

Test Report

Report No.: SZER090929810703E-2

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Client : Amphenol Technology(Shenzhen) LTD

Address: Block 5, Fuan 2nd Industrial Park, Dayang Road, Dayang Development zone, Fuyong Town,
Baoan, Shenzhen, PRC

Report on the submitted sample said to be:

Sample Name : Amphenol H4 Connector Female, MC 4 Connector Male
Sample Description : Normal
Model/type : PV-090508-F, PV-KST4/611-UR
Amount of Sample : 3pcs each model, 6pcs in total
Manufacturer : Amphenol Technology(Shenzhen) LTD
Sample Received Date : Oct. 12, 2009
Sample tested Date : Oct. 12, 2009~ Oct. 15, 2009

Test Requested: (As requested by the client, please see following sheets in detail.)

Test Sequence	Test Item
1	Dielectric withstanding voltage test
2	Temperature rise test
3	Contact resistance test
4	IPX7
5	Life test (Pull)

Test Results: Please see page 3,4,6,7 and 11.

Inspected by: _____
Engineer

Approved by: _____
Lab Supervisor

Approved date: _____

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Tested Samples:

Sample No.	Sample Name	Model/type	Quantity
007~012	Amphenol H4 Connector Female, MC 4 Connector Male	PV-090508-F, PV-KST4/611-UR	6pcs

Sample Photos before the Test:



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Test Item 1: Dielectric withstanding voltage test

(1) Test Equipment:

Name	Model/type	Serial No.	Valid Date to
Dielectric strength tester	TOS5101	BTTEELSZ10036	Apr. 06, 2010

(2) Environmental Conditions:

Temperature: 23°C Humidity: 50%RH

(3) Tested Samples: 007,008

(4) Reference Standard: UL 1703-2002

(5) Test Condition:

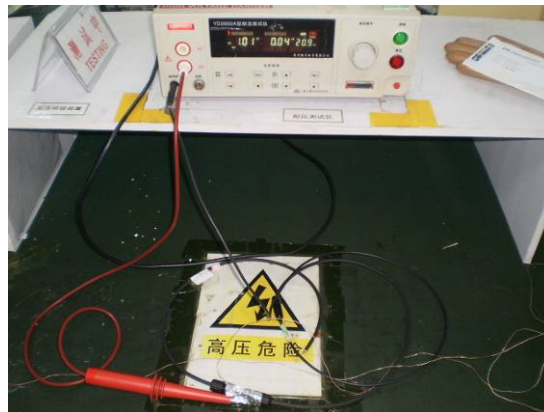
The test performed in accordance to the criteria listed above, and under the conditions as below:

---Voltage: 1000V dc

---Test position: between conductive parts and the shell

Test Result: PASS.

Test Photo:



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Test Item 2: Temperature Rise

(1) Test Equipment:

Name	Model	Serial No.	Valid Date to
High Temperature Tester	PC-200	BTTEELSZ20045	Jun. 02, 2010
DC regulated power supply	QJ30100X 0-30V/100A	BTTEELSZ00079	Aug. 28, 2010
Hybrid Recorder	34970A	BTTEELSZ00071	Jun. 02, 2010

(2) Environmental Conditions:

Temperature: 23°C Humidity: 50%RH

(3) Tested Samples:007,008

(4) Reference Standard: IEC 60512

(5) Test Condition:

The test performed in accordance to the criteria listed above, and under the conditions as below:

---Temperature: 85°C

---Energize the test sample at the 30.0A DC until thermal stability is achieved and measure and record sample temperature rise

Test Result: After the test, there was no visible change on surface of the sample; the temperature rise test data as follows.

Sample No.	Test Point	Temperature rise(°C)
007,008	A*	95.7
Note*: see picture below for reference		

Test Photo:



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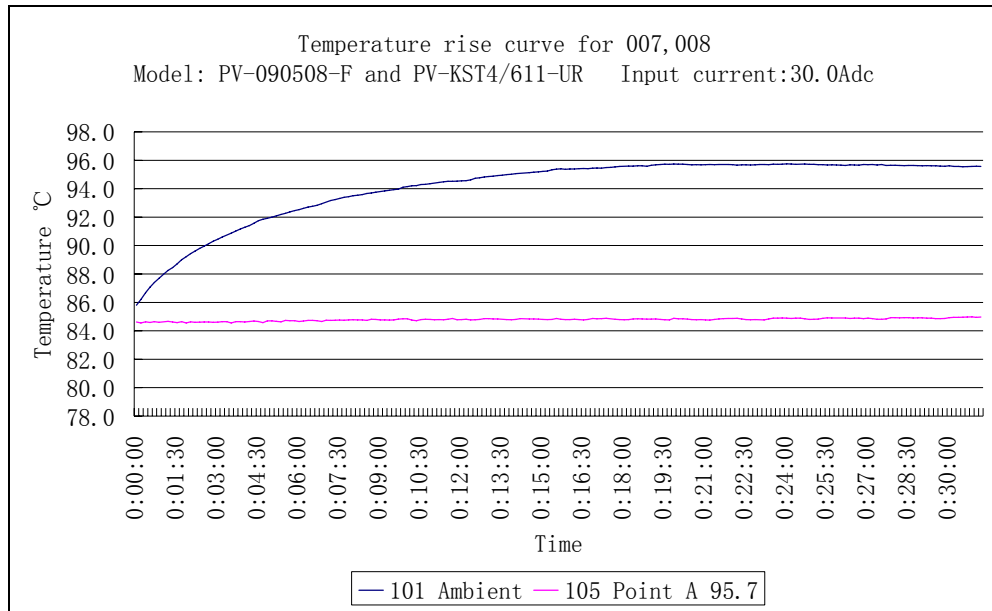
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Test point:



Test Point A*
On contact

Test Curve:



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Test Item 3: Contact resistance test

(1) Test Equipment:

Name	Model	Serial No.	Valid Date to
DC regulated power supply	QJ30100X 0-30V/100A	BTTEELSZ00079	Aug. 28, 2010
Hybrid Recorder	34970A	BTTEELSZ00071	Jun. 02, 2010

(2) Environmental Conditions:

Temperature: 23°C Humidity: 50%RH

(3) Tested Samples: 007,008

(4) Test Condition:

---The contact resistance measured with direct current to 30.0A_{dc} supplied, record the voltage drop between the contacts of the samples

---Measurements shall be carried out in both current flowing directions

---Use of the following equation to calculate the contact resistance

$$R = \frac{|V_{mf} - V_{mr}|}{|I_f| + |I_r|}$$

Where

R is the resistance;

V_{mf} is the measured forward voltage;

V_{mr} is the measured reverse voltage;

I_f is the forward current;

I_r is the reverse current.

Test Result:

Sample name	Amphenol H4 Connector Female, MC 4 Connector Male			
Model/type	PV-090508-F, PV-KST4/611-UR			
Sample No.	Input current (A dc)	Voltage drop (mV) Forward	Input current (A dc)	Voltage drop (mV) Reverse
007,008	30.0	7.1	30.0	-7.1

$$R = \frac{|V_{mf} - V_{mr}|}{|I_f| + |I_r|} = 0.237\text{m}\Omega$$

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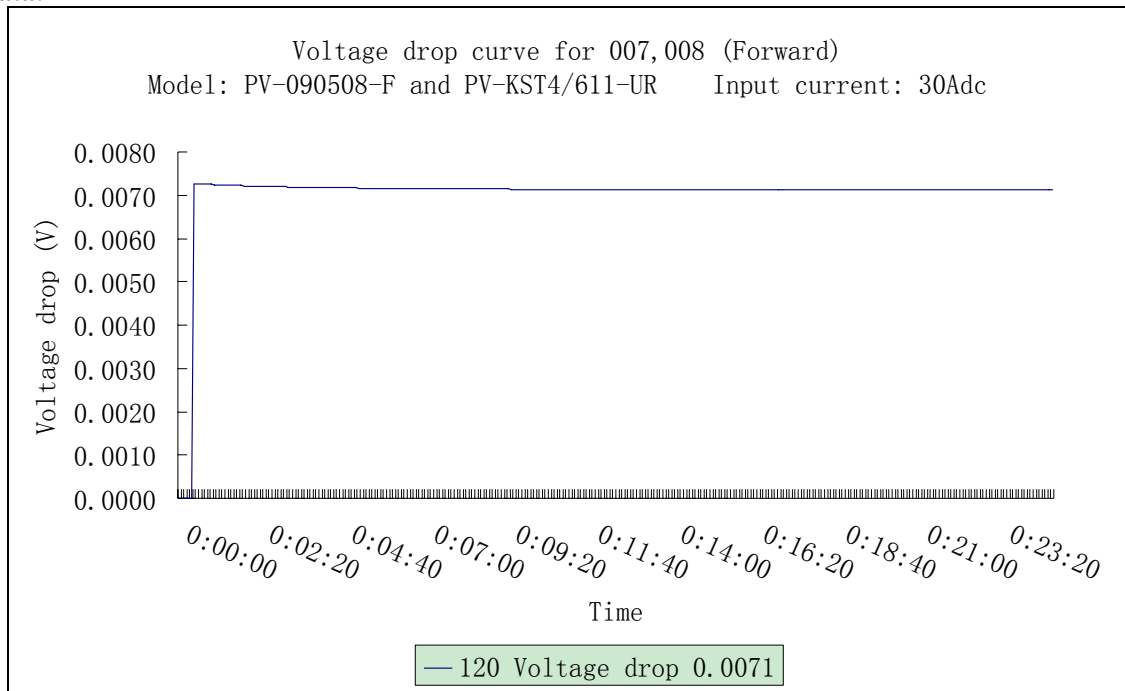
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Test Photo:



Test Data:

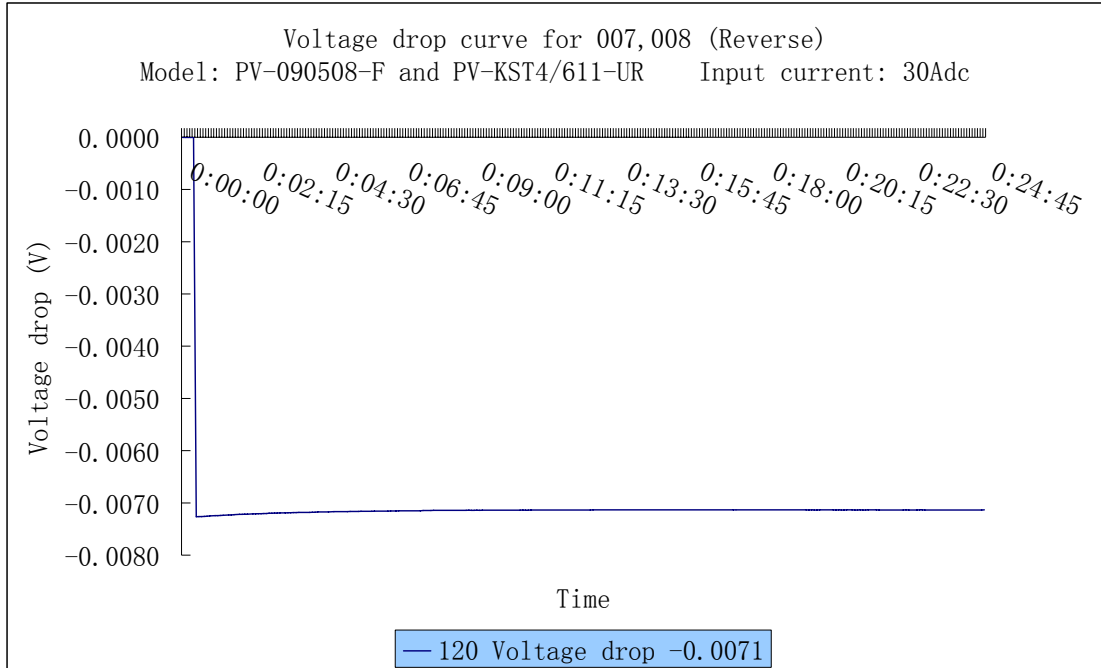


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Test Data (reverse):



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Test Item 4: IPX7

(1) Test Equipment:

Name	Serial No.	Valid Date to
Immersion tank	BTTEELSZ20057	Aug. 04, 2010

(2) Environmental Conditions:

Temperature: 28°C Humidity: 57%RH

(3) Reference Standard: IEC 60529-2001

(4) Tested Sample: 009,010

(5) Test Condition:

The test performed in accordance to the criteria listed above, and under the conditions as below:

---Below the surface of water: 1m

---Test duration: 30 minutes

Test results: After the test, there was no water into the sample, sample passed the IPX7 test.

Test Photo:



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Sample Photo after the Test:



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Test Item 5: Life test (Pull)

(1) Test Equipment:

Name	Model	Serial No.	Valid Date to
The computer control electronically almighty test machine	CMT5504	ATTETLSZ00043	Sep. 12, 2010

(2) Environmental Conditions:

Temperature: 25°C Humidity: 59%RH

(3) Tested Sample: 011,012

(4) Test Condition:

---Mated connectors with cable attached. With the cable ends secured to the pull test machine, pull connectors apart with 50 mm/min. Record separation force. Live cable ends, contacts may not be exposed after test.

Test results: Live cable ends, contacts were exposed after test, the separation force was 300.243N.

Test Photo:



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Sample Photo after the Test:



*** End of report ***

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