

## LITHIUM BATTERIES TEST SUMMARY

### IN ACCORDANCE WITH SUB-SECTION 38.3 OF UN MANUAL OF TESTS AND CRITERIA

1	Product Manufacturer	Andreas Stihl AG & Co. KG Badstraße 115 71336 Waiblingen Germany +49-(0)7151-26-0 <b>info@stihl.de</b> www.stihl.com
2	Model	STIHL battery packs and integrated batteries
3	Voltage rating	See rating plate
4	Ah rating	See rating plate
5	Wh rating	See rating plate

These models of Lithium ion batteries have been successfully tested and comply with the UN Model Regulations, Manual of Test and Criteria, Part III, subsection 38.3

PERFORMED TESTS		RESULTS
38.3.4.1 T1	Altitude Simulation	Passed
38.3.4.2 T2	Thermal Test	Passed
38.3.4.3 T3	Vibration	Passed
38.3.4.4 T4	Shock	Passed
38.3.4.5 T5	External Short Circuit (if applicable)	Passed
38.3.4.7 T7	Overcharge (if applicable)	Passed

(Note that tests T6 and T8 are not applicable to batteries.)

Revision Date:	2025-03-14
Revision Number:	2.2
Name:	Robert Olma, Vice President Regulatory Affairs & Global Governmental Relations

The UN 38.3 tests were performed by one of the following test houses and were tested to UN Manual Test and Criteria Revision 3 Amendment 1 or subsequent revisions or amendments.

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## LITHIUM CELLS OR BATTERIES TEST SUMMARY IN ACCORDANCE

### WITH SUB-SECTION 38.3 OF UN MANUAL OF TESTS AND CRITERIA

#### PRODUCT TEST INFORMATION

Model numbers	Physical Description	Battery weight (kg)	Wh rating	Test report number	UN-Manual Test and Criteria Revision	Test report date	Applicable UN Numbers acc. to UN Model Regulations
PS 3000 battery module	One battery module of PS 3000	0.5	86	28253823001	6 <sup>th</sup> Revision Amendment 1	2018-02-09	UN 3480
AS 2 (10.2 V 2.6 Ah)	Detachable lithium ion battery	0.22	28	MDW-B18100 MDW-PT1903	6 <sup>th</sup> Revision 6 <sup>th</sup> Revision Amendment 1	2018-09-19 2019-06-04	UN3480/ UN3481
				305271-TL7-2	7 <sup>th</sup> Revision Amendment 1	2023-07-28	UN3480/ UN3481
AAI 10.0 (18 V, 2.3 Ah)	Integrated lithium ion battery	0.3	50	311278-TL7-1	7 <sup>th</sup> Revision Amendment 1	2023-11-28	UN3480/ UN3481
AAI 20.0 (18 V, 4.2 Ah)	Integrated lithium ion battery	0,45	90	315154-TL7-1	7 <sup>th</sup> Revision Amendment 1	2024-02-14	UN3480/ UN3481
AAI 40 (18 V, 2.25 Ah)	Integrated lithium ion battery	0.5	42	BU-2014-02383-0-UN	5 <sup>th</sup> Revision Amendment 1+2	2015-03-09	UN3480/ UN3481
AAI 50 (18.5 V, 1.9 Ah)	Integrated lithium ion battery	0.6	42	BU-201900502-B1	6 <sup>th</sup> Revision Amendment 1	2019-12-06	UN3480/ UN3481
AAI 50.1 (18 V, 2.4 Ah)	Integrated lithium ion battery	0.8	52	271953-TL7-1	6 <sup>th</sup> Revision Amendment 1 Im Bericht Rev7.	2020-07-30	UN3480/ UN3481
AAI 50.2 (18 V, 2.4 Ah)	Integrated lithium ion battery	0.8	50	288694-TL7-1	7 <sup>th</sup> Revision	2021-10-28	UN3480/ UN3481

AAI 80 (18 V, 4,5 Ah)	Integrated lithium ion battery	0.75	83	BU-2014-02383-1- UN	5 <sup>th</sup> Revision Amendment 1+2	2015-03-17	UN3480/ UN3481
AAI 100 (18.5 V, 3.8 Ah)	Integrated lithium ion battery	0.8	83	BU-201900503-B1	6 <sup>th</sup> Revision Amendment 1	2019-12-06	UN3480/ UN3481
AAI 100.1 (18 V, 4.9 Ah)	Integrated lithium ion battery	0.8	104	271953-TL7-2	6 <sup>th</sup> Revision Amendment 1 Im Bericht Rev7.	2020-07- 30	UN3480/ UN3481
AAI 100.2 (18 V, 4.9 Ah)	Integrated lithium ion battery	0.8	101	288694-TL7-2	7 <sup>th</sup> Revision	2021-10-28	UN3480/ UN3481
AAI 110 (36 V, 2.3 Ah)	Integrated lithium ion battery	0.9	104	284850-TL7-2	7 <sup>th</sup> Revision	2021-05-28	UN3480/ UN3481
AAI 110.1 (36 V, 2.4 Ah)	Integrated lithium ion battery	0.9	101	308042-TL7-2	7 <sup>th</sup> Revision Amendment 1	2023-08-31	UN3480/ UN3481
AAI 130 (28,8 V, 4.5 Ah)	Integrated lithium ion battery	1	130	BU-2012-000290- UN	5 <sup>th</sup> Revision	2012_06_29	UN3480/ UN3481
AAI 131 (29 V, 4.5 Ah)	Integrated lithium ion battery	1	130	BU-2016-04485-0- B1	5 <sup>th</sup> Revision Amendment 1+2 Im Bericht Rev5	2016_07_15	UN3480/ UN3481
AAI 160 (29.6 V, 3.8 Ah)	Integrated lithium ion battery	1.3	133	BU-201900504-B1	6 <sup>th</sup> Revision Amendment 1	2019-12-06	UN3480/ UN3481
AAI 160.1 (28.8 V, 4.9 Ah)	Integrated lithium ion battery	1.3	167	271953-TL7-3	6 <sup>th</sup> Revision Amendment 1 Im Bericht Rev7.	2020-07- 30	UN3480/ UN3481
AAI 160.2 (28.8 V, 4.9 Ah)	Integrated lithium ion battery	1.3	161	288694-TL7-3	7 <sup>th</sup> Revision	2021-10-28	UN3480/ UN3481
AAI 200 (28.8 V, 6.75 Ah)	Integrated lithium ion battery	1.4	194	BU-2012-000365- UN	5 <sup>th</sup> Revision	2012-11-12	UN3480/ UN3481
AAI 201 (29 V, 6.8 Ah)	Integrated lithium ion battery	1.4	194	BU-2016-04485-0- B1	5 <sup>th</sup> Revision Amendment 1+2 Im Bericht Rev5	2016-07-15	UN3480/ UN3481
AAI 210 (36 V, 4.9 Ah)	Integrated lithium ion battery	1.4	209	284850-TL7-4	7 <sup>th</sup> Revision	2021-05-28	UN3480/ UN3481

AAI 210.1 (36 V, 4.9 Ah)	Integrated lithium ion battery	1.4	202	308042-TL7-3	7 <sup>th</sup> Revision Amendment 1	2023-08-31	UN3480/ UN3481
AAI 250 (29.6 V, 5,7 Ah)	Integrated lithium ion battery	1.6	200	BU-201900505-B1	6 <sup>th</sup> Revision Amendment 1	2019-12-06	UN3480/ UN3481
AAI 250.1 (28.8 V, 7.3 Ah)	Integrated lithium ion battery	1.6	251	271953-TL7-4	6 <sup>th</sup> Revision Amendment 1 Im Bericht Rev7.	2020-07-30	UN3480/ UN3481
AAI 250.2 (28.8 V, 7.3 Ah)	Integrated lithium ion battery	1.6	242	288694-TL7-4	7 <sup>th</sup> Revision	2021-10-28	UN3480/ UN3481
AAI 310 (36 V, 7.3 Ah)	Integrated lithium ion battery	1.8	313	24850-TL7-6	7 <sup>th</sup> Revision	2021-05-28	UN3480/ UN3481
AAI 310.1 (36 V, 7.4 Ah)	Integrated lithium ion battery	1.8	302	308042-TL7-4	7 <sup>th</sup> Revision Amendment 1	2023-09-27	UN3480/ UN3481
AK 10 (36 V, 1.4 -2.0 Ah)	Detachable lithium ion battery	0.8	54	281300-3380-0010/213448-rev.01	5 <sup>th</sup> Revision Amendment 1+2	2015-10-28	UN3480/ UN3481
			59	281310-3380-0010/209684	5 <sup>th</sup> Revision Amendment 1+2	2015-06-01	
			72	237965-EC2-11	6 <sup>th</sup> Revision Cor.1	2017-08-15	
			72	246105-TL7-1	6 <sup>th</sup> Revision Cor.1	2018-04-20	
			72	7191257336-EEC21/01	6 <sup>th</sup> Revision Amendment 1	2021-07-26	
			72	7191257336-EEC21/03	6 <sup>th</sup> Revision Amendment 1	2021-07-26	
			72	294168-TL7-1	7 <sup>th</sup> Revision	2022-04-29	
			72	303001-TL7-2	7 <sup>th</sup> Revision Amendment 1	2023-02-21	

AK 20 (36 V, 2.8 -4.0 Ah)	Detachable lithium ion battery	1.2	118	281300-3380- 0011/209685	5 <sup>th</sup> Revision amendment 1+2	2015-06-01	UN3480/ UN3481
			108	281300-3380- 0010/213448-1	5 <sup>th</sup> Revision Amendment 1+2	2015-10-28	
			144	237965-EC2-12	6 <sup>th</sup> Revision	2017-08-15	
				246123-TL7-1	6 <sup>th</sup> Revision Corr.1	2018-04-19	
				7191257336- EEC21/02	6 <sup>th</sup> Revision Corr.1	2021-05-07	
				7191257336- EEC21/02	6 <sup>th</sup> Revision Amendment 1	2021-07-23	
				7191257336- EEC21/04	6 <sup>th</sup> Revision Amendment 1	2021-07-26	
				294168-TL7-2	7 <sup>th</sup> Revision	2022-04- 29	
303001-TL7-3	7 <sup>th</sup> Revision Amendment 1	2023-02-21					
AK 30 (36 V, 4.8 -5.0 Ah)	Detachable lithium ion battery	1.3	180	225083-EC2-1	5 <sup>th</sup> Revision Amendment 1+2	2016-09-21	UN3480/ UN3481
				246125-TL7-1	6 <sup>th</sup> Revision Corr.1	2018-03- 07	
				281807-TL7-2	7 <sup>th</sup> Revision	2021-05-28	
				7191257336- EEC21/05	6 <sup>th</sup> Revision Amendment 1	2021-09-14	
				7191291063- EEC22	7 <sup>th</sup> Revision Amendment 1	2022-09-14	

AK 30.0 S (36 V, 5.0 Ah)	Detachable lithium ion battery	1.3	180	7191257336- EEC23/05_CRI	6 <sup>th</sup> Revision Amendment 1	2023-10-18	UN3480/ UN3481
				7191291063- EEC23_CRI	7 <sup>th</sup> Revision Amendment 1	2023-10-18	
AP 20.0 (36 V, 3.9 Ah)	Detachable lithium ion battery	1.3	144	323090-TL7-1	7 <sup>th</sup> Revision Amendment 1	2024-12-09	UN3480/ UN3481
				325105-TL7-1	7 <sup>th</sup> Revision Amendment 1	2025-01-28	
AP 30.0 (36 V, 7.2 Ah)	Detachable lithium ion battery	1.8	270	327136-TL7-1	7 <sup>th</sup> Revision Amendment 1	2025-01-31	UN3480/ UN3481
AP 80 (36 V, 2.6 Ah)	Detachable lithium ion battery	1.2	84	8993-1	4 <sup>th</sup> Revision Amendment 1	2008-07- 04	UN3480/ UN3481
				BU-00028.2010.1.1	4 <sup>th</sup> Revision Amendment 1+2	2010-07-21	
AP 100 (36 V, 2.0-2.4 Ah)	Detachable lithium ion battery	0.9	76	281300-3380- 0008/196892-1 A2	5 <sup>th</sup> Revision Amendment 1+2	2015-05-19	UN3480/ UN3481
			94	246609-TL7-1	6 <sup>th</sup> Revision Corr.1	2018-03- 05	
				281300-3380- 0018/272582	7 <sup>th</sup> Revision	2020-10- 07	
AP 115 (36 V, 3.2 Ah)	Detachable lithium ion battery	1.2	118	281300-3380- 0006/187822	5 <sup>th</sup> Revision Amendment 1	2013-11-22	UN3480/ UN3481
AP 120 (36 V, 3.3 Ah)	Detachable lithium ion battery	1.6	118	2203/00-0	4 <sup>th</sup> Revision amendment 1+2	2009-04- 09	UN3480/ UN3481
AP 160 (36 V, 4.0 -4.5 Ah)	Detachable lithium ion battery	1.7	162	BU-00010-2010-1.1	4 <sup>th</sup> Revision amendment 1+2	2012-03- 09	UN3480/ UN3481
				2199/00-0	4 <sup>th</sup> Revision amendment 1+2	2009-04- 09	

			172	BU0051.2009-1.1	4 <sup>th</sup> Revision amendment 1+2	2009-12-28	
AP 180 (36 V, 4.2 Ah)	Detachable lithium ion battery	1.7	178	281300-3380- 0004/167174	5 <sup>th</sup> Revision	2012-08-15	UN3480/ UN3481
AP 200 (36 V, 4.0-4.8 Ah)	Detachable lithium ion battery	1.3	151	281300-3380- 0008/196891-2 A2	5 <sup>th</sup> Revision Amendment 1+2	2015-05-19	UN3480/ UN3481
			187	246612-TL7-1	6 <sup>th</sup> Revision Corr.1	2018-03- 05	
			187	281300-3380- 0018/284847	7 <sup>th</sup> Revision	2022-01-31	
				297965-TL7-4	7 <sup>th</sup> Revision, Amend.1	2022-09- 22	
AP 200 S (36 V, 4.8 Ah)	Detachable lithium ion battery	1.3	187	281300-3380- 0018/284847	7 <sup>th</sup> Revision	2022-01-31	UN3480/ UN3481
AP 200.0 S (36 V, 4.8 Ah)	Detachable lithium ion battery	1.3	187	314036-TL7-1	7 <sup>th</sup> Revision	2024-03- 01	UN3480/ UN3481
				327153-TL7-1	7 <sup>th</sup> Revision, Amend. 1	2025-02- 04	
AP 300 (36 V, 6.0 Ah)	Detachable lithium ion battery	1.8	227	281300-3380- 0008/196898-3 A2	5 <sup>th</sup> Revision Amendment 1+2	2015-05-19	UN3480/ UN3481
				245137-TL7-1	6 <sup>th</sup> Revision Corr.1	2018-04-16	
				284847-TL7-9	7 <sup>th</sup> Revision	2022-01-31	
AP 300 S (36V, 7.2 Ah)	Detachable lithium ion battery	1.8	281	245289-TL7-1	6 <sup>th</sup> Revision Corr.1	2018-05-29	UN3480/ UN3481
				272580-TL7-2	7 <sup>th</sup> Revision	2020-07- 28	

				284847-TL7-8	7 <sup>th</sup> Revision	2022-01-31	
AP 300.0 S (36 V, 7.2 Ah)	Detachable lithium ion battery	1.8	281	314036-TL7-2	7 <sup>th</sup> Revision	2024-03-01	UN3480/ UN3481
				325938-TL7-1	7 <sup>th</sup> Revision Amendment 1	2025-01-29	
AP 500 S (36 V, 8.8 Ah)	Detachable lithium ion battery	2.0	337	272581-TL7-2	7 <sup>th</sup> Revision	2020-08-28	UN3480/ UN3481
AR 900 (36 V, 23.7- 24.75 Ah)	Separable lithium ion battery	6,6 6.6	891	281300-3380- 0003/167168	5 <sup>th</sup> Revision	2012-08-15	UN3480/ UN3481
			916	281300-3380- 0003/189326	5 <sup>th</sup> Revision Amendment 1	2014-03-24	
AR 1000 (36 V, 16.6 Ah)	Separable lithium ion battery	4.4	626	226763-EC2-1	6 <sup>th</sup> Revision	2016-12-15	UN3480/ UN3481
AR 2000 (36 V, 21.8 Ah)	Separable lithium ion battery	6.7	916	281300-3380- 0009/208144	5 <sup>th</sup> Revision Amendment 1+2	2015-09-22	UN3480/ UN3481
AR 2000 L (36 V, 27.4 Ah)	Detachable/ Separable lithium ion battery	7.5	1015	254558-TL7-3	6 <sup>th</sup> Revision Amendment 1	2019-02-20	UN3480/ UN3481
				284848-TL7-4	7 <sup>th</sup> Revision	2021-08-30	
				304568-TL7-3	7 <sup>th</sup> Revision Amendment 1	2023-04-27	
AR 2000.0 L (36 V, 29.2 Ah)	Detachable/ Separable lithium ion battery	7.5	1080	318809-TL7-3	7 <sup>th</sup> Revision Amendment 1	2024-05-16	UN3480/ UN3481
AR 3000 (36 V, 29.3 Ah)	Separable lithium ion battery	6.8	1148	281300-3380- 0003/207688	5 <sup>th</sup> Revision Amendment 1+2	2015-04-27	UN3480/ UN3481
				213449-EC2-2	5 <sup>th</sup> Revision Amendment 1+2	2016-05-02	

AR 3000 L (36 V, 41.2 Ah)	Separable lithium ion battery	9.5	1522	254558-TL7-1	6 <sup>th</sup> Revision Amendment 1	2019-02-20	UN3480/ UN3481
				284848-TL7-2	7 <sup>th</sup> Revision	2021-07-29	
				304568-TL7-4	7 <sup>th</sup> Revision Amendment 1	2023-04- 27	
AR 3000.0 L (36 V, 43.8 Ah)	Detachable/ Separable lithium ion battery	9.7	1620	318809-TL7-4	7 <sup>th</sup> Revision Amendment 1	2024-05- 16	UN3480/ UN3481
BGA 45 (18 V, 2.5 Ah)	Integrated lithium ion battery	0.4	45	1116090214	5 <sup>th</sup> Revision Amendment 1+2	2016-11-02	UN3480/ UN3481
				1117110286	6 <sup>th</sup> Revision	2017-12- 27	
FSA 45 (18 V, 2.0 Ah)	Integrated lithium ion battery	0.4	36	1116090084	5 <sup>th</sup> Revision Amendment 1+2	2016-10- 20	UN3480/ UN3481
HSA 45 (18 V, 2.0 Ah)	Integrated lithium ion battery	0.4	36	1116090083	5 <sup>th</sup> Revision Amendment 1+2	2016-10- 24	UN3480/ UN3481
5120.4 (HSA 25, 10.8 V, 2.0 Ah)	Detachable lithium ion battery	0.2	21.6	281300-3380- 0007/196618	5 <sup>th</sup> Revision Amendment 1	2014-05-23	UN3480/ UN3481

### Additional Information:

All STIHL batteries are manufactured according to a quality management program as required in:

- IATA-DGR                    3.9.2.6.1 e)
- IMDG-Code                2.9.4.5
- ADR/RID/ADN            2.2.9.1.7 e)
- ISO 9001