

Subject 1206

January 26, 2018

SUMMARY OF TOPICS

The following changes in requirements to the Standard for Electric Commercial Clothes-Washing Equipment, UL 1206, are being proposed:

1. Clarification of endurance cycles for control devices

STP BALLOTS AND ALL COMMENTS DUE: FEBRUARY 26, 2018

UL's goal is to have no interest category comprise more than one-third of the STP membership balance. To improve the current balance for STP 2157, UL is looking for participants in all interest categories other than Producer. Definitions for these interest categories are available on the Standards STP Internet site:

<http://ulstandards.ul.com/develop-standards/participation/interest-categories/>

If you are interested in applying for STP 2157 membership or are aware of potential candidates for this STP, please contact the STP Project Manager, ross.wilson@ul.com.

For your convenience in review, proposed additions to existing requirements are shown underlined and proposed deletions are shown ~~lined-out~~.

1. Clarification of endurance cycles for control devices

RATIONALE

Proposal submitted by: Darrin Conlon, UL LLC

This proposal is intended to clarify the endurance cycles for operating and protective control devices, and documents present practice in the application of these requirements.

PROPOSAL

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

(See 20A.2)

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 <u>for temperature-regulating devices and other types of operating controls.</u>
Overvoltage Category	Overvoltage Category II
Pollution degree	See 23A.4

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

(See 20A.3)

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 <u>for manual, non-self-resetting temperature-limiting devices, and other manual, non-self-resetting protective controls.</u> b) 100,000 cycles, for <u>automatic, self-resetting</u> temperature-limiting controls, combination temperature-limiting and regulating controls, and other <u>automatic, self-resetting</u> 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)

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