

Conduit Stub Ups in Stationary Generators

Q Is it permissible to stub up conduits into the bottom of a stationary generator enclosure and continue the conductors out of the conduit directly into the generator itself, or do I need to continue the conduit to the generator termination box?

A It is permissible to stub up conduits into a generator enclosure and have exposed conductors inside of the generator enclosure provided that the generator is mounted on a non-combustible surface such as concrete. Stationary generators are evaluated for compliance with the Standard for Safety for Stationary Engine Generator Assemblies UL 2200 and Listed under the product category Stationary Engine Generators (FTSR), located on page 150 in the 2010 UL White Book. You can also access the Guide Information for FTSR on UL's Online Certification Directory at www.ul.com/ database and enter FTSR at the Category code search field.

UL 2200 requires that engine generators be provided with a complete enclosure. The bottom of the enclosure can be mounted on a non-combustible surface such as concrete, similar to an open bottom switchboard. Conduit stubs up into the enclosure may expose conductors within the enclosure; however, connection to the generator terminations box must be in compliance with the installation instructions and the *NEC* and be accessible to the AHJ for inspection.

Q Are wire connectors that are filled with silicone Listed to splice THWN conductors in an open bottom handhole for an outdoor parking lot light?

A Unless the wet locations connectors or their shipping carton or installation instructions state that they are for use with THWN con-

ductors, then they are not Listed for use with THWN insulated conductors.

Wire connectors Listed for wet locations are Listed under Sealed Wire Connector Systems (ZMWQ), located on page 454 in the 2010 UL White Book.

The Guide Information for (ZMWQ) states this category covers sealed wire connector systems intended for wet or damp locations and other installations, such as direct burial, below grade, or above grade where protected from direct exposure to sunlight. These systems may also be used indoors or in dry locations.

Sealed wire connector systems are intended for use in installations covered by ANSI/NFPA 70, *National Electrical Code*.

This category covers a complete system or insulating caps, covers, resins, tubing and tapes that are part of the system for use with specific wire connectors where the seal is made at the conductor. Pressure wire connectors may or may not be provided with the system.

Sealed wire connector systems are intended for use with Types USE, RHW, XHHW, RW90 EP, RW90 XLPE or TWU, 30 AWG through 2000 kcmil copper or aluminum conductors with currents not exceeding the ampacity of insulated conductors rated either 75° or 90°C and intended for use at 600 V or less.

When so marked, sealed wire connector systems may also be intended for use with conductors of single- or multiple-conductor underground feeder cable (Type UF), golf course sprinkler cable, underground low-energy cable, irrigation cable, or other cable with insulation acceptable for direct burial, below grade use, or wet locations.

The sealing medium used in these connectors has to be suitable for the conductor or cable insulation that the connectors are evaluated for use with to assure that the connector is suitable for wet locations and sealed to the elements especially in below grade applications.

Sealed wire connector systems are marked with the following:

1. catalog number
2. wire range
3. voltage rating
4. operating temperature rating
5. the statement "For Use in Wet or Damp Locations"
6. additional conductor types, if applicable

Sealed wire connector systems are also marked with all required wire connector markings and assembly information (see Wire Connectors and Soldering Lugs, ZMVV), as well as with complete assembly instructions for the sealed wire connector system.

A sealed wire connector system may additionally be marked "Direct Burial," "Raintight," "Watertight" or

"Submersible," as applicable.

All markings are located on:

1. all parts that comprise the system,
2. the packaging carton,
3. the unit container, or
4. the information sheet provided in each unit container.

The Listing Mark for these products includes the UL symbol together with the word "LISTED," a control number, and the product name "Sealed Wire Connector System."

You can also access the Guide Information for ZMWQ on UL's Online Certification Directory at www.ul.com/database and enter ZMWQ at the Category code search field.