

Standard Information

Standard Number: UL 541

Standard Name: Refrigerated Vending Machines,

Standard Edition and Issue Date: 8th Edition, Dated December 30, 2011

Date of Revisions: November 6, 2013

Date of Previous Revisions to Standard: 8th Edition, Dated December 30, 2011

Effective Date of New/Revised Requirements

Effective Date (see Processing Schedule below): **November 6, 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date of **November 6, 2015** unless the product is found to comply with new/revised requirements.

Overview of Changes: Numerous changes throughout the standard. Note that the SDO may not pursue a SUN for requirements they have always applied to their Certifications. Specific details of new/revised technical requirements are found in table below.

Processing Schedule: So that production of products bearing Listing Marks will not be interrupted, the following schedule of **approximate** dates has been established to ensure Listing Reports are found compliant by Effective Date:

- March 6, 2015 = 8 Month Report Review – Intertek will review all Reports. Update if compliance is verified or issue Findings Letter/Quote for any re-evaluations needed
- May 6, 2015 = 6 Month Quote Cut-off – Quotes returned for necessary re-evaluations
- October 6, 2015 = 30 Day Warning – Client advised of all non-compliant Reports to be Suspended
- **November 6, 2015** = Effective Date – ATM Suspended for all non-compliant Reports

Fees: An initial review of Listing Report (s) will be covered by a direct billing project and will be invoiced at not more than \$1000 per report.

Client Action Required:

Information – To assist our Intertek Engineer with review of your Certification Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements 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 – **Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.**



Standards Update Notice (SUN)

Issued: May 9, 2014

Description of New/Revised Technical Requirements

Clause	Verdict	Comment	NC#
29.3.1		Revised - Added "Standard for Safety of Household and Similar Electrical Appliances, Part 1: General Requirements, UL 60335-1" to requirement.	
30.1.5.1		Added - "The values of current specified in 30.1.5 shall be the values marked on the vender nameplate as required by 99.1."	
30.1.15.1		Revised - Added "shall comply with the operating control (limiter) endurance cycle requirements in Standard for Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Temperature Sensing Controls, UL 60730-2-9, Table CC.2, in addition to"	
30.1.23		Added - An operating control not complying with 30.1.15 shall: a) Be powered entirely by no more than one low-voltage circuit; and b) Comply with the endurance cycle requirements in the Standard for Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Temperature Sensing Controls, UL 60730-2-9, Table CC.2, for air conditioning and refrigeration applications if it controls a motor-compressor.	
30.1.24		Added - An operating control that complies with 30.1.15 shall also comply with the following: a) For electronic controls – Installation Class 2 for electromagnetic compatibility (EMC) shall be in accordance with Electromagnetic Compatibility (EMC) – Part 4-5: Testing and Measurement Techniques – Surge Immunity Test IEC 61000-4-5; b) Category II shall be the overvoltage category; c) Insulating materials shall have a minimum comparative tracking index (CTI) of 100 (Material Group III); and d) The applicable pollution degree shall be as specified in 52.3 (a) – (d).	
57.1.5		Revised - Changed From: "for R744, this value is 580 psig (4.0 MPa)." To: "to R744, this value is 553 psig (3.8 MPa)."	
Table 92.1		Revised - Adds tests to "Tests on nonmetallic materials-based on nonmetallic requirements in Sections 7 – 10"	
93A		Section Added "Refrigeration Identification Tests"	
97A		Section Added "Annual Refrigeration Identification"	
99.3		Revised - Added items (d-e) d) Shall be single-phase; and e) Motor-compressor rated load or maximum rated current shall not exceed 9 amperes at 115 volts or 4.5 amperes at 230 volts.	
102.5		Added - Requires instructions for product employing R744 specify installation location, and users/installers follow material safety data sheets (MSDS)	
SA6.1.1		Revised - Letter height for marking requirements in SA6.1.2 to SA6.1.5 increased from 1/8 inch (3.2mm) to ¼ inch (6.4mm).	
SA6.1.6		Revised - Requirement changed From "processing tubes shall be color	



Standards Update Notice (SUN)

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Clause	Verdict	Comment	NC#
		coded to specify the refrigerant used. To shall be painted or colored red, Pantone Matching System (PMS) No. 185. This color shall be present at all places where service puncturing or otherwise creating an opening in the refrigerant circuit might be expected. In the case of a process tube on a compressor, the color mark shall extend at least 1 inch (25.4mm) from the compressor.	
SA6.2.3		Revised - Expanded requirements from SA6.2.3 to SA6.2.3 (a-b) added c) A vending machine having a flammable refrigerant shall not be intended for use in lobbies or locations of egress, such as a hallway or public corridor.	
Supplement SB		Section Added SUPPLEMENT SB - REQUIREMENTS FOR REFRIGERATED VENDING MACHINES INTENDED FOR INSTALLATION WITHIN MOTOR FUEL DISPENSING FACILITIES	
		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 the new/revised requirements.	