CERTIFICATE OF COMPLIANCE

Certificate Number 20170918-E91151

Report Reference E91151-20041213

Issue Date 2017-SEPTEMBER-18

Issued to: TYCO ELECTRONICS CORP

2901 FULLING MILL RD

MIDDLETOWN PA 17057-3170

This is to certify that representative samples of

SEALED WIRE-CONNECTOR SYSTEMS

Insulating, Splicing Sleeves for Underground Conductors, Part Nos. GelWrap, followed by 18/4, followed by followed by a three or four digit numeric code, followed by UL, may be followed by a three digit alphanumeric code, may be followed by SGL or the letter B and a two digit number; Part Nos. GelWrap-UF-250UL and GELWRAP-UFXT-450UL, may be followed by a three digit alphanumeric code, may be followed by SGL or the letter B and a two digit number; all model numbers may have a 4 digit alphanumeric prefix.

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL486D, Standard for Sealed Wire Connector Systems

CSA C22.2 No. 198.2-05, Standard for Sealed Wire

Connector Systems

Additional Information: See the UL Online Certifications Directory at

www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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DESCRIPTION

PRODUCT COVERED:

USL, CNL -Insulating, Splicing Sleeves for Underground Conductors, Part Nos. GelWrap, followed by 18/4, followed by **followed by a three or four digit numeric code**, followed by UL, may be followed by a three digit alphanumeric code, may be followed by SGL or the letter B and a two digit number; Part Nos. GelWrap-UF-250UL and GELWRAP-UFXT-450UL, may be followed by a three digit alphanumeric code, may be followed by SGL or the letter B and a two digit number; all model numbers may have a 4 digit alphanumeric prefix.

RATINGS:

18/4 Models

Voltage Rating: 600 V,

Wire Range - 14-4/0 AWG

Models GelWrap-UF-250UL and GELWRAP-UFXT-450UL

Voltage Rating - 600 V

Wire Range - Nos. $14-8\,$ AWG, two or three conductors plus a ground UF cable; copper wire only.

Tightening Torque - For models incorporating Unlisted Component Terminal Block UFCH - 8 in lb; For models incorporating Unlisted Component Terminal Block R-795 - 7 in lb; For models incorporating Unlisted Component Terminal Block R-1661 - 15 in lb

Wire Strip Length - For models incorporating Unlisted Component Terminal Block UFCH - 5/8 in.; For models incorporating Unlisted Component Terminal Block R-795 or R-1661 - 1/2 in.

ENGINEERING CONSIDERATION (NOT FOR FIELD REPRESENTATIVE'S USE):

18/4 models are wrap around gel filled splice sleeves which consist of two materials for outer body and gel. They are intended to be installed over Listed, crimp-type, splicing wire connectors with Listed stainless steel tie wraps. The connectors are not supplied with the system. Models Part Nos. Gelwrap-UF-250UL and GELWRAP-UFXT-450UL are kits which are supplied with connectors.

* USL indicates investigation to the Standard for Insulated Wire Connector Systems for Underground Use or in Damp or Wet Locations, UL 486D.

CNL indicates investigation to the following Canadian Standards:

CAN/CSA C22.2 No. 0-M91- General Requirements - Canadian Electrical Code, Part II

CAN/CSA C22.2 No. 198.2-M1986 - Underground Cable Splicing Kits

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NOMENCLATURE:

- (a) GelWrap-(b)-(c)-UL-(d)-(e)
- (a) Four digit alphanumeric prefix designating customer specific packaging or private label (optional)

Basic Cat. No. - GelWrap

- (b) Size/type
- *___18/4
- (c) Three or four digit numeric code sleeve length in millimeters
 UF-250
 UFXT-450
- (d) Three digit alphanumeric code designating customer specific packaging or private label (optional)

CONSTRUCTION DETAILS:

General -

Markings - The following shall be marked, in its entirety, on the tubing unit container or on an information sheet provided in each unit container.

For All Part Nos.:

- 1. Listee's name or Tradename "Raychem".
- 2. Cat No.
- 3. Maximum dimensions of the Listed connectors intended to be used with the wraps (18/4 models only).
- 4. Statement indicating that the specific crimping tool recommended by the Listed connector manufacturer shall be used(18/4 models only).
- 5. Statement indicating that the system has been found acceptable for insulating a pressure wire connector and is intended for burial directly in the earth.
- 6. Electrical rating (600 V)
- 7. Wire Range

Additional For Part Nos. GelWrap-UF-250UL and GELWRAP-UFXT-450UL:

- 1. Wire Range and Type(as specified in ratings section)
- 2. Tightening torque(either "8 in-lbs", "7 in-lbs" or "15 in-lbs" as specified in ratings section)
- 3. Wire Strip Length(either "1/2 in" or "5/8 in" as specified in ratings section)

The following optional markings may also be included on all models:

1. "Submersible"

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INSTALLATION INSTRUCTIONS:

Provided with each unit container. Refer to Ill. 1 for example.

Installation instructions for 18/4 models shall include the following items along **with items** 1-3 (or the equivalent) in Ill.1

- 1.) Max Compression Connector diameter 0.85 in. (22 mm)
- 2.) Max Mechanical Connector Dimensions (H x W): 1.2 x 1.1 in. (30 x 28 mm)
- 3.) Minimum Seal Length: 2 in.(50 mm) along with an image of how to determine seal length measurements

Installation instructions for models GelWrap-UF-250UL and GELWRAP-UFXT-450UL shall include the following items along with items $1\ -3$ (or the equivalent) in Ill.1

1) Minimum Seal Length: 2-1/2 in.(75 mm) along with an image of how to determine seal length measurements