

STANDARD INFORMATION

Standard Number: UL 1004-7
Standard Name: Standard for Electronically Protected Motors
Standard Edition and Issue Date: 2nd Edition Dated July 13, 2012
Date of Revision: October 4, 2017
Date of Previous Revision of Standard: May 25, 2016

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **October 27, 2018**

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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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: Additional requirements for electronically protected motors intended for field installation. 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



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CLAUSE	VERDICT	COMMENT
6	Info	<p>Application of UL 60730-1 to Controls used to Provide Overtemperature Protection for Motors</p> <p>With reference to 2.1, all performance testing required by the Standard for Automatic Electrical Controls for Household and Similar Use, Part 1: General Requirements, UL 60730-1, on the control is to be performed with the control connected as intended to the motor.</p>
6.1		<p><i>Exception: A motor control shall only need comply with the requirements for operating controls in UL 60730-1, if the motor coil complies with the locked rotor performance criteria in the Standard for Thermally Protected Motors, UL 1004-3, with motor control disconnected from the motor coils, and the power supply for the motor control connected directly across a single motor coil or any combination of motor coils connected in parallel.</i></p>
6.5		<p>Controls evaluated to provide required motor overtemperature protection shall provide the following required safety functions when evaluated to the requirements of UL 60730-1:</p> <ul style="list-style-type: none"> a) Locked rotor protection – The control shall not allow motor temperatures in excess of those the applicable values specified in Table 41A.1 <u>8.1</u> of UL 1004-3 under any test condition required by UL 60730-1. b) Loss of phase (power supply phase not motor phase): <ul style="list-style-type: none"> 1) Where loss of a power supply phase does not result in a cessation of rotation, the temperature of the motor windings shall not exceed the applicable values specified in Table 41C.1 <u>10.1</u> of UL 1004-3. 2) Where loss of a power supply phase results in a cessation of rotation, the temperature of the motor windings shall not exceed the applicable values specified in Table 41A.1 <u>8.1</u> of UL 1004-3. c) <u>Running heating (at manufacturer’s option and declaration)</u> – The control shall not allow motor temperature in excess of those specified in Table <u>10.1</u> of UL 1004-3 under any test condition required by UL 60730-1. <p><i>Exception: Controls used in motors to address (a), (b), and (c) and intended for field installation shall not allow motor temperatures in excess the values specified in Table 32.1 of UL 1004-1.</i></p>
10	Info	a) INSTRUCTIONS



New clause added;

Instructions shall be provided for motors intended for field installation and shall include:

10.2

- a) Instructions for installation and proper connection in the field, including a wiring diagram that shows the intended methods of electrical connection to the supply circuit, and grounding instructions; and
- b) The intended end-use application. (Examples of intended applications include a motor for installation in an HVAC application or a motor intended to be used as a pool pump motor.)

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.
