

STANDARD INFORMATION

Standard Number: UL 507

Standard Name: Electric Fans

Standard Edition and Issue Date: 10th Edition Dated November 9, 2017

Date of Revision: August 15, 2018 and November 6, 2018

Date of Previous Revision of Standard: February 22, 2018

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **March 1, 2021**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revise 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

Overview of Changes:

August 15, 2018:

- Detachable Cords
- Revision of the Temperature Test Frequency for Multiple Frequency Products
- Modification of Dielectric Voltage Withstand Test
- Appliances for Use in "Other Spaces Used for Environmental Air"
- Marking Requirement for Evaporative Coolers Shipped Without Motors

November 6, 2018:

- Removal of reference to UL 244A and UL 873
- Revision of ceiling fan blade edge requirements

Specific details of new/revise 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:

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
<p>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</p>		
<p>The following changes reflect the August 15, 2018 revision</p>		
15	Info	Power Supply Connections – Cord-Connected Appliances
15.1	Info	Cords and plugs
15.1.4		The flexible cord <u>for products as described in rows 1 and 2 of Table 15.1</u> shall be attached permanently to the appliance or be in the form of a separate cord set with acceptable means for permanent connection to the appliance.
		<i>New clause added;</i>
15.1.4.1		An appliance intended for use with a detachable cord set shall not be provided with terminal pins that accommodate a standard flatiron or appliance plug.
46	Info	Temperature Test
46.1	Info	All fans
46.1.10		For the temperature test, the test voltage for an appliance is to be as specified in Table 40.1. When the appliance has a single frequency rating, the test is to be conducted at that frequency. An appliance rated 25 – 50 hertz or 50 – 60 hertz is to be tested using a 60-hertz supply that has more than one frequency rating is to be tested at its minimum and maximum rated frequency, unless it can be established that one test will result in the most severe operating conditions.
47	Info	Dielectric Voltage Withstand Test
		An appliance shall withstand for 1 minute without <u>electrical</u> breakdown the application of a <u>DC potential or an AC 60-hertz essentially sinusoidal potential of the value indicated in 47.2 between</u> at a frequency within the range of 40 to 70 Hz <u>between</u> the following:
47.1		<ul style="list-style-type: none"> a) Uninsulated live metal parts and the enclosure. A non-conductive enclosure is to be wrapped in conductive foil. b) Terminals of opposite polarity. c) Uninsulated live metal parts and accessible dead metal parts. d) Uninsulated live metal parts and grounding contacts of grounding type receptacles. e) Primary and isolated secondary circuits.



CLAUSE	VERDICT	COMMENT
201	Info	<p>Markings</p> <p><i>New clause added;</i></p> <p>A commercial-industrial evaporative cooler or air-filtering appliance that is shipped from the factory without the motor and drive assembly shall be plainly marked as shown in (a) – (e).</p> <p>a) Identification of all motors and/or motor kits suitable for installation on the evaporative cooler or air-filtering appliance. Identification shall include manufacturer’s name, model or cat. no. and/or motor kit no., electrical ratings such as voltage, amperage, frequency, number of phases (if polyphase) and horsepower.</p> <p>Exception: If the motor is the only electric-energy-consuming component or if it is on a separate circuit, the electrical rating given on the motor nameplate need not be shown elsewhere on the evaporative cooler or air-filtering appliance if this nameplate is visible on the motor after the evaporative cooler or air-filtering appliance has been installed as intended.</p> <p>201.11</p> <p>b) Motors which incorporate motor-overload protection shall be marked to indicate the presence of such protection.</p> <p>c) Motors which do not incorporate motor-overload protection (not marked “thermally protected”) shall be so identified to indicate that remote motor-overload protection is required per 200.3.1.</p> <p>d) The marking shall include:</p> <ol style="list-style-type: none"> 1) A provision for marking on the unit to indicate which motor has been installed; and 2) The following instruction: “Mark the motor list to indicate which motor or motor kit has been installed by (include specific method). For dual voltage motors, indicate the voltage for which the motor is connected.” (Equivalent wording may be employed). <p>e) The marking shall include a reference to enclosed installation or operating instructions for identification of the proper drive assembly to be installed.</p>
	Info	APPLIANCES FOR USE IN “OTHER SPACES USED FOR ENVIRONMENTAL AIR”
212	Info	General
212.1		<p>These requirements cover air-filtering appliances specifically evaluated for use in “other spaces used for environmental air” per Article 300.22 (c) of the National Electrical Code, ANSI/NFPA 70. In addition to the applicable requirements in Part 1 of this Standard, air-filtering appliances for use in “other spaces used for environmental air” shall comply with the requirements in all applicable Part 2 sections including, but not necessarily limited to, Fans For Use With Solid-State Speed Controls, Fans For Use In Unattended Areas, and Sections 213 and 214.</p>



CLAUSE	VERDICT	COMMENT
213	Info	Construction
213.1		Exception No. 1 of 7.3.1 shall not apply to these air filters appliances . All non-metallic enclosure and cabinet parts, including polymeric grilles, shall be classed 5 VA by the burning tests described in the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94.
214	Info	Markings
214.1		Air filtering Appliances in compliance with Sections 212 and 213 shall be marked "These units evaluated for use in other spaces for environmental air per National Electrical Code Article 300.22 (c)(3)."
214.2		Air filtering Appliances marked as specified in 214.1 and evaluated per Exception No. 3 of 213.2 shall be marked "CAUTION:" and the following or equivalent "Units shall not be installed less than 30.5 cm (12 inches) apart."
The following changes reflect the November 6, 2018 revision:		
60	Info	Static Load Test For Mounting Means
		<i>New clause added;</i>
		For a Ceiling Insert Fan with tab type mounting means, the Static Load Test is subjected to the applicable requirements in 60.1 – 60.3, except for the modifications specified in (a) through (d):
60.5		a) The security of the attachment of the appliance to the ceiling shall not be adversely affected; b) The face of the product secured by the tab mounting means shall not permanently displaced more than 1/8 in (3.2 mm) from its original position. The displacement shall be measured 1 minutes after the test load has been removed. c) During the installation, the tab mounting means are to be used and set up in accordance with the instructions; and d) The load is to be maintained for 5 minutes.
	Info	PART 2 – SPECIFIC FAN TYPES FANS FOR USE WITH SOLID STATE SPEED CONTROLS
86	Info	Construction
		A solid-state speed control shall comply with the applicable requirements in the Standard for Solid-State Fan Speed Controls, UL 1917, or the equivalent.
86.2		Exception No. 1: The spacings of an integral factory wired component solid-state speed control shall comply with either the Standard for Solid-State Fan Speed Controls, UL 1917, or the standard for Solid State Controls for Appliances, UL 224A. Compliance with the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1, and/or the applicable Part 2 standard from the UL 60730 series.



CLAUSE	VERDICT	COMMENT
129	Info	Performance
129.1	Info	Ventilating-hood-fan shelf temperature test
		The test is to be conducted in each of the following applicable conditions:
		c) The conditions specified in (a) and (b) with the ventilating-hood-fan shelf operating and not operating.
		Exception: The test is not required to be repeated with the fan not operating when:
129.1.1.5		1) The user cannot turn the fan "off" while the receptacle remains energized because of an automatic temperature control; 2) The automatic temperature control withstands 100,000 cycles of intended operation without impaired performance while making and breaking the maximum rated current at rated voltage; and 3) The control complies with the calibration requirements in the Standard for Limit Controls, UL 353, or the standard for Temperature Indicating and Regulating Equipment, UL 873. Compliance with the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1, and/or the applicable Part 2 standard from the UL 60730 series.
	Info	CEILING INSERT FAN/LIGHT COMBINATIONS
143	Info	Construction
143.1		A thermally protected Type IC unit shall be provided with thermal protection that cycles the lamp circuit. The protector shall comply with the requirements for devices rated for control of incandescent lamps, as specified in the standard for Temperature Indicating and Regulating Equipment, UL 873 or the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1, and/or the applicable Part 2 standard from the UL 60730 series.
143.3		An automatic-reset overtemperature-protective device that is provided on a thermally protected Type IC unit to cycle the fan motor on and off, to regulate the temperatures during the Normal Temperature Test, shall comply with standard for Temperature Indicating and Regulating Equipment, UL 873 or the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1, and/or the applicable Part 2 standard from the UL 60730 series, including the 100,000 cycle Endurance Test.
	Info	EVAPORATIVE COOLERS
159	Info	Construction
159.2	Info	Motors and pumps



CLAUSE	VERDICT	COMMENT
159.2.4		The electronic circuitry provided as part of a drain pump shall comply with the requirements in the standard for Temperature Indicating and Regulating Equipment, UL 873 or the Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1, and/or the applicable Part 2 standard from the UL 60730 series.
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.		