STANDARDS UPDATE NOTICE (SUN)
ISSUED: November 12, 2019

STANDARD INFORMATION

Standard Number: UL 1004-4
Standard Name: Electric Generators
Standard Edition and Issue Date: 3rd Edition Dated July 2, 2018
Date of Revision: July 2, 2018
Date of Previous Revision of Standard: 2nd Edition Revised May 20, 2015

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **July 2, 2020**

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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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:

- Addition of construction requirements for machines rated over 1,000 V or employing form wound constructions
- Addition of temperature requirements for standby generators

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:

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		Additions to existing requirements are <u>underlined</u> and deletions are shown ~~lined out~~ below.
	Info	**CONSTRUCTION**
4	Info	**General**
4.1		***New clause added;*** Machines rated in excess of 1,000 V or rated between 460 V and up to 34,000 V, and employing a form wound insulation system shall additionally meet the requirements of the Standard for Form Wound and Medium Voltage Rotating Electrical Machines, UL 1004-9.
9	Info	***New section added;*** **Temperature Test for Standby Generators**
9.1		When tested in accordance with the Temperature Test of UL 1004-1, the windings of a standby generator shall not exceed the limits specified in Table 9.1, when adjusted to a 40°C (104°F) ambient.
Table 9.1		**Maximum winding temperature for standby generators (thermocouple or resistance method)**

Materials and components	°C	(°F)
Class A (105)	125	(257)
Class B (130)	145	(293)
Class F (155)	170	(338)
Class H (180)	190	(374)

9.2		During the Temperature Test when the temperature on a field-installed lead or on any part within the wiring compartment that can be contacted by a lead is more than 60°C (140°F) when adjusted to the rated ambient, the standby generator shall be marked at or near the point where field connections shall be made, and so located that the marking is readily visible during installation in accordance with 10.3. The temperature value to be used in the marking shall be in accordance with Table 9.2.
Table 9.2		**Terminal box marking**

Maximum temperature[a] attained in terminal box or compartment during temperature test		Temperature marking	
°C	(°F)	°C	(°F)
61 – 75	(142 – 167)	75	(167)
76 – 90	(169 – 194)	90	(194)
[a] Corrected to an ambient temperature of 40°C (104°F)			

CLAUSE	VERDICT	COMMENT
	Info	**MARKINGS**
10	Info	**General**
10.2		***New clause added;*** A standby generator shall be marked “Standby Service”.
10.3		***New clause added;*** When the temperature within a terminal box exceeds 60°C (140°F) at a point where field installed leads can contact, a standby generator shall be additionally marked with the following: ”CAUTION: Use supply wires suitable for ___°C ” or equivalent wording. The temperature to be marked shall be 75°C or 90°C for temperature ranges of 61 – 75°C and 76 – 90°C, respectively. The marking shall appear on the nameplate, in the terminal box, or near the point where the supply connections are made. Exception: Generators intended for use only as components or specific equipment need not be so marked if this information is provided separately.
		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.