ULC
STANDARD

ULC-S318:1996-R2016
(Reaffirmed 2016)

STANDARD FOR POWER SUPPLIES FOR BURGLAR ALARM SYSTEMS

Prepared and Published by:

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REFERENCE PUBLICATIONS

The documents shown below are referenced in the text of this Standard. Unless otherwise stated elsewhere in this Standard such reference shall be considered to indicate the edition and/or revisions of the document available at the date on which the Committee approved this ULC Standard.

Documents Published by the Canadian Standards Association (CSA)
5060 Spectrum Way, Mississauga, ON L4W 5N6 Canada
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www.csa.ca

- C22.1-94, Safety Standard for Electrical Installations, Canadian Electrical Code, Part I
- CAN/CSA-C22.2 No. 107.1-M91, Commercial and Industrial Power Supplies
- CAN/CSA-C22.2 No. 157-92, Intrinsically Safe and Non - Incendive Equipment for Use in Hazardous Locations
- CAN/CSA-C22.2 No. 950-M89, Safety of Information Technology Equipment, Including Electrical Business Equipment

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- CAN/ULC-S301-M88, Central and Monitoring Station Burglar Alarm Systems
- CAN/ULC-S302-M91, Installation and Classification of Burglar Alarm Systems for Financial and Commercial Premises, Safes and Vaults
- CAN/ULC-S303-M91, Local Burglar Alarm Units and Systems
- ULC-S309, Residential Burglar Alarm System Units
- CAN/ULC-S306-M89, Intrusion Detection Units
- ULC Subject C1076-1986, Guide for Proprietary Burglar Alarm System Units

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STANDARD FOR POWER SUPPLIES FOR BURGLAR ALARM SYSTEMS

PREFACE

This is the Reaffirmation of the First Edition of the Standard for Power Supplies for Burglar Alarm Systems, ULC-S318:1996-R2016.

This Edition of the Standard has been formally approved by the ULC Standards Committee on Security and Burglar Alarm Equipment and Systems.

This Standard has been developed in compliance with the requirements of SCC for Accreditation of Standards Development Organizations.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This First Edition ULC Standard has been reaffirmed.

Attention is drawn to the possibility that some of the elements of this Canadian standard may be the subject of patent rights. ULC Standards shall not be held responsible for identifying any or all such patent rights.

Requests for interpretation of this Standard should be sent to ULC Standards. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

The review and action to revise or reaffirm this Standard will not exceed 5 years from the date of publication, unless the Standard is identified as fitting within a stabilized category, whereby the review will commence within the appropriate time frame set out by ULC Standards.

This Standard is intended to be used for conformity assessment.

1. SCOPE

1.1 This Standard does not apply to power supplies that are an integral part of equipment contained in the following Standards:

A Central and Monitoring Station Burglar Alarm Systems, CAN/ULC-S301;

B Installation and Classification of Burglar Alarm Systems for Financial and Commercial Premises, Safes and Vaults, CAN/ULC-S302;

C Local Burglar Alarm Units and Systems, CAN/ULC-S303;

D Intrusion Detection Units, CAN/ULC-S306;

E Residential Burglar Alarm System Units, ULC-S309;

F Proprietary Burglar Alarm System Units, ULC Subject C1076.

1.2 The primary source of power for power supplies shall be primary or secondary alternating current (ac).

1.3 Class 2 circuits shall meet the requirements of the Canadian Electrical Code, CSA Part I.

1.4 These requirements cover power supplies for use as components in burglar alarm systems.

1.5 These requirements do not cover intrinsically safe power supplies for use in hazardous locations, as defined in the Canadian Electrical Code.

2. GLOSSARY

2.1 For the purpose of this Standard, the definitions (in *italic* print) shall apply.

EXTRA-LOW-VOLTAGE CIRCUIT - A *circuit* involving a potential up to and including 30 V rms (42.4 V dc or ac peak) and providing not more than 100 VA rated output. The 100 VA limit shall be provided by the construction of the transformer, a fixed impedance, a non interchangeable fuse, a non adjustable manual reset circuit protective device, or a regulating network.

HAZARDOUS LOCATION POWER SUPPLY - Power supply intended for premises, buildings, or parts thereof in which there exists the hazard of fire or explosion due to the fact that:

A Highly flammable gases, flammable volatile liquid mixtures, or other highly flammable substances are manufactured or used, or are stored in other than original containers;

B Combustible dust or flyings are likely to be present in quantities sufficient to produce an explosive or combustible mixture, or it is impracticable to prevent such dust or flyings from collecting in or upon motors or other electrical equipment in such quantities as to produce overheating through