

## STANDARD INFORMATION

**Standard Number:** UL 705

**Standard Name:** Standard for Safety for Power Ventilators

**Standard Edition and Issue Date:** 7<sup>th</sup> Edition Dated July 19, 2017

**Date of Revision:** July 19, 2017

**Date of Previous Revision of Standard:** 6<sup>th</sup> Edition Dated March 28, 2016

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **January 3, 2019**

## 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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:** Separation of circuits. 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
12		<b><i>New section added;</i></b>
		<b>Separation of Circuits</b>
12.1		Unless having insulation suitable for the highest voltage involved, insulated conductors of different circuits (internal wiring, including wires in a junction box or compartment) shall be separated by barriers, or shall be segregated, and shall, in any case, be separated or segregated from uninsulated live parts connected to different circuits. Segregation of insulated conductors may be accomplished by clamping, routing, or equivalent means that ensures permanent separation from insulated or uninsulated live parts of a different circuit.
12.2		There shall be provision for segregating or separating by barriers field-installed conductors of any circuit from field-installed and factory-installed conductors connected to any other circuit, unless the conductors of both circuits are or will be insulated for the maximum voltage of either circuit.
12.3		Within a compartment that is not a control enclosure junction box or its equivalent, field-installed low-voltage (including Class 2) circuit conductors may be segregated from factory-installed conductors of different circuits by locating field wiring openings, routing factory wiring, and locating electrical components so that the factory conductors are maintained at least 127 mm (5 in) from a line representing intended routing of the low-voltage (including Class 2) circuit conductors. The line shall allow for droop, and shall connect the opening provided for entrance of the low-voltage (including Class 2) conductors to the terminals or leads to which the conductors are attached.
12.4		There shall be provision for segregating or separating by barriers field-installed conductors of a hazardous voltage circuit from: <ul style="list-style-type: none"> <li>a) Uninsulated live parts connected to a different circuit, other than wiring terminals; and</li> <li>b) Any uninsulated live parts of electrical components such as a pressure-limiting device, motor overload protective device, or other protective device where short circuiting or grounding may result in unsafe operation of the equipment; except at wiring terminals.</li> </ul>
12.5		There shall be provision for segregating or separating by barriers, field-installed conductors of an low-voltage circuit from: <ul style="list-style-type: none"> <li>a) Uninsulated live hazardous voltage circuits; and</li> <li>b) Wiring terminals and any other uninsulated live parts of hazardous voltage electrical components such as a pressure-limiting device, motor overload protective device, or other protective device where short circuiting or grounding may result in unsafe operation of the unit.</li> </ul>
12.6		If a barrier is used to provide separation between the wiring of different circuits, it shall be of metal or of suitable insulating material of adequate mechanical strength, and reliably held in place.



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12.7	A metal barrier shall be at least 0.66 mm (0.026 in) thick if of uncoated steel, 0.74 mm (0.029 in) thick if of galvanized steel, and 0.91 mm (0.036 in) thick if of nonferrous metal. A barrier of insulating materials shall be not less than 0.71 mm (0.028 in) thick, and shall be of greater thickness if its deformation could be so readily accomplished as to defeat its purpose.
12.8	If the barrier is removable or has openings for the passage of conductors, it is acceptable provided that instructions for the use of the barrier are a permanent part of the device. In lieu of a barrier, complete instructions may be provided that, when used in conjunction with the wiring diagram, will provide for the separation of the circuits of different voltages.
12.9	Field-installed conductors may be segregated from other field-installed conductors and from uninsulated live parts connected to other circuits by arranging the location of the openings in the enclosure for the various conductors, with respect to the terminals or other uninsulated live parts, so that conductors or parts of different circuits will not intermingle.
12.10	The output of a transformer device supplying a circuit shall not be interconnected with the output of another such transformer device provided as a part of the equipment, unless the voltage and current measurements at the output terminals of the interconnected devices are low-voltage.
12.11	Two or more transformer devices supplying Class 2 circuits and provided as a part of the equipment, shall be treated as separate circuits. If more than one such circuit is intended to be field-wired, the several circuits shall be segregated or separated by barriers as specified in 12.2, and the transformer output of each circuit shall be marked to warn that the separation shall be maintained.

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**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.**

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