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TECHNICAL ADVISORY BULLETIN
Recommended Grounding for TE33-1820 Pole Mount RPN Enclosure

Date: 4/21/2020
Model #: TE33-1820 Remote Power Node Enclosure

Issue

- As there are a few configurations of the TE33-1820 RPN, additional information on grounding is required beyond what is already provided in the installation manual.

Corrective Action

- Provide detailed grounding instructions with a diagram for the pole mount TE33-1820 RPN enclosure.
- The grounding specifications and diagram depicted in this TAB are based on recommended industry best practices. However, site grounding design and construction shall always adhere to local electrical codes and the internal standards of the company that is responsible for ownership and operation of equipment.

Warning

- *Only qualified personal should install and connect the power components within the Alpha system.*
- *An enclosure that is not properly grounded presents an electrical hazard and will likely result in premature equipment failure.*
- *A proper grounding system (i.e. ground electrode system) that meets or exceeds the specifications of the equipment must be designed and installed prior to or in conjunction with the installation. The ground system must be bonded to the enclosure to ensure a "common" or "single-point" ground.*

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Grounding Instructions

1. Install a **continuous** length of #6AWG tinned solid copper ground wire (grounding electrode conductor) connecting the two driven ground rods and terminate it on the ACEG bus in the AC service disconnect enclosure. This length of conductor serves as a Vertical Ground Riser (VGR) (*Refer to Figure 1*).

   Note: *It is recommended that all buried grounding connectors are 12" below finished grade line or below the frost line. For below grade connections, crimp or mechanical connectors may be used instead of an exothermic weld provided they are listed for direct burial applications.*

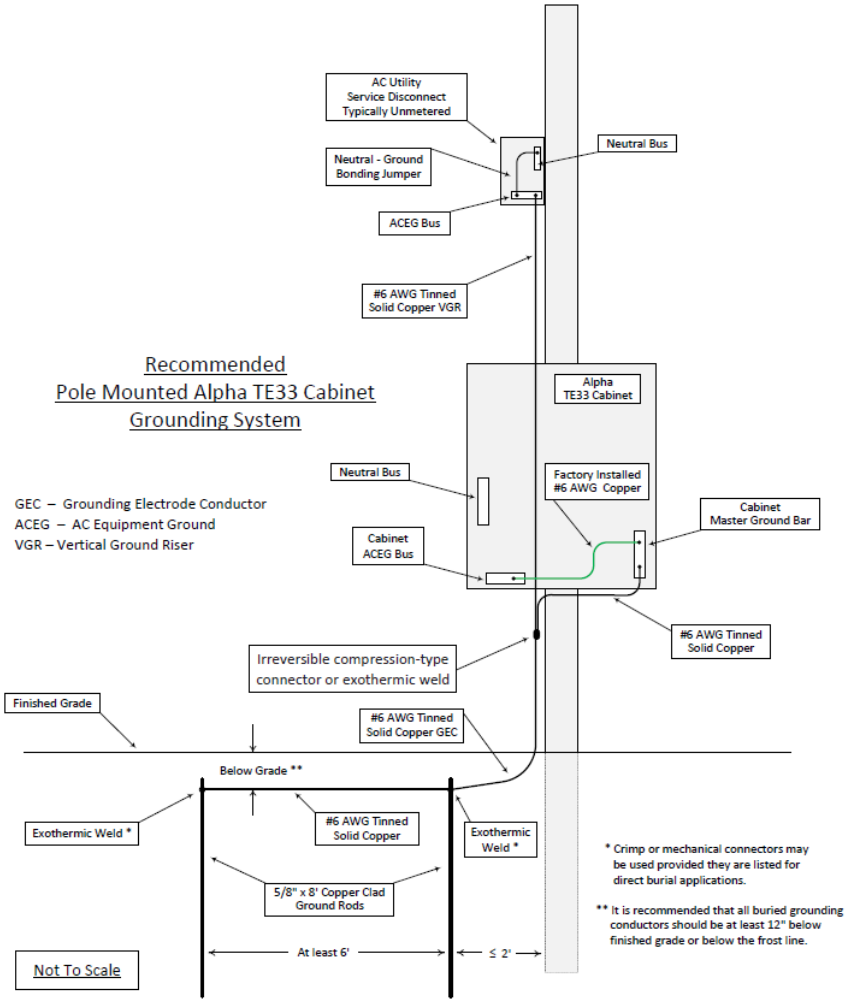

Figure 1 – TE33-1820 RPN Grounding Diagram

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2. Route a length of #6 AWG tinned solid copper conductor from a junction point with the VGR at a location below the cabinet to the Enclosure MGB, located on the right-side wall. Connect the length of conductor to the VGR via an irreversible compression connector or exothermic weld and connect the other end to the Enclosure MGB using a suitable two-hole compression lug. The enclosure MGB accepts a two-hole lug with 3/8" holes on 1" centers *(refer to Figure 2)*.

   Note: *Avoid tight radius bends and route the conductor such that it intersects with the VGR in a downward manner as illustrated in Figure 1.*

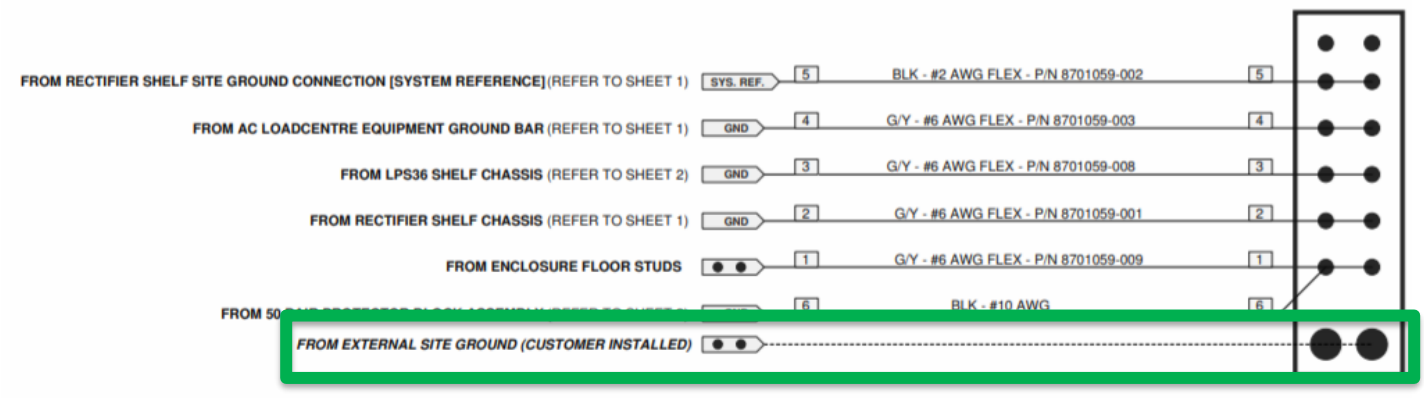

Figure 2 – TE33-1820 RPN Enclosure Master Ground Bar Wiring

For additional assistance or if you have any questions regarding this notification, please contact Alpha Technical Support at 1-888-462-7487 or www.alpha.ca/report-a-problem.

Sincerely,

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