

## **Energy Division**

# Raychem TFT-R Tool Free Termination

The TFT-R elastomeric medium voltage cable termination is available for both shielded and non-shielded indoor and outdoor applications. TFT-R terminations are designed for customers who prefer cold applied terminations.

The TFT-R termination is the latest advancement in cold-applied terminations. These terminations feature an advanced stress control system using metal oxide matrix technology that provides superior electrical performance.

The TFT-R terminations feature an outer elastomeric insulation tubing formulated for long-term performance in extreme environments. The tubing comes with a pre-lubricated, crush resistant core (holdout) for simple installation\*. The superior elastomeric insulation tubing, together with the positive positioned stress control system and moisture sealing mastic, provide simple, reliable, and consistent installations.

TFT-R, TFT-G, and TFT-R-SG terminations are designed for 5/8, 15, 25 and 35 kV single conductor shielded and non-shielded extruded dielectric cables up to 1250 kcmil.

## **Key Benefits**

- Provides maintenance free, long life even in highly contaminated areas
- Material does not degrade in outdoor applications, outstanding UV stability
- Stress control patch provides excellent electrical performance and prevents misplacement of stress control system

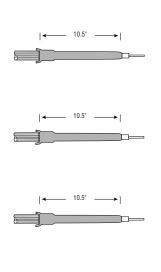
- Crush resistant core prevents collapsing due to rough handling\*
- Quick and easy installation
- Seals out all moisture and contamination
- Provides easier installation in confined spaces
- Fewer kits to accommodate a wider range of cable sizes
- Termination can be adjusted for proper position after installation on cable
- Terminations meet or exceed industry standards
- **Note: (\*)** excludes TFT-P-R variety, as holdouts are not used.

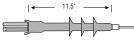


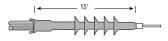
### **Kit Contents**

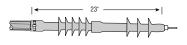
Each TFT-R, TFT-R-G, and TFT-R-SG termination kit contains an outer elastomeric insulation tubing on a pre-lubricated, crush resistant core (holdout), a stress control patch, sealing mastic, grounding components, and installation instructions.

TFT-R-G and TFT-R-SG termination kits also include cable prep and cleaning components.









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## Installation

Each kit contains an easy to follow installation instruction with visual displays of the installation steps. Installation is fast and simple. The selection guide can assist with selecting the appropriate kit for your specific cable size.

### **Specifications**

The TFT-R terminations meet or exceed all rating requirements of IEEE 48-1996 for Class 1 terminations.

For special applications, contact your local Tyco Electronics sales office.

#### Product Selection Guide and Application Dimensions: Selection Information: dimensions in inches (millimeters)

|                 | Nominal Conductor Size   | (5 and 8 kV)         | Min./Max. Insulation ODs |
|-----------------|--------------------------|----------------------|--------------------------|
| TET-D-D (Shia   | Ided, Indoor) PUSH ON IN | STALL ΔΤΙΟΝ          |                          |
|                 | 5 kV/8 kV                |                      |                          |
| TFT-P-80R       | #6 - #2 AWG              |                      | 0.39 - 0.61" (10 - 16)   |
|                 | 10 1127000               |                      | 0.00 0.01 (10 10)        |
| TFT-R (Non-Shi  | elded, Indoor and Outdoo | r)                   |                          |
|                 | 5 kV                     | *                    |                          |
| TFT-50R         | #2 - 3/0 AWG             |                      | 0.53 - 0.80" (13 - 20)   |
| TFT-51R         | #1 AWG - 350 kcmil       |                      | 0.64 - 1.09" (16 - 28)   |
| TFT-52R         | 250 - 750 kcmil          |                      | 0.85 - 1.45" (22 - 37)   |
| TFT-53R         | 500 - 1250 kcmil         |                      | 1.06 - 1.70" (27 - 43)   |
| TFT-54R         | 1000 - 2000 kcmil        |                      | 1.49 - 2.20" (38 - 56)   |
|                 |                          |                      |                          |
| TFT-R-G (Shield | ded, Indoor and Outdoor) |                      |                          |
|                 | 5 kV                     | 8 kV                 |                          |
| TFT-150R-G      | #2 - 3/0 AWG             | #2 - 3/0 AWG         | 0.53 - 0.80" (13 - 20)   |
| TFT-151R-G      | #2/0 AWG - 500 kcmil     | #1/0 AWG - 350 kcmil | 0.64 - 1.09" (16 - 28)   |
| TFT-152R-G      | 350 - 1000 kcmil         | 250 - 750 kcmil      | 0.85 - 1.45" (22 - 37)   |
| TFT-153R-G      | 750 - 1250 kcmil         | 500 - 1000 kcmil     | 1.06 - 1.70" (27 - 43)   |
|                 |                          |                      |                          |
| TFT-R-G (Shield |                          |                      |                          |
|                 | 15 kV                    |                      |                          |
| TFT-150R-G      | #2 - 3/0 AWG             |                      | 0.53 - 0.80" (13 - 20)   |
| TFT-151R-G      | #2 - 250 kcmil           |                      | 0.64 - 1.09" (16 - 28)   |
| TFT-152R-G      | 4/0 - 500 kcmil          |                      | 0.85 - 1.45" (22 - 37)   |
| TFT-153R-G      | 500 - 750 kcmil          |                      | 1.06 - 1.70" (27 - 43)   |
|                 |                          |                      |                          |
| TFT-R-SG (Shie  | lded, Outdoor)           |                      |                          |
|                 | 15 kV                    |                      |                          |
| TFT-151R-SG     | #2 - 250 kcmil           |                      | 0.64 - 1.09" (16 - 28)   |
| TFT-152R-SG     | 4/0 - 500 kcmil          |                      | 0.85 - 1.45" (22 - 37)   |
| TFT-153R-SG     | 500 - 750 kcmil          |                      | 1.06 - 1.70" (27 - 43)   |
| TFT-154R-SG     | 1000 - 1250 kcmil        |                      | 1.49 - 2.20" (38 - 56)   |
|                 | 25 kV                    |                      |                          |
| TFT-251R-SG     | #1 - 3/0 AWG             |                      | 0.64 - 1.09" (16 - 28)   |
| TFT-252R-SG     | #2/0 - 500 kcmil         |                      | 0.85 - 1.45" (22 - 37)   |
| TFT-252R-SG     | 250 - 750 kcmil          |                      | 1.06 - 1.70" (27 - 43)   |
| TFT-253R-SG     | 750 - 1250 kcmil         |                      | 1.49 - 2.20" (38 - 56)   |
| 1F1-254K-5G     | 750 - 1250 KCITIII       |                      | 1.49 - 2.20 (38 - 36)    |
|                 | 35 kV                    |                      |                          |
| TFT-352R-SG     | 1/0 - 250 kcmil          |                      | 0.85 - 1.45" (22 - 37)   |
| TFT-353R-SG     | 4/0 - 500 kcmil          |                      | 1.06 - 1.70" (27 - 43)   |
| TFT-354R-SG     | 500 - 1250 kcmil         |                      | 1.49 - 2.20" (38 - 56)   |

100 and 133% compact and concentric stranded cable dimensions. 25 and 35 kV ODs are based on 100% compact and concentric stranded cable dimensions.

| Related Product Information:   | 15 kV -Test Report: EDR-5302   25 kV -Test Report: EDR-5303   35 kV -Test Report: EDR-5299<br>Indoor - Nonshedded -Test Report: EDR-5306   TFT-P  -Test Report: EDR-5527  |  |  |
|--|---|--|--|
| Packaging:   | Standard packaging is three terminations per box.   |  |  |
| Available Accessories:   | The BRKT series of stainless steel cable mounting brackets are available.   |  |  |
|  | Four sizes of brackets accommodate cable diameters from 0.80-2.40".   |  |  |
|  | The MOD-3-TFT series of three conductor modification kits are available. Kits provide rejacketing of phase conductors and breakout seals. A complete line of Utilux copper compression terminals are also available.  |  |  |
| Related Product Information:   | NCTR-99-065 - Salt fog and tensile strength test report.  |  |  |
|  |   |  |  |
| Tyco Electronics Corporation<br>8000 Purfoy Road<br>Fuquay Varina, NC 27526-9349<br>Tel: 800.327.6996<br>Fax: 800.527.8350 | All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding<br>and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the<br>suitability of each product for the desired application. Under no circumstances does this constitute an assurance of<br>any particular quality or performance. Such an assurance is only provided in the context of our product specifications<br>or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions |  |  |

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Energy Division - a pioneer in the development of economical solutions for the electrical power industry. Our product range includes: Cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.