Bulletin 2-7-39 Approval of electrical equipment Rules 2-022 and 2-024

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Scope

- (1) Approval requirements
- (2) Approval of customer owned metering equipment
- (3) Approval of meter-mounted transfer switch devices

1) Approval requirements

The Ontario Electrical Safety Code (OESC) and Ontario Regulation 438/07, for Product Safety, recognize Certification Bodies accredited by the Standards Council of Canada to approve electrical equipment (Rule 2-024). Only_equipment bearing one of the marks shown in the following link are deemed acceptable by the Electrical Safety Authority (ESA): https://esasafe.com/electrical-products/recognized-certification-marks/

To meet the requirements of the OESC (Rules 2-022 and 2-024), equipment shall be approved to a recognized Canadian standard.

Photo B1 displays the European Conformity (CE) mark which is a manufacturer's self-declaration mark that **is not recognized in Canada**:

Photo B1 – CE marking is not recognized in Canada



2) Approval of customer owned metering equipment

This Bulletin is intended to provide direction for acceptance of customer owned metering to be used to monitor consumption of electricity beyond the revenue metering owned by the Local Distribution Company (LDC).

Question:

Can plug-in, in-line meters which have been approved by Measurements Canada and marked, be accepted in Ontario after the service switch?

Answer:

Yes, notwithstanding Rule 2-024 meters approved by Measurement Canada are accepted. Typically, the approval number is identified as "AE-xxxx". See an example in photo B2.

Rationale:

At this time, there are no electrical standards available for plug-in, in-line meters.

Photo B2 - Socket sub meter





3) Approval of meter-mounted transfer switch devices

Background:

There are multiple manufacturers of meter-mounted transfer switches, leading to questions about approval options for meter-mounted transfer switches. In addition to the traditional, plug in-generator inlet, some devices only accept the generator hardwired to the device.



Photo B3 - Meter-mounted transfer switch



<u>Diagram B1 - Meter-mounted</u> <u>transfer switch plug-in generator</u>

Direction:

Meter-mounted transfer switches are required to be approved. Acceptable approval options are:

- Field Evaluation to SPE 1000 by a recognized Field Evaluation agency (Inspection Body)
- Certification to UL Standard, UL1008M

ESA will continue to accept certification to UL Standard UL1008M, until Canadian version of UL1008M is developed.

Note:

Ontario Electrical Safety Code - Bulletins

<u>Meter-mounted transfer devices installed by an LEC do not require a "Notification"* or "Connection Authorization"** (Rules 2-005 f), 2-013). However, a "Notification" is required to hardwire a generator to a transfer switch since it is considered an electrical installation.</u>

* Since the installation requires connection of the transfer device neutral to the neutral in the metermounting device (meter base), these devices shall not be installed where a neutral is not present in the meter-mounting device such as a TEE Service.

**Unless required by LDC, connection authorization is not required.