
AMP CO Plus 4 Ports Insert

1. SCOPE

1.1 Content

This specification covers performance, tests and quality requirements for AMP* CO 4 Ports Insert. This assembly provides a universal connection interface between premise wiring of an office and the user's network of communications equipment. These products allow 4 connections over 1 cable and must be used only with compact boots.

1.2 Qualification

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

2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

2.1 Tyco Electronics Documents

- A. 109-197: AMP Test Specifications vs EIA and IEC Test Methods
- B. 501-93011: Qualification Test Report
- C. C-1644016: Insert 4x RJ45 TEL FR style
- D. C-1711000: Insert 4x RJ45 TEL
- E. C-1711001: Insert 4s RJ45 TEL 100ohm term

2.2 Other Documents

- A. EN 50173: Information Technology; Generic Cabling Systems
- B. ANSI/TIA/EIA 568-B.2: Commercial Building Telecommunications Cabling Standard
- C. IEC 60512: Basic testing procedures and measuring methods for electromechanical components for electronic equipment, Test Specifications as indicated in Fig. 1
- D. IEC 60068: Basic Environmental testing procedures, Test Spec. as in Fig. 1

3. REQUIREMENTS

3.1 Design and Construction

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

3.2 Materials

Materials shall be as specified on applicable product drawing.

3.3 Ratings

- A. Voltage: 150 V ac max.
- B. Current: signal application only
- C. Temperature: -40 to 70 °C

3.4 Performance and Test Description

Product is designed to meet electrical, mechanical and environmental performance requirements specified in Figure 1. Unless otherwise specified, all tests shall be performed at ambient environmental conditions in accordance with 5.3.1. of IEC 60068-1.

3.5 Test Requirements and Procedures Summary

Test Description	Requirement	Procedure
Examination of Product	Meets requirements of product drawing	Visual, dimensional and functional per applicable quality inspection plan
ELECTRICAL		
Input-Output Resistance	Max. 200 mΩ, initial and final	IEC 60512-2 Test 2a Subject samples to 20 mV open circuit at max. 100 mA See Figure 3
Insulation Resistance	Min. 500 MΩ	IEC 60512-2, Test 3a Test at 500 V dc between adjacent contacts
Dielectric Withstanding Voltage	1000 V dc or ac peak 1 minute hold max. 5 mA leakage current	IEC 60512-2, Test 4a Test between adjacent contacts
Current-Carrying Capacity	0.75 A dc Applicable for an ambient temperature of 60 °C	IEC 60512-3 Test 5b See Figure 4
ENVIRONMENTAL		
Stress Relaxation	See Note	IEC 60068-2-2, Test Method 9b. Subject samples to temperature life at 70 °C for 500 hours
Corrosion Testing	See Note	IEC 60512-11-7 Test Conditions: SO ₂ 0,5 ppm (Volume) H ₂ S 0,1 ppm (Volume) T= (25 ± 2)°C HR= (75 ± 3) % Test time 4 days

NOTE

Shall meet visual requirements, show no physical damage and shall meet requirements of additional tests as specified in Test Sequence in Figure 2.

Figure 1

3.6 Product Qualification and Requalification Test Sequence

Test or Examination	Test Group (a)					
	1	2	3	4	5	6
	Test Sequence (b)					
Examination of Product	1,5	1,10	1,5			
Termination resistance and shielded termination resistance		2,9	2,4			
Insulation resistance		4,8				
Dielectric withstanding voltage		5,7				
Current-carrying capacity		3				
Transmission parameters	2,4(c)					
Stress relaxation	3	6				
Corrosion testing			3			

NOTE

- (a) See Para 4.1.A
- (b) Numbers indicate sequence in which tests are performed
- 4(c) Perform only NEXT, RL & Attenuation according to ANSI/TIA

Figure 2

4. QUALITY ASSURANCE PROVISIONS

4.1 Qualification Testing

A. Sample Selection

Samples shall be prepared in accordance with applicable Instruction Sheets and shall be selected at random from current production. All test groups shall each consist of a minimum of 5 samples.

B. Test Sequence

Qualification inspection shall be verified by testing samples as specified in Figure 2.

4.2 Requalification Testing

If changes significantly affecting form, fit or function are made to the product or manufacturing process, product assurance shall coordinate requalification testing, consisting of all or part of the original testing sequence as determined by development / product, quality and reliability engineering.

4.3 Acceptance

Acceptance is based in verification that the product meets the requirements of Figure 1. Failures attributed to equipment, test setup or operator deficiencies shall not disqualify the product. When product failure occurs, corrective action shall be taken and samples resubmitted for qualification. Testing to confirm corrective action is required before resubmittal.

4.4 Quality Conformance Inspection

Applicable Tyco AMP quality inspection plan will specify the sampling acceptable quality level to be used. Dimensional and functional requirements shall be in accordance with applicable product drawing and this specification.

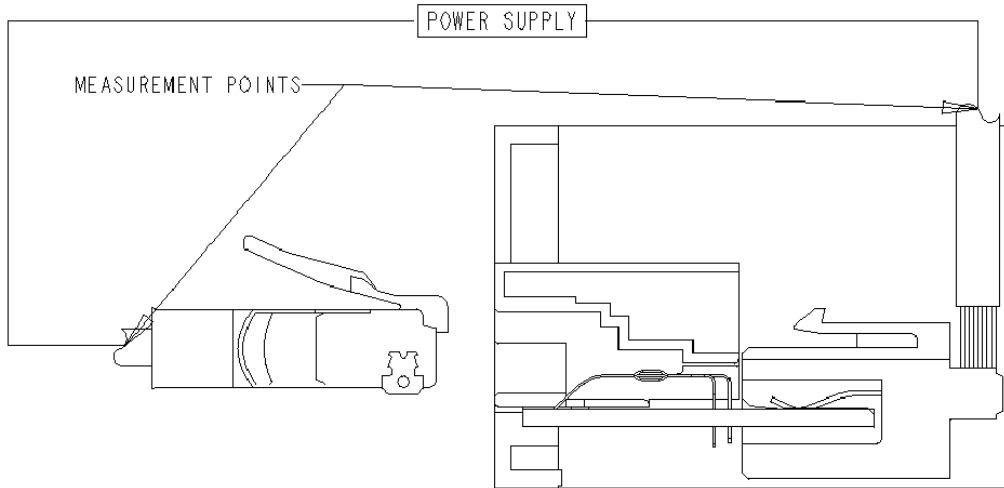


Figure 3

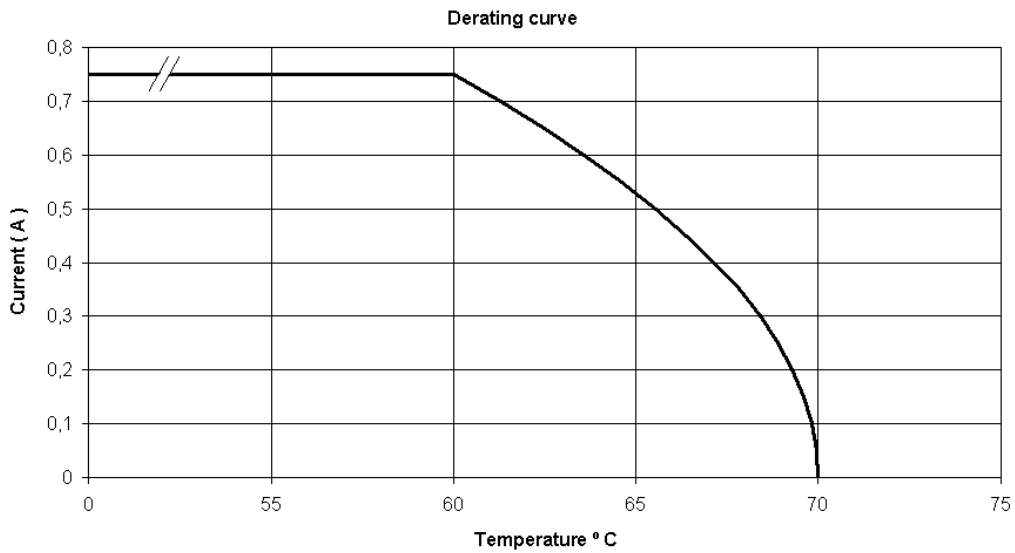


Figure 4