

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

## NATIONAL TECHNICAL SYSTEMS (NTS) CHICAGO

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## ELECTRICAL

Valid to: May 31, 2018

Certificate Number: 0214.39

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following electrical tests:

**Test Technology/Description:****Test Methods<sup>1</sup>:**Current Measure<sup>2</sup>*(1000A DC, 1000A AC)*

USCAR 2, Sections 5.3.3 &amp; 5.3.4;

GMW3431, Section 4.2.3

Insulation Resistance<sup>2</sup>*(1 Kilo-ohms to 10 Tera-ohms)*

MIL-STD-202, Method 302;

IPC-TM-650, Sections 2.5.11, 2.5.16, &amp; 2.5.26A;

USCAR-2 Section 5.5.1;

GMW 3431, Section 4.1.3;

ASTM D257

High Voltage/Dielectric Withstanding Voltage<sup>2</sup>*(Up to 50 kVAC & 60 KV DC)*

ASTM D149 (2009) Types 1, 3, &amp; 4;

MIL-STD-202, Method 301;

IPC-TM-650 Sections 2.5.6B, 2.5.6.1A,

2.5.6.2A, 2.5.6.3, 2.5.7D, 2.5.7.1, &amp; 2.5.25A

Continuity Monitoring<sup>2</sup>*(50 Nanosecond Event Detection or more or Resistance Change)*

IPC-9701, Section 4.3.3 (2002);

MIL-STD-202, Method 310;

USCAR-2, Section 5.1.9

Contact Resistance, Low Level Contact Resistance<sup>2</sup>*(LLCR) (10 micro-ohms to 200 kilo-ohms)*

MIL-STD-202, Method 307;

MIL-DTL 83513G, Method 3.5.6;

ASTM B539 (2002);

ASTM B193;

IPC-TM-650, Sections 2.5.12, 2.5.13, 2.5.14,

2.5.24, &amp; 2.5.32

**Test Technology/Description:**Dry Circuit Resistance/Resistance<sup>2</sup>Voltage/Voltage Drop<sup>2</sup>

Battery Testing

External Short Circuit

Overcharge

**Test Methods<sup>1</sup>:**USCAR-2, Section 5.3.1;  
MIL-STD-202, Methods 303 & 304

GMW 3431, Section 4.1.1; USCAR-2, 5.3.2

UN/ST/SG/AC.10/11 Section 38.3.4.5

UN/ST/SG/AC.10/11 Section 38.3.4.7

<sup>1</sup> When the date, revision or edition of a test method standard is not identified on the scope of accreditation, the laboratory is required to be using the current version within one year of the date of publication, per part C., Section 1 of A2LA R101 - *General Requirements- Accreditation of ISO-IEC 17025 Laboratories*.

<sup>2</sup> Also using customer specific test methods utilizing any combination of test equipment parameters listed above.

**On the following types of equipment:**

Industrial Drives, Tractor Components, Automotive System and Subsystems, Consumer Electronics, Electrical Power/Distribution Equipment



## *Accredited Laboratory*

A2LA has accredited

### **NATIONAL TECHNICAL SYSTEMS (NTS) CHICAGO**

*Mount Prospect, IL*

for technical competence in the field of

### **Electrical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).



Presented this 5<sup>th</sup> day of October 2016.

A handwritten signature in blue ink, appearing to read 'J. C. Bunt'.

Senior Director of Quality and Communications  
For the Accreditation Council  
Certificate Number 0214.39  
Valid to May 31, 2018

*For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.*