CAN/UL 2735C:2022

STANDARD FOR SAFETY

Electric Utility Meters for Canada

SCC FOREWORD

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UL Standard for Safety for Electric Utility Meters for Canada, CAN/UL 2735C

First Edition, Dated July 15, 2022

Summary of Topics

This is the First Edition of the Standard for Electric Utility Meters for Canada, CAN/UL 2735C dated July 15, 2022, which covers the electrical safety of electricity meters rated up to 600 VAC, which measure, monitor, record, transmit, or receive electrical energy generation or consumption information.

The requirements are substantially in accordance with Proposal(s) on this subject dated December 3, 2021 and March 3, 2022.

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JULY 15, 2022

CAN/UL 2735C:2022

Standard for Electric Utility Meters for Canada

First Edition

July 15, 2022

This CAN/UL Safety Standard consists of the First Edition.

This standard has been designated as a National Standard of Canada (NSC) on July 15, 2022.

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Preface

This is the First Edition of the Standard for Electric Utility Meters for Canada, CAN/UL 2735C.

UL is accredited by the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

This Standard has been developed in compliance with the requirements of SCC for accreditation of a Standards Development Organization.

Annexes A and B, identified as normative, form a mandatory part of this Standard.

This CAN/UL 2735C Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

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.

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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This Edition of the Standard has been formally approved by the STP on Electric Utility Meters for Canada, STP 2735C.

This list represents the STP 2735C membership when the final text in this standard was balloted. Since that time, changes in the membership may have occurred.

STP 2735C Membership

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STP 2735C Membership Continued

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This Standard is intended to be used for conformity assessment.

The intended primary application of this standard is stated in its scope. It is important to note that it remains the responsibility of the user of the standard to judge its suitability for this particular application.

CETTE NORME NATIONALE DU CANADA EST DISPONIBLE EN VERSIONS FRANÇAISE ET ANGLAISE

INTRODUCTION

1 Scope

1.1 This Standard covers the electrical safety of electricity meters rated up to 600 VAC, which measure, monitor, record, transmit, or receive electrical energy generation or consumption information.

1.2 Meters covered by this Standard may be provided with one or two-way communication capabilities, by means of carrier signals, telephone, cable, wireless communication, or other methods.

1.3 Meters covered by this Standard may additionally provide signals, either by direct connection or wirelessly, for the control of electrical loads or electrical power generation equipment in response to signals received from the utility or local communication networks.

1.4 This Standard applies to detachable meters (Type “S” meters or “S-base” meters), and bottom-connected meters (Type “A” meters or “A-base” meters), intended for installation in ordinary (non-classified) locations. These may or may not be intended to be under the exclusive control of the serving utility.

1.5 This Standard does not apply to equipment intended as test equipment or equipment intended to make measurements for analysis in a laboratory or industrial setting.

2 Definitions

2.1 For the purpose of this Standard, the following definitions apply.

2.2 ACCESS PANEL – A panel or door that may be opened or removed to provide access to a portion of the meter interior.

2.3 ACCESSIBLE (part) – A meter part, conductive or non-conductive, which may be touched in normal use when the meter is installed as specified by the manufacturer, with the meter cover in place.

2.4 AUXILIARY (control) POWER SUPPLY – An electrical power supply of the meter, provided via dedicated terminal(s) in addition to the measurement terminals.

NOTE: The auxiliary power supply terminals of the meter are intended for connection to a power source separate from the measured circuit(s). For example, this type of power supply is used in applications where a meter is expected to operate when the measured circuits may be de-energized or function outside of the normal operating range of parameters (e.g. power quality monitoring).

2.5 AUXILIARY WIRING LEADS (of the meter) – Connections of meter communication ports, input/output ports, auxiliary power supply or other auxiliary ports provided on cables leaving the meter enclosure through an opening in the meter base.

2.6 BASE – The back portion of a meter that mates with the meter cover to form a complete enclosure, which supports the terminals, a hanger if provided, and provides support for sealing to the cover.

2.7 BOTTOM-CONNECTED METER (Type “A” meter or “A-BASE” meter) – A non-detachable meter that is connected using wiring terminals on the bottom of the meter.

2.8 CLEARANCE DISTANCE – The shortest distance in air between two conductive parts.

2.9 COVER – A lid or equipment covering used to protect the measurement components of a meter from external elements while allowing the viewing of the dials and nameplate information. A cover may contain other components which may be required for resetting demand and electronically reading the meter[§].