

## STANDARD INFORMATION

**Amendment 1: See updated Effective Date in blue below**

**Standard:** UL 507

**Standard ID:** Electric Fans [UL 507:2017 Ed.10+R:27May2020]

**Previous Standard ID:** Electric Fans [UL 507:2017 Ed.10+R:15Nov2018]

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** ~~May 27, 2022~~ November 27, 2024

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

**Overview of Changes:** Addition of requirements for fans for use in unattended areas. Specific details of new/revise requirements are found in table below.

**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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined-out</del> below.</i>
	Info	<b>FANS FOR USE IN UNATTENDED AREAS</b>
178	Info	<b>General</b>
		In addition to any other motor requirements specified in this standard, the requirements specified in Sections 178 and 179A apply to any motor used in fan products which are built into or within the building structure and which operate unattended or in situations in which the operator may not detect or be notified of a locked rotor condition.
		Note 1: Examples include wall-insert fans, through-wall fans, ceiling-insert fans, attic exhaust fans, whole house fans, and duct fans.
178.1	Info	Note 2: See Appendix B “Section 178 and 179A Flow Chart requirements reference guides”.
		Exception No. 1: These requirements do not apply to range hoods with integral blowers, downdraft fans with integral blowers, ceiling suspended fans, low voltage component fans, polyphase commercial and industrial fans that are marked for commercial or industrial use, and recreational vehicle fans rated 24 V or less.
		Exception No. 2: These requirements do not apply to fans or motors employing an Electronically Protected Motor that complies with UL1004-7 that uses methods in addition to or other than a motor winding temperature sensing device(s).
		<b><i>New clause added;</i></b>
178.2		A secondary protection device provided for supplemental-fuse overcurrent protection shall comply with one of the following:  a) Supplementary Protectors for Use in Electrical Equipment, UL 1077, or b) Standard for Low-Voltage Fuses – Part 14: Supplemental Fuses, UL 248-14
		<b><i>New clause added;</i></b>
178.3		A secondary protection device shall be suitable for its use in the fan or motor, including:  a) Have a voltage rating at least that of the voltage it is subject to in the application; b) Have a temperature rating suitable for the temperature measured on the secondary protection during normal operation;



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		<p>c) Not be an automatic reset type;</p> <p>d) A secondary protector with contacts that are intended to open during an overcurrent situation shall comply with UL 1077 tested at 6 times the full load current rating of the motor or shall be additionally subject to the Switch Overload Test, Section 59.1 of UL 507.</p> <p>e) Supplemental-fuse overcurrent protection shall be capable of clearing a fault current (interrupt rating), as tested per the Standard for Low-Voltage Fuses – Part 14: Supplemental Fuses, UL 248- 14 or the Standard for Supplementary Protectors for Use in Electrical Equipment, UL 1077, of not less than 1,000 Amps for a nominal 115 V circuit, and 1,000 Amps for a nominal 240V circuit. When the fuse is located in the fan or motor downstream of another current limiting device, the fault current clearing capability of the supplemental-fuse overcurrent protection shall be suitable for the maximum fault current capable of being imposed on the device.</p>
		<p><b><i>New clause added;</i></b></p>
178.4		<p>A fan or motor that uses a secondary protection device that is relied upon during Fan Motor Failure Analysis, 179A.2, shall be evaluated as a specific fan/motor/protector combination. When the fan or motor, the secondary protection device, or the fan/motor/secondary protection device combination is changed, the combination shall be reevaluated.</p>
		<p><b><i>New clause added;</i></b></p>
178.5		<p>For a polarized motor, the secondary protection device(s) shall be connected in the ungrounded (line) conductor of the supply circuit only. For an unpolarized motor, the secondary protection device (s) shall be connected on both the ungrounded and grounded (neutral) conductors such that when it operates, it opens either or both ungrounded and grounded conductors.</p>
		<p><b><i>New section added;</i></b></p>
179.1		<p><b>Fan motor heat aging</b></p> <p>This section contains requirements for fan motor heat aging. See standard for details.</p>