



Induction Heat Treat Terminated Ring Tongue Terminal for Copper Litz Wire

1. SCOPE

1.1. Content

This specification covers the electrical and mechanical performance requirements for Anti-Rotational Ring Tongue terminal 62613-2 terminated using the crimp and induction heat treat termination process.

1.2. Qualification

When tests are performed on the subject product , procedures specified in Figure 1 shall be used. All inspections shall be performed using the applicable inspection plan and product drawing 62613.

1.3. Qualification Test Results

Successful qualification testing on the subject product line has not yet been completed.

2. APPLICABLE DOCUMENTS AND FORMS

The following documents and forms constitute a part of this specification to the extent specified herein. Unless otherwise indicated, the latest edition of the document applies.

2.1. Industry Documents

- EIA-364: Electrical Connector/Socket Test Procedures Including Environmental Classifications
- UL486: UL Standard for wire connectors

3. REQUIREMENTS

3.1. Design and Construction

Product shall be of the design, construction, materials and physical dimensions specified on the applicable product drawing 62613.

3.2. Test Requirements and Procedures Summary

Unless otherwise specified, all tests shall be performed at ambient environmental conditions.

TEST DESCRIPTION	REQUIREMENT		PROCEDURE
Examination of product	Meets requirements of product drawing.		EIA-364-18 Method B Visual,dimensional and functional as per applicable inspection plan and no physical damage.
MECHANICAL			
Crimp tensile strength	Conductor size AWG (mm ²)	Minimum tensile force N(lbs)	UL486 Speed of tensile testing machine to be 25.4 mm/min. test until breakage or pull-out
	12(3.3)	312 (70)	
	10(5.3)	356 (80)	

ELECTRICAL			
Low Level Contact Resistance	Measure LLCR initially and after 500 cycles of Current Cycling 1.00 mΩ max initial 1.20 mΩ max final Resistance measurement = crimp + 1.5" wire		EIA-364-23 Subject specimens to 100mA max and 20 mV max open circuit voltage
Static-heating test	Conductor size, AWG (mm ²)	Assigned maximum ampere rating (A)	Static-heating test current (A)
	12(3.31)	20	20
	10(5.26)	30	30
Current Cycling	Conductor size, AWG (mm ²)	Current Cycling test current (A)	
	12(3.31)	28	
	10(5.26)	45	
			EIA-364-55 Subject terminals to 500 cycles of 45 min ON / 15 min OFF at specified current. Temperature rise shall not exceed 125 C above ambient temperature

Figure 1



NOTE

Shall meet visual requirements, show no physical damage, and meet requirements of additional tests specified in the Product Qualification and Requalification Test Sequence shown in Fig 2.

3.3. Product Qualification and Requalification Test Sequence

TEST OR EXAMINATION (a)	TEST GROUP		
	A	B	C
	TEST SEQUENCE (b)		
Examination of product	1	1	1
Crimp tensile strength	2		
Static-heating test		2	
Low Level Contact Resistance			2,4
Current Cycling			3

Figure 2



NOTE

(a) Samples shall be prepared in accordance with applicable instruction sheets. They shall be selected at random from current production.

(b) Numbers indicate sequence in which tests are performed.