ABB EPIS	Functional Testing Specification
Parts & Repair Services *Louisville, KY*	**LOU-GED-342A4922P28V**

Test Procedure for an Acro power supply (PS24-150(J) 342A4922P28V150DHNC.

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A	Initial release	J. Francis	08/21/2018

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
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1. SCOPE

This is a functional testing procedure for an Acro power supply (PS24-150(J) 342A4922P28V150DHNC.

1. STANDARDS OF QUALITY

1.1 Refer to the current revision of the IPC-A-610 standard for workmanship standards.

2. APPLICABLE DOCUMENTS

2.1 The following document(s) shall form part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue shall apply.
2.1.1 Check board's electronic folder for more information.

3. ENGINEERING REQUIREMENTS

3.1 Equipment Cleaning
3.1.1 Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to site specific SRA's for cleaning guidelines.
3.2 Equipment Inspection
3.2.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:
3.2.1.1 Wires - broken, cracked, or loosely connected
3.2.1.2 Terminal strips / connectors - broken or cracked
3.2.1.3 Components - visually damaged
3.2.1.4 Capacitors - bloated or leaking
3.2.1.5 Solder joints - damaged or cold
3.2.1.6 Circuit board - burned or de-laminated
3.2.1.7 Printed wire runs / Traces - burned or damaged

4. EQUIPMENT REQUIRED

4.1 The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

Qty	Reference #	Description
1	*	Fluke 87 DMM (or Equivalent)
1	*	+70 to +145 VDC variable Power Supply
1	*	342A4922P28V150DHC Power Supply Load Box

5. TESTING PROCESS

5.1.1 Visually check the Electrolytic Capacitors for expired dates.

5.1.1.1 If Electrolytic caps are out of date, replace them all.

5.1.2 Setup – Do not apply power at this time.

5.1.2.1 If installed in assembly, removed power supply to be tested. Reinstall into assembly after testing.

5.1.2.2 Connect power supply to be tested to load box, connector will only fit in appropriate receptacle.

5.1.2.3 Connect multimeter, set to read DC volts, to load connector. There are loops to attach meter to.

5.1.2.4 Connect power supply leads to 125 VDC power supply, they are labeled and connector will only fit in appropriate receptacle.

5.1.3 Testing

5.1.3.1 Apply +125 VDC to power supply.

5.1.3.2 Meter should read an output of +28 VDC -/+ 0.56 VDC (2%).

5.1.3.3 Lower input voltage from +125 VDC to +70 VDC.

5.1.3.4 Meter should read an output of +28 VDC -/+ 0.56 VDC (2%).

5.1.3.5 Raise the input voltage from +70 VDC to +145 VDC.

5.1.3.6 Meter should read an output of +28 VDC -/+ 0.56 VDC (2%).

5.1.3.7 Lower input voltage from +145 VDC to +110 VDC.

5.1.3.8 Meter should read an output of +28 VDC -/+ 0.56 VDC (2%).

5.1.3.9 Let unit run for at least 1 hour, monitoring output.

5.2 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time.

8. ATTACHMENTS

8.1 None at this time.