



ULC Standards
Normes ULC



ANSI/CAN/UL/ULC 6200:2019

JOINT CANADA-UNITED STATES
NATIONAL STANDARD

STANDARD FOR SAFETY

Controllers for Use in Power Production

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UL Standard for Safety for Controllers for Use in Power Production, ANSI/CAN/UL/ULC 6200:2019

First Edition, Dated May 31, 2019

Summary of Topics

The First Edition of ANSI/CAN/UL/ULC 6200 has been issued to reflect the ANSI and SCC approval dates, and to incorporate the proposals dated August 24, 2018 and February 22, 2019.

The requirements are substantially in accordance with Proposal(s) on this subject dated August 24, 2018 and February 22, 2019.

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MAY 31, 2019



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ANSI/CAN/UL/ULC 6200:2019

Standard for Controllers for Use in Power Production

First Edition

May 31, 2019

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

The most recent designation of ANSI/UL 6200 as an American National Standard (ANSI) occurred on May 31, 2019. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, Preface or SCC Foreword.

This standard has been designated as a National Standard of Canada (NSC) on May 31, 2019.

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ANNEX A (Normative) Standards for Components

ANNEX B (informative) Markings required to be translated and suggested french and spanish translations

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Preface

This is the First Edition of the ANSI/CAN/UL/ULC 6200, Standard for Controllers for Use in Power Production.

UL is accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

This Standard has been developed in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization. ULC Standards is accredited by the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

Annex [A](#), identified as Normative, forms a mandatory part of this Standard.

Annex [B](#), identified as Informative, is for information purposes only.

This ANSI/CAN/UL/ULC 6200 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of ANSI and 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 UL Standards Technical Panel (STP) on Controls for Stationary Engine Driven Assemblies, STP 6200.

This list represents the STP 6200 membership when the final text in this standard was balloted. Since that time, changes in the membership may have occurred.

STP 6200 Membership

Name	Representing	Interest Category	Region
Abrams, Michael	Aquatec Maxcon	Supply Chain	Australia
Allen, Blake K.	Marex Canada Ltd	AHJ	Canada
Basler, Michael	Basler Electric Co.	Producer	USA
Belcher, Steven	FM Gernerator	Supply Chain	USA

STP 6200 Membership Continued on Next Page

STP 6200 Membership Continued

Name	Representing	Interest Category	Region
Bush, Ken	Maryland State Fire Marshal's Office	AHJ	USA
Ching, Yonghan	Cummins Power Generation Inc	Producer	USA
Day, Rick	State of Michigan Fire Marshal Office	AHJ	USA
Dollard, James	IBEW Local 98	General Interest	USA
Dona, Mario	Self	General Interest	Australia
Eifrid, Brady	Kohler Co.	Producer	USA
Flyvholm, Jesper	DEIF A/S	Producer	Europe
George, Rick	Intertek	Testing and Standards	USA
Gumkowski, Anthony	Travelers Insurance Company	General Interest	USA
Jonas, Jeff	Generac Power Systems Inc.	Producer	USA
Jordan, Diana Pappas	Underwriters Laboratories Inc.	STP Chair – Non-voting	USA
Kovacik, John	UL LLC	Testing and Standards	USA
Martin, Derrick	Underwriters Laboratories Inc.	Project Manager (Non-Voting)	USA
Niclaus, Mike	NEC Power LLC	Commercial/Industrial User	USA
Sahota, Santokh	Simson Maxwell Ltd.	Producer	Canada
Sappington, Steven	Caterpillar Inc.	Producer	USA
Watt, Glen	Glenergy Services	AHJ	Australia
Young, Eddie	IRED Thermal Group Ltd	General Interest	Canada

International Classification for Standards (ICS): 29.240.30

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 Web site: ul.com

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 These requirements apply to control panels, control units, and other various electrical circuits employed within a control circuit device intended for support functions, maintain operation and limiting safety control features for use in a Stationary Engine Driven Assembly or similar power production equipment control applications.

1.2 These requirements cover controls operating at 600 Volts a.c. or d.c maximum with sensing and measurement circuits without the use of isolation devices and 36 kV a.c. or d.c. maximum with the use of isolation devices.

1.3 These requirements apply only to electrically operated control equipment.

1.4 These requirements apply to equipment intended to be operated and installed by qualified personnel in the field.

1.5 These requirements apply to control equipment used in or with movable engine driven assemblies that are otherwise constructed the same as stationary engine driven assemblies.

1.6 These requirements do not cover:

a) Distribution equipment which sole function is the automatic or nonautomatic transferring of one or more load conductor connections from one power source to another. In Canada the Standard for Transfer Switch Equipment is CSA C22.2 No. 178.1. In the United States it is the Standard for Transfer Switch Equipment, UL 1008.

b) Devices in the output power circuit, but would apply to pilot devices that monitor or control switching devices that control loads in power circuits.

c) Controls for the propulsion engine of a vehicle.

d) Independent equipment that does not perform any control function of an engine driven assembly or similar power production equipment control applications.

e) Equipment or devices for use in or connected to hazardous (Classified) locations.

f) Industrial Control Equipment for general use. In Canada the Standard for Industrial Control Equipment is CSA C22.2 No. 14. In the United States it is the Standard for Industrial Control Equipment, UL 508.

g) General Use Industrial Control Panels and Industrial Control Panel Assemblies other than power production. In Canada the Standard for Industrial Control Panels and Assemblies is CSA C22.2 No. 286. In the United States it is the Standard for Industrial Control Panels, UL 508A.

h) Equipment or devices for use in mobile applications.

2 General

2.1 Units of measurement

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

2.2 Verification

2.2.1 Labels and literature intended to accompany a product, such as installation, rating, operation, and user-maintenance instructions or manuals shall be reviewed in the investigation of the product.

2.3 Environmental conditions

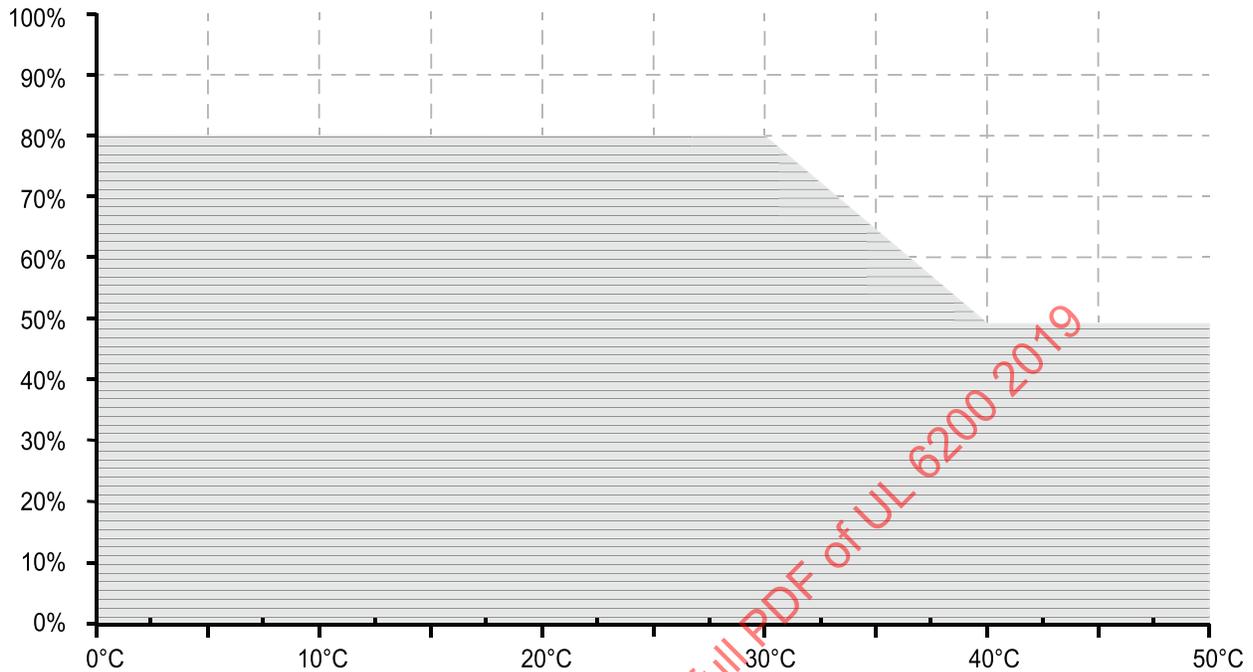
2.3.1 This standard applies to equipment designed for use under the following conditions:

- a) Indoor or outdoor use;
- b) Altitude 0 to 2000 m;
- c) Ambient temperature as declared by manufacturer or per [Table 2.1](#);
- d) Maximum relative humidity in that does not exceed the levels charted in [Figure 2.1](#);
- e) Voltage fluctuation of 90 percent to 110 percent of the nominal rated voltage for utility/mains connected equipment and 75 percent to 120 percent of the nominal rated voltage for battery connected circuits;
- f) Overvoltage Level III as defined in Insulation Coordination, CSA C22.2 No. 0.2 for Canada and Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment, UL 840 for the United States based on direct connection to distribution circuits and local to the generator assembly; and
- g) Pollution degree 3 as defined in Insulation Coordination, CSA C22.2 No. 0.2 for Canada and Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment, UL 840 for the United States.
- h) Altitudes greater than 2000 m. See Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests, IEC 60664-1 Table A.2.

Table 2.1
Ambient temperatures

	Minimum		Maximum			
	Enclosed/open equipment		Enclosed equipment		Open equipment	
	°C	°F	°C	°F	°C	°F
Indoor	0	(32)	40	(104)	55	(131)
Outdoor	minus 35	(minus 31)	55	(131)	70	(158)

Figure 2.1
Maximum relative humidity



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2.4 Components

2.4.1 Except as indicated in [2.4.2](#), a component of a product covered by this Standard shall comply with the requirements for that component. See Annex A for a list of Standards covering components generally used in the products covered by this Standard. A component shall comply with the Standards of UL or ULC or CAN/CSA Standards as appropriate for the country where the product is to be used.

Exception: PCB mounted components, such as resistors, capacitors, surface mounted inductors, semiconductor switches, and microprocessors are not evaluated as components but as an assembly feature of a PCB.

2.4.2 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.

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

2.4.4 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.