

Standard Information

Standard Number: UL 50 / CSA C22.2.94.1

Standard Name: Enclosures for Electrical Equipment, Non-Environmental Considerations

Standard Edition and Issue Date: 13th Edition Dated October 16, 2015

Date of Previous Revision to Standard: 12th Edition Revised April 27, 2012

Effective Date of New/Revised Requirements

Effective Date (see Schedule below): **September 5, 2016**

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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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

The 13th edition of UL 50 was issued to include the following requirements:

- Addition of environmental Type ratings 3X, 3RX, and 3SX
- Clarification of types of cast metal suitable for use as an enclosure
- Equipment door opening 90 degrees from the closed position
- Certification Requirement Decision for nonmetallic-sheathed cable clamps
- Revision to requirement of cover and flange overlap for cabinets used as panelboards

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:

- January 6, 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
- March 7, 2016= 6 Month Quote Cut-off – Quotes returned for necessary re-evaluations
- August 5, 2016 = 30 Day Warning – Client advised of all non-compliant Reports to be Suspended
- **September 5, 2016** = 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.

Description of New/Revised Technical Requirements

Clause	Verdict	Comment
1	Info	Scope <i>The second edition of UL 50E includes the addition of environmental Type ratings 3X, 3RX, and 3SX.</i>
6	Info	Construction
6.5	Info	Cast metal enclosures
6.5.5		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i> An enclosure may be constructed of iron, steel, copper, brass, or aluminum cast metal. Aluminum-base cast metal containing less than 80% aluminum shall not be used. Magnesium-base cast metal shall not be used. Zinc-base die -cast metal shall not be used for an enclosure.
6.7	Info	Covers and doors
6.7.1.2		<i>New clause added;</i> The enclosure shall be constructed so that all doors are able to be opened to a minimum of 90° from the closed position.
6.10		Connections for wiring systems
6.10.5.1	Info	<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i> A separable or integral clamp provided in an as part of a factory assembled enclosure and intended for securement of nonmetallic-sheathed cable shall comply with the applicable requirements of Annex B, Ref. <u>No. 5 and No. 6. Size of openings shall comply with Clause 6.10.5.2.</u>
6.10.5.2		<i>New clause added;</i> A separable or integral clamp provided as part of a factory assembled enclosure and intended for securement of nonmetallic-sheathed cable shall substantially close the opening in the enclosure as determined by the following: a) the clamp, constructed or mounted as part of the factory assembled enclosure with no cable installed, shall inhibit the passage of a 2.5 mm (3/32 inch) diameter probe, no force being applied to the probe that would result in repositioning of the clamp; or b) the clamp shall be provided, at the factory, with a means to individually close each opening.
9	Info	Cabinets and Cutout Boxes
9.1	Info	General
9.1.1		<i>Additions to existing requirements are <u>underlined</u> below.</i> In Mexico and the United States, a cabinet or cutout box shall comply with the requirements for enclosures. <u>However, the requirements in Clause 9.2 shall supersede equivalent requirements for enclosures.</u> In Canada, this requirement does not apply.

Standards Update Notice (SUN)

Issued: November 6, 2015

Clause	Verdict	Comment
9.2		<i>New section added;</i> Sheet metal cabinets
9.2.1		Notches
9.2.1.1		The front flange of each of the two side walls of a Type 1 enclosure intended for use with a panelboard may have one notch to accommodate means for installing the cover. Each notch shall not be more than 17.5 mm (11/16 inch) wide.
9.2.2		Slot and tab fastenings
9.2.2.1		Slot and tab fastenings, consisting of a small cutout on the inner flange surface and a tab created by pushing in a small segment of metal from the overlapping flange, are considered as an acceptable fastening only when used in Type 1 enclosures and are used in combination with a rivet, weld, bolt, or screw having machine screw threads in at least one of the following locations on each length of a flange: a) At the back edge of the enclosure, provided that the distance between the fastenings (including the slot and tab fastenings) comply with Clause 6.4.2.5; or b) Joining adjacent sides, including a top or bottom side, to comply with Clause 6.4.2.3, except that a rivet, weld, bolt or screw having machine screw threads shall be used to secure the front edge of the enclosure in accordance with Clauses 6.4.2.3 and 6.4.2.4.
		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.