

Standards Update Notice (SUN)

Issued: April 13, 2016

Standard Information

Standard Number: UL 1203 Standard Name: Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations Standard Edition and Issue Date: 5th Edition Dated November 22, 2013 Date of Revision: October 16, 2015 Date of Previous Revision to Standard: 5th Edition Dated April 24, 2015

Effective Date of New/Revised Requirements

Effective Date (see Schedule below): January 30, 2017

Impact, Overview, Fees 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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: This revision is being issued to include requirements for RTV silicon rubber material, and to align UL 1203 with the current ferrous metal electrical enclosure corrosion protection requirements in UL 50E. 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).

Schedule: So that shipping of products with Listing Marks will not be interrupted, an *approximate* schedule has been established to ensure Listing Reports are found compliant by Effective Date:

- May 30, 2016 = 8 Month Report Review Intertek will review all Reports. Update if compliance is verified or issue Findings Letter/Quote for any re-evaluations needed
- July 29, 2016 = 6 Month Quote Cut-off Quotes returned for necessary re-evaluations
- December 30, 2016 = 30 Day Warning Client advised of all non-compliant Reports to be Suspended
- January 30, 2017 = Effective Date ATM Suspended for all non-compliant Reports

Fees: An initial review of Listing Report (s) will be covered by a direct billing project and will be invoiced at not more than \$1000 per report.

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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Description of New/Revised Technical Requirements

Clause	Verdict	Comment
		Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.
10	Info	Joints in Enclosures
10.2	Info	Cemented joints
10.2.1		 When a part that is not intended to be removed after assembly, and that is notrequired to be opened to install or service the equipment is sealed cemented with a sealing compound, the sealing compound shall comply with the following as applicable: a) Epoxy and RTV silicone rubber shall R resist solvent action in compliance with Section 34, Tests on Sealing Compounds; b) RTV silicone rubber shall resist aging in accordance with the air-oven aging test method found in Section 41.3 Resist moisture in compliance with Section 89, High Humidity Tests; and c) Plaster-based cements shall resist moisture in compliance with Section 89, High Humidity Tests; and Comply with the requirements of 25.2, without loosening or cracking, or showing other signs of deterioration.
		other signs of deterioration.
15	Info	Protection Against Corrosion
15.1		All <u>enclosure of</u> ferrous-metal parts other than stainless steel shall <u>comply with the</u> <u>applicable requirements for indoor corrosion protection as is found in the Standard for</u> <u>Enclosures for Electrical Equipment, Environmental Considerations, UL 50E, be protected</u> against corrosion, An enclosure of ferrous metal other than stainless steel shall be subjected to Section 24, Rust-Resistance Test except at joint surfaces and conduit threads, for example, by zinc or cadmium coating, plating, enameling, painting, varnishing, or lacquering . Jointsurfaces and conduit threads are not prohibited from being electroplated.
24	Info	Rust-Resistance Test
		This section has been deleted.
34	Info	Chemical Resistance Tests on Sealing and Cementing Compounds
34.1	Info	A sealing compound <u>material other than portland cement-based compounds and</u> <u>plaster-based materials which are</u> used in Class I equipment shall be subjected to the tests described in 34.2 – 34.7 to determine its resistance to chemicals.
34.9		The adhesive bond strength of formed-in-place RTV silicone rubber is used as a measure of the retention of physical properties following conditioning. Shearing force is to be determined on as-received specimens and specimens exposed to chemical vapors. The shearing force after exposure is to be at least 50 percent of the value determined using as-received samples.



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Clause	Verdict	Comment
34.10		At least 45 specimens are required - three for as-received tests three for each chemical and three for air-oven aging. The samples shall be in accordance with the form and dimensions of the test specimens that are specified in ASTM D 1002. See Figure 34.
34.11		Thirty-nine specimens (three specimens for each chemical) are to be exposed for 168 hours (7 days) to saturated vapors in air of the chemicals specified in 33.2.3.
34.12		Three specimens are to be placed in an air-oven for accelerated aging in accordance with the test method described in 41.3.3 through 41.3.5.
34.13		Following conditioning, each specimen is placed, in turn, in the grips of a tensile testing machine. The loading is applied to the specimen and continued to the shear point. The result is recorded for each specimen and the average value for each group of specimens is to be calculated. The average value for conditioned specimens shall not be less than 50 percent of the average value for specimens as-received.
34.14	Info	As an alternative, tests to determine resistance of the RTV silicone rubber to chemicals shall be permitted to be conducted on a complete sample that incorporates the sealing compound as intended in the final assembly. These tests are to consist of explosion and hydrostatic pressure tests in accordance with Section 21, Explosion Tests, and Section 22, Hydrostatic Pressure Test, on the complete sample after the sample has been exposed to the chemicals specified in 33.3.2. There shall be no flame propagation, rupture, cracking, breakage, or other damage to the sample.
		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.