1. INTRODUCTION

1.1 Purpose

Tests were performed on AMPTRAC UPGRADE KIT, to determine its conformance to the requirements of AMP Product Specification 108-22138, Rev. C.

1.2 Scope

This report covers the electrical, mechanical and environmental performance of the AMPTRAC UPGRADE KIT, manufactured by Tyco Electronics Raychem S. A.

The tests were performed between July 13 and September 13, 2006.

1.3 Conclusion

The AMPTRAC UPGRADE KIT meets the electrical, mechanical and environmental performance requirements of AMP Product Specification 108-22138, Rev. C.

1.4 Product Description

The AMPTRAC SYSTEM is used as an Intelligent Infrastructure Management.

1.5 Test Samples

The test samples were randomly selected from normal current production lots, and the following part numbers were used for test:

Test Group	Qty	Part Number	Description
1	1	1711148-1	AMPTRAC UPGRADE KIT
2	1	1711148-1	AMPTRAC UPGRADE KIT
3	1	1644042-1 (1711148-1 + 1644042-2)	PATCH PANEL 24 PORTS Cat 6 SHIELDED WITH AMPTRAC APPLICATION
4	1	1644042-1 (1711148-1 + 1644042-2)	PATCH PANEL 24 PORTS Cat 6 SHIELDED WITH AMPTRAC APPLICATION

Auxiliary material: Plugs from patch cord AMPTRAC P.N. 1711186-2.

1.6 Qualification Test Sequence

Sequence 1 (Samples 1 and 3):
Initial input to output resistance.
Initial insulation resistance.
Stress Relaxation.
Final insulation resistance.
Final input to output resistance.
Dielectric withstanding voltage.

Sequence 2 (Samples 2 and 4):
Initial input to output resistance.
Corrosion.
Final input to output resistance.

2. SUMMARY OF TESTING

2.1 Examination of product – All Samples

All samples submitted for testing were selected from normal current production lots. They were inspected and accepted by the product Assurance Department.

2.2 Input to output Resistance – All Samples.

All termination resistance measured values with low level method must be lower than 20 Ohm (maximum specified value):
Maximum measured values were lower than 1 Ohm.

2.3 Insulation Resistance – Samples 1 and 3.

All initial insulation resistance measurements values must be higher than $5 \cdot 10^{8}$ Ohm (minimum specified value):
Minimum measured values were higher than $5.0 \cdot 10^{10}$ Ohm.

2.4 Dielectric Withstanding Voltage – Samples 1 and 3.

No dielectric breakdown or flashover occurred during the test, having applied 1500 V AC peak between contacts and shield and 1000 V AC peak between adjacent contacts.

2.5 Stress Relaxation – Samples 1 and 3.

No physical damage occurred to the samples after Stress Relaxation test.

2.6 Corrosion Testing – Samples 2 and 4.

No physical damage occurred to the samples after Corrosion test.

3. TESTS METHODS

3.1 Examination of product (Reference Standard: IEC 60512, test 1a, 1b)
Product drawings and inspections plans were used to examine the samples. They were examined visually and functionally.

3.2 Input to output Resistance (Reference Standard: IEC 60512, test 2a)
Input to output resistance measurements at low level current were made using four terminal techniques.

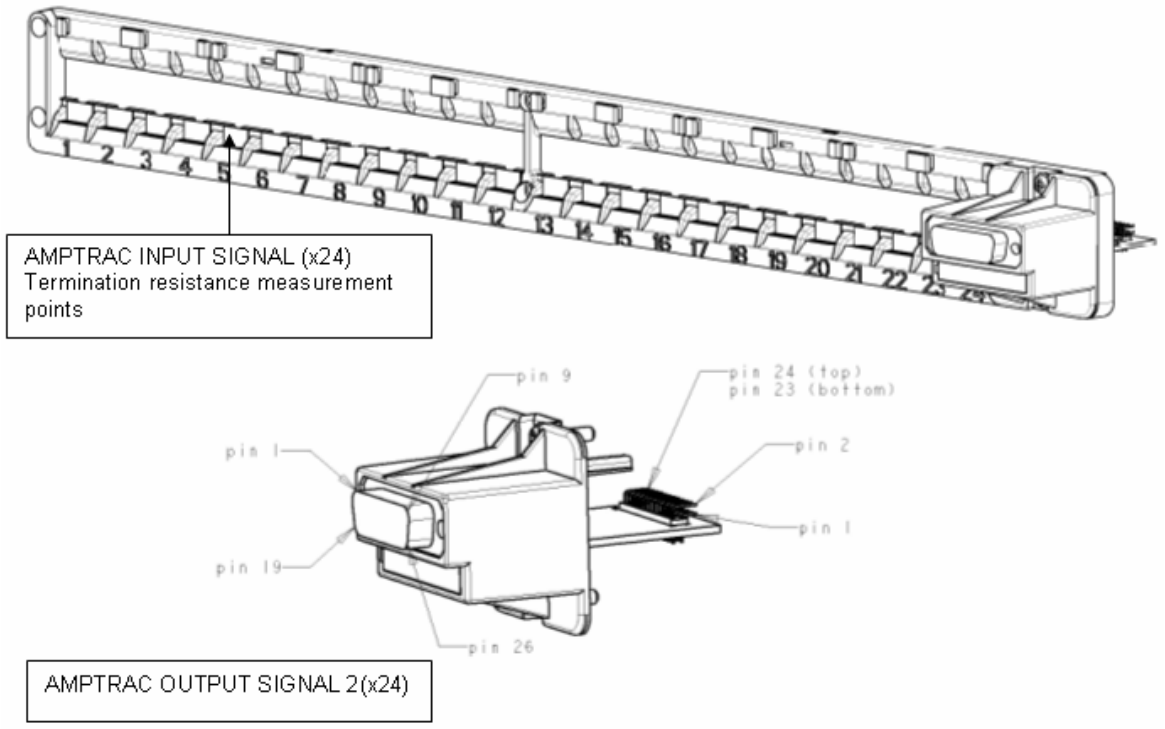

Figure 1

3.3 Insulation Resistance (Reference Standard: IEC 60512, test 3a)
Insulation Resistance was measured between adjacent contacts and between contacts and shield using a megaohmmeter applying 100 V DC.

3.4 Dielectric Withstanding Voltage (Reference Standard: IEC 60512, test 4a)
A 1000 V AC peak voltage was applied between adjacent contacts during 60 s.
A 1500 V AC peak voltage was applied between contacts and shield during 60 s.
Maximum leakage current: 5 mA.

3.5 Stress Relaxation (Reference Standard: IEC 60512, test 11i)
Samples were placed into an oven at 70º C for 500 h.

3.6 Corrosion Testing (Reference Standard: IEC 60512-11-7 and IEC 60068-2-60)
Samples were placed during 4 days in a chamber with:
SO_2 = 0.5 ppm (Volume),
H_2S = 0.1ppm (Volume),
T = 25º C +/-2º C, HR = 75 % +/-3 %.