
Proposal Number: 2018-OA-020

Rule 78-000, 78-200 to 78-210 and 78-052

Description of Change: Delete current Ontario Amendment to Rules 78-000 and 78-200 to 78-210, and amend Rule 78-052 (CE Code 2018) to clarify GFCI requirements for branch circuits

Submitted by: Electrical Safety Authority

Background:

Deleting these requirements as the CE Code 2018 has adopted the requirements in Ontario Amendment (OESC 2015) Rules 78-200 to 78-210 for “Non-commercial docking facilities.”

Rationale:

The following changes have been made to Section 78, which results in the requirements for “Non-commercial docking facilities” to be included in the scope, and permit deleting the Ontario Amendment OESC 2015 Rules 78-200 to 78-210:

- Title of section has changed to include “docking facilities,” “boathouses,” and “fixed and floating piers.”
- Scope (Rule 78-000) has been revised to include installation of electrical equipment on docking facilities, boathouses, fixed and floating piers, with no restriction to commercial facilities only.
- New definitions (Rule 78-002) have been added to define docking facilities, boathouses, fixed and floating piers. These definitions allow application of rules on both commercial and non-commercial docking facilities. This will warrant the deletion of the OA in Rule 78-000.
- Rule 78-202 referred receptacle requirement to Rule 78-052(4), which requires all receptacle rated at 125 V, 15 A or 20 A to be protected by GFCI Class A type. This requirement is now applicable to all docking facilities as per Rule 78-050(5) (CE Code 2018).
- Rule 78-204 referred branch circuit requirements to Rule 78-054. These requirements are now applicable to all fixed and floating boathouses and docks as per Rule 78-052(1) (CE Code 2018).
- Rule 78-206 required GFCI protection to feeders for distribution equipment in or on a boathouse or docks. This is now addressed in Rule 78-052(2) and explained in associated Appendix B note (CE Code 2018).
 - o Note: 78-052(3) in CE Code 2018 intends to require ground fault protection to branch circuits. However, the rule as written is debatable, so an Ontario amendment is proposed to clarify the requirement and reflect the intent as explained in Appendix B note.
- Rule 78-208 referred wiring methods requirements to Rule 78-058. As the scope and title of the section had changes, the general rules of the section will apply to all installations on docking facilities, boats and fixed and floating piers. Rule 78-056 (CE Code 2018) addresses wiring methods requirements, and it is part of the general rules.

- Rule 78-210 referred grounding and bonding requirements to Section 10, with exception to have equipment bonding to be only copper conductors. This is now applicable to all Section 78 installations as per General Rule 78-058 (CE Code 2018).

Proposed Change:

Delete item (c) from Rule 78-000 (OESC 2015)

78-000 Scope

This Section supplements and amends the general Sections of this Code and applies to the following installations:

- (a) marinas, yacht clubs, and similar establishments, including fixed or floating piers, that are used for the construction, repair, storage, launching, berthing, and fuelling of small craft; **and**
- (b) facilities for marine wharves, structures, and fishing harbours; **and**
- ~~(c) non-commercial docking facilities associated with a dwelling unit.~~

Delete Rules 78-200 to 78-210 (OESC 2015)

Non-commercial docking facilities

~~78-200 General~~

~~Rules 78-202 to 78-210 inclusive apply to electrical installations in non-commercial docking facilities constructed or occupied for the use of the owner or residents of the associated dwelling unit.~~

~~78-202 Receptacles~~

~~Receptacles installed for non-commercial docking facilities shall conform to the requirements of Rule 78-052(4).~~

~~78-204 Branch circuits~~

~~Receptacles installed on or in fixed or floating boathouses and docks shall conform to the requirements of Rule 78-054.~~

~~78-206 Feeders~~

~~(1) Feeders for distribution equipment in or on a boathouse or dock shall be protected by a ground fault circuit interrupter of the Class A type.~~

~~(2) Notwithstanding Subrule (1), where ground fault circuit interrupters of the Class A type are not available due to rating, the equipment shall be permitted to be provided with ground fault protection that will clear a ground fault within the time and current values specified for a Class A type interrupter.~~

~~78-208 Wiring methods~~

~~Wiring methods for non-commercial docking facilities shall conform to the requirements of Rule 78-058.~~

~~78-210 Grounding and bonding~~

~~Grounding and bonding requirements shall be in accordance with Section 10, except that an equipment bonding conductor of copper shall be used.~~

Amend Rule 78-052(2) & (3) (CE Code 2018)

2) Ground fault protection shall be provided to de-energize all normally ungrounded conductors of each feeder for distribution equipment ~~or~~ **and branch circuits** in or on fixed or floating piers, docking facilities, and boathouses, with the ground fault setting sufficient to allow normal operation of the distribution equipment, but in no case greater than 30 mA.

3) Branch circuits installed in or on fixed or floating piers, docking facilities, and boathouses **and originate from a distribution equipment that has ground fault protection on its feeder**, shall not be required to have additional ground fault protection ~~where such protection is provided in accordance with Subrule 2).~~