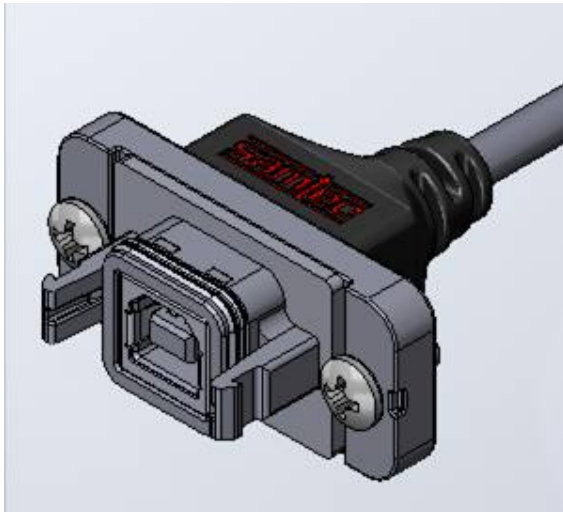




Project Number: Design Qualification Test Report		Tracking Code: 126562_Report_Rev_1	
Requested by: Kevin Meredith		Date: 3/4/2011	Product Rev: N/A
Part #: RPCU-G-00.25-BMS-BC RCU-G-02.00-BMS-BC / DCA-RPBU-01-01-B		Lot #: N/A	Tech: Nick Greco Eng: Eric Mings Mark Shireman
Part description: RPCU			Qty to test: 42
Test Start: 02/15/2011		Test Completed: 02/16/2011	



Design Qualification Test Report

PART DESCRIPTION

**RPCU-G-00.25-BMS-BC
RCU-G-02.00-BMS-BC / DCA-RPBU-01-01-B**

Tracking Code: 126562_Report_Rev_1	Part #: RPCU-G-00.25-BMS-BC RCU-G-02.00-BMS-BC / DCA-RPBU-01-01-B
Part description: RPCU	

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to ISO 10012-1 and ANSI/NCSL 2540-1, as applicable.

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SCOPE

To perform the following tests: Design qualification test. See test plan.

APPLICABLE DOCUMENTS

Standards: EIA Publication 364

TEST SAMPLES AND PREPARATION

- 1) All materials were manufactured in accordance with the applicable product specification.
- 2) All test samples were identified and encoded to maintain traceability throughout the test sequences.
- 3) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
- 4) Any additional preparation will be noted in the individual test sequences.

Tracking Code: 126562_Report_Rev_1	Part #: RPCU-G-00.25-BMS-BC RCU-G-02.00-BMS-BC / DCA-RPBU-01-01-B
Part description: RPCU	

FLOWCHARTS

IP67 Dust & Water

TEST STEP	GROUP A1 6 Mated Connectors	GROUP A2 6 Mated Connectors	GROUP B1 6 Connectors	GROUP B2 6 Connectors	GROUP C1 6 Connectors	GROUP D1 6 Mated Connectors	GROUP D2 6 Mated Connectors
			(Cable dust cover)	(Cable dust cover)	(Un-mated RPCU)	(After 100 Cycles)	(After 100 Cycles)
01	Dust Test	Submersion Water Test	Dust Test	Submersion Water Test	Dust Test	Dust Test	Submersion Water Test
02	Check for Dust	Check for Water	Check for Dust	Check for Water	Check for Dust	Check for Dust	Check for Water

Dust/Water Testing = Per CE/IEC 60529 Code IP67

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Part description: RPCU	

ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

WATER TESTING:

- 1) Reference document: CEI/IEC 60529 Code IP67
- 2) SCRES torque specification for SPN-17-01 is 12 IN-LB
- 3) SCPE torque specification for SCN-17-01 is 12 IN-LB

DUST TESTING:

- 1) Reference document: CEI/IEC 60529 Code IP67
- 2) SCRES torque specification for SPN-17-01 is 12 IN-LB
- 3) SCPE torque specification for SCN-17-01 is 12 IN-LB

Tracking Code: 126562_Report_Rev_1	Part #: RPCU-G-00.25-BMS-BC RCU-G-02.00-BMS-BC / DCA-RPBU-01-01-B
Part description: RPCU	

RESULTS

IP67 Testing (Water & Dust)

Group A1		
Dust	<u>Initial (Before Exposure)</u> No Dust Present	<u>After Exposure</u> No Dust Present
Group A2		
Water	<u>Initial (Before Exposure)</u> No Water Present	<u>After Exposure</u> No Water Present
Group B1		
Dust	<u>Initial (Before Exposure)</u> No Dust Present	<u>After Exposure</u> No Dust Present
Group B2		
Water	<u>Initial (Before Exposure)</u> No Water Present	<u>After Exposure</u> No Water Present
Group C1		
Dust	<u>Initial (Before Exposure)</u> No Dust Present	<u>After Exposure</u> No Dust Present
Group D1		
Dust	<u>Initial (Before Exposure)</u> No Dust Present	<u>After Exposure</u> No Dust Present
Group D2		
Water	<u>Initial (Before Exposure)</u> No Water Present	<u>After Exposure</u> No Water Present

Tracking Code: 126562_Report_Rev_1	Part #: RPCU-G-00.25-BMS-BC RCU-G-02.00-BMS-BC / DCA-RPBU-01-01-B
Part description: RPCU	

DATA SUMMARIES

IP67 Testing (Water & Dust)

Group A1

<u>Sample #</u>	Visual Inspection
1	Pass
2	Pass
3	Pass
4	Pass
5	Pass
6	Pass

Group A2

<u>Sample #</u>	Visual Inspection
1	Pass
2	Pass
3	Pass
4	Pass
5	Pass
6	Pass

Group B1

<u>Sample #</u>	Visual Inspection
1	Pass
2	Pass
3	Pass
4	Pass
5	Pass
6	Pass

Group B2

<u>Sample #</u>	Visual Inspection
1	Pass
2	Pass
3	Pass
4	Pass
5	Pass
6	Pass

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Part description: RPCU	

DATA SUMMARIES Continue

Group C1

<u>Sample #</u>	Visual Inspection
1	Pass
2	Pass
3	Pass
4	Pass
5	Pass
6	Pass

Group D1

<u>Sample #</u>	Visual Inspection
1	Pass
2	Pass
3	Pass
4	Pass
5	Pass
6	Pass

Group D2

<u>Sample #</u>	Visual Inspection
1	Pass
2	Pass
3	Pass
4	Pass
5	Pass
6	Pass

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Part description: RPCU	

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: WATER-01
Description: IP-67 1.0 Meter Water Column Chamber
Manufacturer: Samtec Machine
Model: N/A
Serial #: N/A
Accuracy: No Calibration Required

Equipment #: WATER-02
Description: IP-68 Water Depth Chamber
Manufacturer: Samtec Machine
Model: N/A
Serial #: N/A
Accuracy: No Calibration Required

Equipment #: DUST-01
Description: IP-X6 Dust Tester
Manufacturer: Samtec Machine
Model: N/A
Serial #: N/A
Accuracy: No Calibration Required