



3850 INDUSTRIAL AVE. HEMET, CA. 92545 TEL. 951-765-2250 FAX 951-765-2255

Qualification Test Report

DT13-48PABCD-R015 EEC-5X650

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EEC-5X650 Test Report





Page i

ABSTRACT

This test report summarizes the testing for the DT Series, 48 pin configuration header for use with the large EEC enclosure.

The DT13-48PABCD-R015 header and EEC-5X650B enclosure were tested in accordance with the Deutsch in-house qualification procedure DITS 7-303-01 and the connector pressure leak test procedure DIDP 7-600-06.

Deutsch Part Number

DT13-48PABCD-R015 DT06-12S*-EP06 W12S-P012 EEC-5X650B 0462-201-1631 Part Description

48 pin DT Header (with 4 Receptacles)
12 pin DT Plug (A,B,C, & D Keys)
12 pin DT Plug Wedge Lock
Enclosure (No Vent Hole)
Size 16 Solid Socket Contact

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EEC-5X650 Test Report





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Page ii

TABLE OF CONTENTS:

	Abstracti
	Table of Contentsii
1.0	Specification Reference1
2.0	Test Conditions and Equipment2
3.0	Sample Description
4.0	Sample Assembly4
5.0	Test Sequence5
6.0	Test Results6
7.0	Conclusion6

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Page 1

1.0 SPECIFICATION REFERENCE

- 1.1. DITS 7-303-01
- 1.2. DIDP 7-600-06

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Page 2

2.0 TEST CONDITIONS AND EQUIPMENT

2.1 Test Conditions

Unless otherwise specified all tests and measurements will be conducted within the following ambient limitations:

Temperature	$23 \pm 5^{\circ}C$
Relative Humidity	$50 \pm 30\%$
Barometric Pressure	650-800 mm Mercury

2.2 Test Equipment

Instrument calibration will be performed in accordance with Deutsch standard calibration procedure prior to using the instrument for testing.

The following data concerning the test equipment will be recorded on the data format for each test:

- a) Description name
- b) Laboratory identification
- c) Date of last calibration prior to use.

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Page 3

3.0 SAMPLE DESCRIPTION AND SELECTION

3.1 Sample Description

The following part numbers will constitute the qualification sample lot:

Deutsch Part No.	<u>Quantity</u>	<u>Description</u>
DT13-48PABCD-R015	8	48 pin DT Header (with 4 Receptacles)
DT06-12S*-EP06	32	12 pin DT Plug (A,B,C, & D Keys)
W12S-P012	32	12 pin DT Plug Wedge Lock
EEC-5X650B	4	Enclosure (No Vent Hole)
0462-201-1631	384	Size 16 Solid Socket Contact

3.2 Sample Selection

All parts and assemblies selected for this test were manufactured utilizing Deutsch Industrial production methods, procedures, and tooling.

3.3 Sample Material

The material of all parts are standard Deutsch material and processes.

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EEC-5X650 Test Report







Page 4

4.0 SAMPLE ASSEMBLY

All plug contact cavities of each sample were wired with 16 AWG wire terminated with size 16 gold solid socket contacts. All samples had sufficient wire lengths to accommodate water immersion testing. The contacts were terminated to the wire using a HDP-400 crimp tool using 0425-205-0000 crimp tooling specifications. The headers are equipped with size 16 nickel pin contacts.

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Page 5

5.0 TEST SEQUENCE

Test samples, 6 mated headers for Group 1 and 2 mated headers with enclosures for Group 2, were subjected to the following tests:

- 5.1 Group 1
 - 1) Water Immersion
 - 2) Thermal Cycling
 - 3) Water Immersion
- 5.2 Group 2
 - 1) Pressure Leak Test
 - 2) Thermal Cycling
 - 3) Pressure Leak Test
 - 4) Durability
 - 5) Impact
 - 6) Pressure Leak Test
 - Note: Water Immersion includes Insulation Resistance test. Pressure Leak Test was performed for 5 minutes at 1.4 PSI. Durability includes mating the header to the enclosure 10 times.

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Page 6

6.0 TEST RESULTS

All parts passed all tests.

7.0 CONCLUSION

The results show that the DT13-48P*-R015 headers and EEC-5X650* enclosures are fully qualified to go into production.

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