-regulating and -limiting devices, and any control relied upon for compliance with abnormal operation testing requirements shall be tested and evaluated as a control managing a SCF in accordance with the applicable requirements in Evaluation of Electronic Circuits, Supplement SA.
20A.3.6	The minimum test parameters for the evaluation of a control managing a SCF (protective control to the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1) and the relevant Part 2 are specified in Table 20A.2.
20A.4	**Temperature-regulating and temperature-limiting devices**
20A.4.1	Temperature sensing device, such as a positive temperature coefficient (PTC) thermistor and a negative temperature coefficient (NTC) thermistor, that is used in combination with an electronic control and that together with the control manages a SCF shall comply with the Standard for Thermistor-Type Devices, UL 1434.

20A.4.2	Protective temperature sensing controls shall have cut-in and cut-out temperatures that do not: a) Deviate from the manufacturer's specified limits in the as-received condition by more than either 6°C or 5 percent, whichever is greater; and b) Drift from the temperatures measured in the as -received condition by more than either 6°C or 5 percent, whichever is greater, after being subjected to the specified number of cycles in accordance with Table 20A.2 and, for electronic protective controls, the environmental stress tests in Section H.26 of the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1.
20A.4.3	With respect to 20A.4.2, if a manufacturer declares a tighter tolerance, the deviation and drift shall remain within the manufacturer's declared values.
20A.5	**Cycle selection controls**
20A.5.1	Clock-operated switches incorporating mechanical clockwork, such as gears, springs, and motors, shall comply with the applicable requirements in one of the following standards: a) Evaluation of Electronic Circuits, Supplement SA; or b) Standard for Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Timers and Time Switches, UL 60730-2-7.
20A.5.2	A cycle selection control incorporating electronic timing or switching circuits, shall comply with the standards specified in 20A.2.1(b).
20A.6	**Door/lid interlock or lock protective controls**
20A.6.1	If a door-actuated or lid-actuated switch is employed to directly disconnect power to the motor, the switch shall comply with the Endurance Test as specified in 29.6 and with the applicable requirements in one of the following standards: a) Standard for Switches for Appliances – Part 1: General Requirements, UL 61058-1; or b) Standard for Industrial Control Equipment, UL 508.
20A.6.2	If a door-actuated or lid-actuated switch is employed as a sensor for an electronic control to disconnect power to the motor, the switch and control shall comply with 20A.3.
20A.6.3	Endurance testing of a door or lid interlock and the associated braking means shall be conducted in accordance with 29.6.
20A.7	**Water level detection controls**
20A.7.1	If a switch is employed as part of a water level detection mechanism, it shall comply with the applicable requirements in one of the following standards: a) Standard for Switches for Appliances – Part 1: General Requirements, UL 61058-1; or b) Standard for Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Automatic Electrical Air Flow, Water Flow and Water Level Sensing Controls, UL 60730-2-15.

20A.7.2	If a pressure or flow switch is employed as part of a water level detection mechanism, the switch shall comply with Flooding of Live Parts, Section 39 for gaskets or seals in contact with laundry detergent or bleach, Polymeric Materials, Section 44 for polymeric materials in contact with laundry detergent or bleach, and with the applicable requirements in one of the following standards: a) Standard for Industrial Control Equipment, UL 508; b) Standard for Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Automatic Electrical Pressure Sensing Controls Including Mechanical Requirements, UL 60730-2-6; or c) Standard for Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Automatic Electrical Air Flow, Water Flow and Water Level Sensing Controls, UL 60730-2-15.
	CUSTOMERS PLEASE NOTE: This Table and column “Verdict” can be used in determining how your current or future production is or will be in compliance with new/revised requirements.