IDC Splice/Poke-In Tap Connector

114-13151 11 DEC 07 Rev C



All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of ± 0.13 [± 0.05] and angles have a tolerance of $\pm 2^{\circ}$. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

This specification covers the requirements for application of IDC Splice/Poke–In Tap Connector used to accommodate termination of power wiring (tap) out to individual commercial ballast lighting fixtures. The splice allows feed through in 12 AWG (stranded and solid) or 18 AWG (solid) THHN/THWN wire. The Poke–In Tap accommodates two 18 AWG pre–stripped solid wires.

The connectors are marked with the applicable wire size and are color–coded for identification. Each connector consists of two pre–assembled housings: the wire splice housing (also referred to as contact retainer or blade), and the wire splice stuffer (also referred to as wire entry) housing. Attached to the wire splice housing is a U–shaped contact. The housing contains two 18 AWG wire holes. Each hole accepts only one 18 AWG wire. The wire splice stuffer housing contains a wire stuffer which forces the wires into the contact slots when the housings are pressed together for termination. The housing provides strain relief for the wire after termination. The connectors are available in loose–piece form for terminating with factory flat rock tooling or manual hand–held tools.

When corresponding with Tyco Electronics Personnel, use the terminology provided in this specification to facilitate your inquiries for information. Basic terms and features of this product are provided in Figure 1.

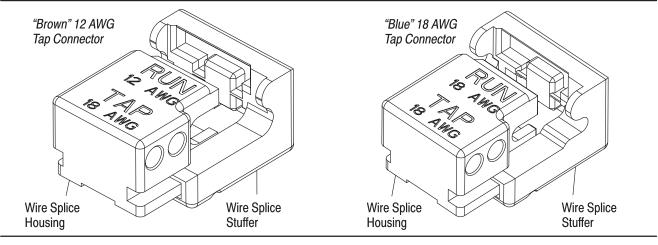


Figure 1

2. REFERENCE MATERIAL

2.1. Revision Summary

- · Updated document to corporate requirements
- New format
- Updated Section 4, QUALIFICATIONS

2.2. Customer Assistance

Reference Product Part Number 1811027 and Product Code 6057 are representative of the IDC Splice/Poke—In Tap Connector. Use of these numbers will identify the product line and expedite your inquiries through a service network established to help you obtain product and tooling information. Such information can be obtained through a local Tyco Electronics Representative or, after purchase, by calling Product Information at the number at the bottom of this page.

2.3. Drawings

Customer Drawings for product part numbers are available from the service network. If there is a conflict between the information contained in the Customer Drawings and this specification or with any other technical documentation supplied, call the Product Information number at the bottom of this page.

2.4. Specifications

Product Specification 108–2219 provides expected product performance and test information for the IDC Splice/Poke–In Tap Connector.

3. REQUIREMENTS

3.1. Safety

Do not stack product shipping containers so high that the containers buckle or deform.

3.2. Limitations

The connectors are designed to operate in a temperature range of -55° to 105°C [-67° to 221°F]

3.3. Material

The housing is made of thermoplastic, 94– V–0 rated for flame retardant connectors and is RoHS compliant. The contact and blade are made of copper alloy with a pre–tin plating.

3.4. Storage

A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the connector material.

B. Shelf Life

The connectors should remain in the shipping containers until ready for use to prevent deformation. The connectors should be used on a first in, first out basis to avoid storage contamination that could adversely affect performance.

3.5. Color Code

The housing of the connectors is a certain color to indicate the available designations. The color code is stated in Figure 2.

CONNECTOR COLOR	FEED THRU WIRE SIZE
BLUE	18 AWG
BROWN	12 AWG

Figure 2

3.6. Wire Selection and Preparation

These connectors will accept 12 AWG (19 strands maximum) or 18 AWG (solid) copper wire for the continuous feed–thru IDC area. The 18 AWG solid wire strip length is 9.53 ±0.8 mm [.375 ±.031 in.] for the poke–in cavities with an insulation range of 1.50 to 2.50 mm [.059 to .098 in.] diameter.

3.7. Termination Requirements



The connector is shipped to the customer in the "Open" position (first retention latch).

- 1. Place the "run wire" in the connector in the IDC area. See Figure 3A.
- 2. Close the connector to the final lock position. See Figure 3B.
- 3. Insert the stripped poke-in wires all the way. See Figure 3C.

The tap wires must be bottomed in the poke—in cavities, and the through wire must be fully contained in the housing side slot and extend past the housing. The terminated closed connector must meet the dimensions provided in Figure 3D.

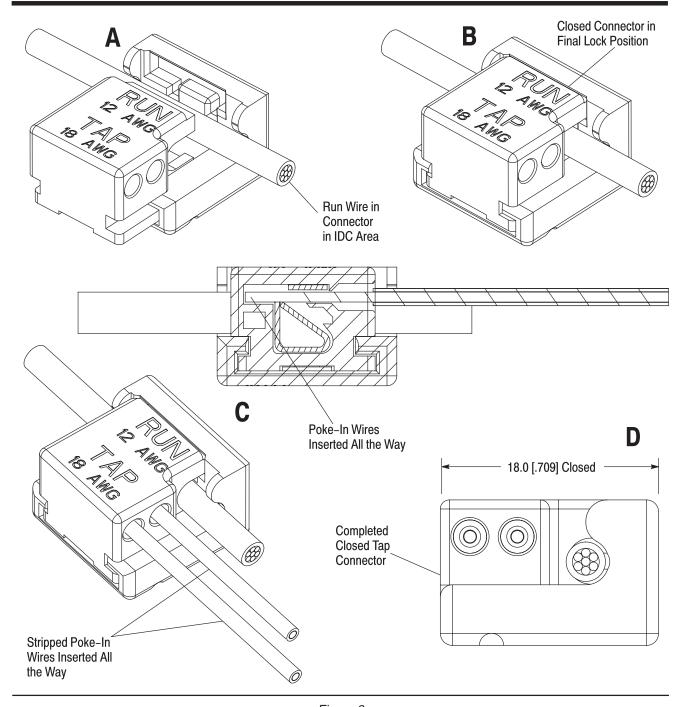


Figure 3

3.8. Repair/Replacement

Terminated connectors must NOT be re—used by removing the wires. Defective connectors must be discarded and replaced.

4. QUALIFICATIONS

This product line has been evaluated and Component Recognized by cURus in File E13288.

5. TOOLING

No special tooling is required for termination of this product line. Flat rock tooling may be used to make harness assemblies in the production facility, and field terminations may be made using channel lock style pliers.

6. VISUAL AID

Figure 4 shows a typical application of an IDC Splice/Poke–In Tap Connector. This illustration should be used by production personnel to ensure a correctly applied product. Applications which DO NOT appear correct should be inspected using the information in the preceding pages of this specification.

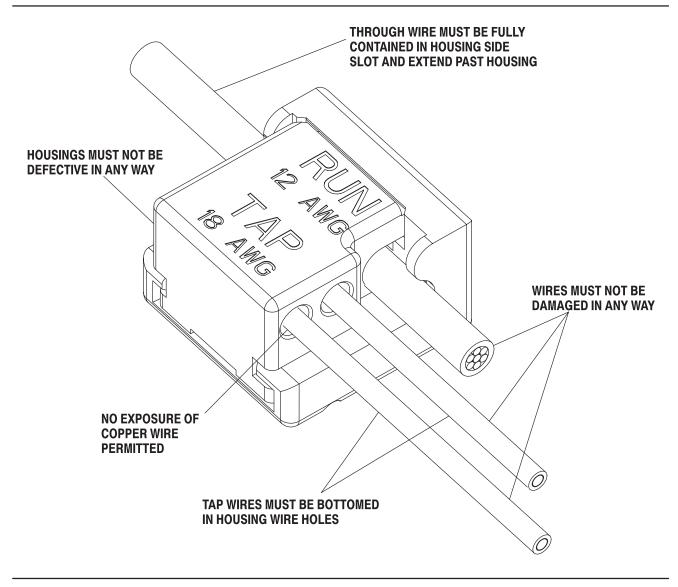


FIGURE 4. VISUAL AID