

Exceptions to Product Approval Requirements

Scope

1. With some conditions as outlined below, Ontario Electrical Safety Code (OESC) Rule 2-022 specifies the exceptions to electrical product approval requirements; see details below.
 - (a) Equipment displayed at trade shows
 - (b) Equipment connected to the output of a Class 2 power supply or equivalent
 - (c) Battery-operated equipment that is portable
 - (d) Equipment, by design, intended for use outside of Ontario
2. Additional exceptions to product approval requirements
 - (a) Fluorescent and HID Lamps, Not Self-Ballasted
 - (b) Revenue Billing Devices, Electricity Meters

1. Exception to approval requirements based on Rule 2-022

With some conditions as outlined below, Ontario Electrical Safety Code (OESC) Rule 2-022 specifies the exceptions to electrical product approval requirements, which include: equipment displayed at trade shows, equipment connected to the output of a Class 2 power supply or a limited powers supply (LPS), battery-operated equipment that is portable or equipment, by design, intended for use outside of Ontario.

(a) Electrical equipment displayed at trade shows

Unapproved electrical equipment is permitted at trade shows in Ontario provided that ESA is notified and permission to show or permission to energize has been granted. Application forms “Permission to Show” and “Permission to Energize” are available on the ESA website: <https://www.esasafe.com/business/esasaf-permits-and-inspections/inspection-forms>

Permission allows unapproved equipment to be displayed or activated for demonstration purposes only at trade shows and do not allow sale of such equipment.

(b) Electrical equipment connected to the output of an approved Class 2 power supply, or equivalent limited power supply (LPS)

Electrical equipment connected to the output of an approved Class 2 power supply* or a limited power supply (LPS)** the output of which does not exceed limits 100 V·A, with the operating voltage not more than 30 V rms, 42.4 V peak, or 60 V dc is not required to be approved, with some exceptions, see a)...f) below.

Electrical equipment is required to be approved even when connected to the output of an approved Class 2 power supply or LPS

Based on Rule 2-022 3), the following equipment shall be approved when connected to the output of Class 2 or LPS power supply:

- a) luminaires;
- b) decorative lighting strings, signs, or displays;
- c) electrical medical equipment;
- d) equipment for hazardous locations as defined under Sections 18 and 20 of the OESC;
- e) equipment that incorporates heating elements; or
- f) lighting equipment that incorporates light-emitting diodes (LEDs).

Exceptions to Product Approval Requirements

* Class 2 power supplies are certified to CAN/CSA-C22.2 No. 223, or both CAN/CSA C22.2 No. 66.1 and CAN/CSA C22.2 No. 66.3, and shall not exceed 100 V·A with the operating voltage not more than 30 V rms, 42.4 V peak, or 60 V dc.

** A limited power supply (LPS) is required to be certified to CAN/CSA-C22.2 No. 60950-1.

Note:

Approval is not required for electrical equipment connected to an approved Class 2 power supply or equivalent LPS, if the power supply is not an integral part of the end-use equipment. If the Class 2 power supply or equivalent LPS is an integral part of an end product / equipment, such as within an enclosure containing other electronic components, assemblies, sub-assemblies, etc., then the overall product / equipment shall be approved in accordance with applicable Canadian standards.

Electrical equipment used in a veterinary practice is not considered to be medical electrical equipment, as indicated by the interpretation below:

- Interpretation is provided in Medical Devices Regulations as follows: *“medical device” means a device within the meaning of the Food and Drugs Act, but does not include any device that is intended for use in relation to animals.*

Definitions:

- The OESC defines a *luminaire* as a complete lighting unit designed to accommodate the lamp(s) and to connect the lamp(s) to circuit conductors. The light source for the luminaire referenced by Subrule 3) a), b), or f) of Rule 2-022 of the OESC may be an incandescent, halogen, or light-emitting diode (LED) lamp or module, or as specified in CSA standard C22.2 No. 250.0.
- The term “Lighting string” is defined in CSA standard C22.2 No. 37-17, Decorative lighting products, as follows: *Lighting string — a factory-assembled series, series-parallel, or parallel string of lamps consisting of an attachment plug or current tap, lampholders, lamps, wire, and an overcurrent protection. A lighting string may be provided with a load fitting (cord connector), a controller, or individual lamp shades or diffusers over each individual lamp, or a combination of the above. A lighting string is intended to provide a decorative effect.*

(c) Battery-operated equipment that is portable

Based on Rule 2-022 2) c), battery-operated, portable electrical equipment is not required to be approved according to the definition of “Electrical Equipment” and the Scope of the OESC. The exception to this is provided by Rule 2-022 4) which states that battery-operated, portable equipment located in hazardous locations and equipment used to test, measure or indicate one or more electrical quantities and marked as Category III or IV, are required to be approved. Equipment in hazardous locations powered by a maximum of two button cell batteries, such as electronic wristwatches, hearing aids, or calculators, do not require approval, as they are deemed incapable of causing an ignition under normal conditions, as per ANSI/ISA-12.12.03.

The Appendix B note to Rule 2-022 states: for battery operated medical devices, as defined by the Food and Drugs Act, refer to all approval requirements of Health Canada.

Exceptions to Product Approval Requirements

(d) Equipment, by design, intended for use outside of Ontario

Based on Rule 2-022 2) d) of the OESC, electrical equipment intended solely for use outside of Ontario, such as travel adapter plugs for using electrical equipment overseas, does not require approval because there is no applicable Canadian standard or certification program.

2. Additional exceptions to product approval requirements

(a) Fluorescent and HID Lamps, Not Self-Ballasted

Currently there is no Canadian / North American standard, or certification program to which these types of lamps can be approved.

(b) Revenue Billing Devices, Electricity Meters

ESA's Bulletin 6-8-* clarifies that revenue billing devices are not required to be approved as per OESC requirements. The Bulletin provides consistent direction with respect to ESA's jurisdiction over revenue billing devices, governed by the "Weights and Measures Act" and "Electricity and Gas Inspection Act" and used by Local Distribution Companies (LDCs), licensed by the Ontario Energy Board (OEB).

Note:

Electricity meters not owned by the Local Distribution Company (LDC) or Supply Authority and used within the scope of the OESC shall be approved.