

Aerial Lift Electrical Testing

ANSI/SAIA A92.2-2015 is the US National Standard for Insulated Aerial Lifts and is enforced through OSHA Regulations 29 CFR 1926.453 Aerial Lifts and 29 CFR 1910.67 Vehicle-Mounted Elevating and Rotating Work Platforms.

The Qualification Test for new trucks is per Table I, the Periodic Test every three (3) years is per Table II. ANSI SAIA A92.2 is being revised in 2020, which will have many changes that will impact electrical testing:

1. The three-year Periodic Test will change from Table II to Table I voltages for vehicles at or above 138KV.
2. The Momentary Overvoltage will be corrected for atmospheric conditions.
3. Measurement System Requirements for accuracy and uncertainty will be per IEEE 4.
 - a. (i.e. Voltage accuracy of 3%, Current accuracy of 5%).

Hubbell Power Systems, Inc. is the third-party testing laboratory for the aerial device industry. Hubbell Laboratories are accredited to perform bare-hand electrical testing to ANSI A92.2-2015 by the American Association for Laboratory Accreditation (A2LA). Hubbell does not manufacture, sell or operate bucket trucks making Hubbell a true third-party resource for testing services.

Hubbell has provided electrical (bare-hand) certification testing for aerial devices since 1964, and is contracted by most major manufacturers to perform electrical qualification testing on new equipment. Advantages to testing with Hubbell include:

1. Up to 500kV class test capability.
2. Indoor, fully enclosed test facilities.
3. Conveniently located in Centralia, Missouri.
4. Accredited for testing to ANSI A92.2-2015.
5. More than 50 years of experience testing bucket trucks, track units and swing jibs.

For quotations or to schedule a tour, contact Hubbell Laboratories at laboratories@hubbell.com or your local Hubbell Power Systems representative.

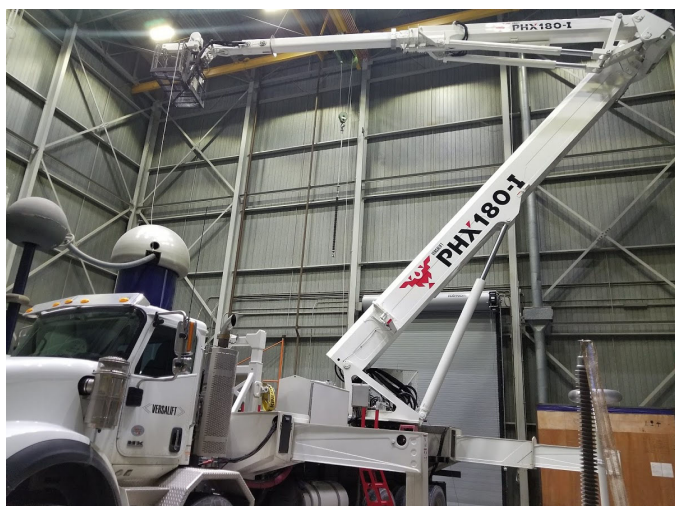


TABLE 1
Design, Quality Assurance and Qualification Test Values for Insulating Aerial Devices with a Lower Test Electrode System (Category A and Category B)

Unit Rating	Required 60 Hertz Rated Voltage Test		Required 60 Hertz Double-Rated Voltage Test		Either of These Withstand Tests	
	One Minute Test Voltage (rms kV)	Maximum Allowable Boom Current (rms microamperes)	One Minute Test Voltage (rms kV)	Maximum Allowable Boom Current (rms microamperes)	60 hertz Two (2) Second Withstand Voltage Test (rms kV)	Switching Surge Withstand Voltage Test (crest kV)
46 & below	27	27	54	54	80	114
69	40	40	80	80	120	170
138	80	80	160	160	240	340
230	133	133	265	265	400	565
345	200	200	400	400	600	850
500	288	288	578	578	720	1020
765	442	442	885	885	1105	1560

TABLE 2
Periodic Electrical Test Values for Insulating Aerial Devices with a Lower Test Electrode System (Category A and Category B)

Unit Rating	60 Hertz (rms) Test			Direct Current Test		
	Voltage (rms kV)	Maximum Allowable Current (rms microamperes)	Time	Voltage (kV)	Maximum Allowable Current (microamperes)	Time
46 & below	40	40	1 min.	56	28	3 min.
69	60	60	1 min.	84	42	3 min.
138	120	120	1 min.	168	84	3 min.
230	200	200	1 min.	280	140	3 min.
345	300	300	1 min.	420	210	3 min.
500	433	433	1 min.	606	303	3 min.
765	663	663	1 min.	928	464	3 min.