



UL 65

STANDARD FOR SAFETY

Wired Cabinets

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UL Standard for Safety for Wired Cabinets, UL 65

Seventh Edition, Dated October 26, 2010

Summary of Topics

This revision of UL 65 includes the following changes in requirements:

Class 2 and LPS Power Systems for use with Wired Cabinets

Class 2 Powered LED Arrays

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin. Changes in requirements are marked with a vertical line in the margin and are followed by an effective date note indicating the date of publication or the date on which the changed requirement becomes effective.

The revised requirements are substantially in accordance with Proposal(s) on this subject dated September 20, 2012 and January 9, 2013.

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UL 65

Standard for Wired Cabinets

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Second Edition – April, 1971
Third Edition – January, 1977
Fourth Edition – March, 1982
Fifth Edition – April, 1993
Sixth Edition – March, 1997

Seventh Edition

October 26, 2010

This UL Standard for Safety consists of the Seventh Edition including revisions through April 11, 2013.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <http://csds.ul.com>.

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APPENDIX A

Standards for Components.....	A1
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INTRODUCTION

1 Scope

1.1 These requirements cover wired cabinets for use in accordance with the National Electrical Code.

1.2 These requirements cover display cases and special-purpose cabinets containing electrical wiring, with or without illumination.

1.3 These requirements also cover wired cabinets of such size that they must be sectionalized for shipping from the factory, and assembled and wired at the installation site.

1.4 These requirements do not cover bathroom cabinets, cabinets provided with or designed for use with refrigeration equipment, or general use cabinets or boxes intended for the enclosure of electrical equipment.

1A Glossary

1A.1 For the purposes of this Standard, the following definitions apply.

1A.1 added April 11, 2013

1A.2 CLASS 2 CIRCUIT – An isolated secondary circuit suitable for use in dry locations involving a potential of not more than 30-volt rms maximum, 42.4 volts peak, 60Vdc open circuit secondary potential under any condition of loading or open circuit and with limited output power as defined by the appropriate component standard.

1A.2 added April 11, 2013

1A.3 LIMITED POWER SOURCE (LPS) – A limited power source is as defined in the Standard for Information Technology Equipment Safety – Part 1: General Requirements, UL 60950-1.

1A.3 added April 11, 2013

2 Components

2.1 Except as indicated in 2.2, a component of a product covered by this standard shall comply with the requirements for that component. See Appendix A for a list of standards covering components generally used in the products covered by this standard.

2.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or
- b) Is superseded by a requirement in this standard.

2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.5 A Relocatable Power Tap (RPT) shall comply with the Standard for Relocatable Power Taps, UL 1363 and shall only be mounted to the wired cabinet if provided with a temporary mounting means incorporated as a feature of the RPT. The mounting feature is the only acceptable method of securement of the RPT to the wired cabinet.

Exception: Hook and loop and other securement means are allowed provided the securement system complies with all of the following:

- a) The RPT is removable without the use of tools;*
- b) No part of the securement means is located in the plane of the receptacle face;*
- c) There are no modifications of the RPT enclosure; and*
- d) The RPT is not secured by any electrical cord.*

2.5 revised April 11, 2013

2.6 A Furniture Power Distribution Unit (FPDU) shall comply with the Standard for Furniture Power Distribution Units, UL 962A and shall be mounted to the wired cabinet using the mounting feature incorporated with the FPDU.

2.6 effective April 26, 2012

2.7 A sign that is mechanically or electrically attached to a Wired Cabinet shall comply with the Standard for Electric Signs, UL 48.

2.7 effective April 26, 2012

2.8 A luminaire supplied with the wired cabinet shall comply with the Standard for Luminaires, UL 1598 or shall comply with the requirements for cabinet lights in the Standard for Portable Electric Luminaires, UL 153.

2.8 effective April 26, 2012

2.9 A low voltage Luminaire supplied with the wired cabinet shall comply with Standard for Low Voltage Lighting Systems, UL 2108.

2.9 effective April 26, 2012

2.10 A light emitting diode luminaire supplied with the wired cabinet shall comply with the basic standard for that luminaire type and the Standard for Light Emitting Diode (LED) Equipment for Use In Lighting Products, UL 8750.

Exception: An LED array supplied by a Class 2 power supply is not required to comply with the Standard for Light Emitting Diode (LED) Equipment for Use In Lighting Products, UL 8750.

2.10 revised April 11, 2013

2.10.1 A Class 2 or LPS powered LED array constructed on a printed circuit board shall have a minimum flammability rating of HB in accordance with the Standard for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94.

2.10.1 added April 11, 2013

2.11 An anti-theft or security device supplied with the wired cabinet shall comply with the Standard for Antitheft Alarms and Devices, UL 1037.

2.11 effective April 26, 2012

2.12 A Class 2 power source shall comply with:

a) The requirements for Class 2 power in the Standard for Low Voltage Transformers – Part 3, Class 2 and Class 3 Transformers, UL 5085-3; or

b) The Standard for Class 2 Power Units, UL 1310

2.12 added April 11, 2013

2.13 A limited power source (LPS) shall comply with the requirements of the Standard for Information Technology Equipment Safety – Part 1: General Requirements, UL 60950-1.

2.13 added April 11, 2013

3 Units of Measurement

3.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

4 Undated References

4.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

CONSTRUCTION

5 General

5.1 A wired cabinet shall be constructed to provide mechanical strength.

5.2 A wired cabinet for use in wet locations shall be investigated for such use. The investigation may include a rain test, a humidity test, or both.

6 Corrosion Resistance

6.1 An iron or steel part shall be made resistant to corrosion by zinc or cadmium coatings, plating, painting, varnishing, or lacquering.

Exception No. 1: Threaded holes, and the cut edges and punched holes of an enclosure, and the like, formed of galvanized stock are not required to be corrosion resistant.

Exception No. 2: Malleable-iron parts, and steel nuts, bolts, screws, and washers are not required to be corrosion resistant.

Exception No. 3: Brass, copper, and lead-alloy (terne) shall not be used for the plating of iron or steel parts to provide corrosion resistance.

7 Joints

7.1 A method of making joints between metal parts and of fastening arms and supports shall be such as to provide strength and rigidity to prevent turning that could result in the movement of a wire or wiring device after the assembly is completed.

7.2 A screw joint may be locked by solder, a setscrew, sealing, or the equivalent.

7.3 Friction alone between parts is not an acceptable means of preventing turning. Turning may be prevented by a lock washer, applied as intended, a locknut seated against another nut, or by an equivalent method.

7.4 Sheet metal nuts may be used to prevent turning when supplied as part of an armored-cable or flexible-conduit connector. Sheet metal nuts made of heat-treated steel may be used for assembly, to prevent turning of threaded tubing not larger than 1/8-inch (3.16-mm) pipe size, and on 1/4-inch (6.35-mm) and smaller diameter bolts and studs.

7.5 A swivel joint shall be constructed so that turning will not damage the insulation on the wires. If wires passing through the joint are concealed, the joint shall be constructed so that rotation is limited to no more than 360 degrees.