Robert Bosch Power Tools GmbH
PT-BI/ENC
70538 Stuttgart
GERMANY
www.bosch-pt.com

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LITHIUM BATTERIES TEST SUMMARY

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

1	Product Manufacturer	Robert Bosch Power Tools GmbH Max-Lang-Straße 40-46 70771 Leinfelden-Echterdingen Germany +49-711-400-40990 kontakt@bosch.de www.bosch-pt.com
2	Model	Bosch Battery Pack GBA 18V
3	Voltage rating	18V
4	Ah rating	1.3 Ah / 1.5Ah / 2.0Ah / 2.5Ah 2.6Ah / 3.0Ah / 4.0Ah 5.0Ah /5.5Ah 6.0Ah / 6.3Ah / 7.0Ah 8.0Ah 12.0Ah
5	Wh rating	23.4Wh / 27.0 Wh / 36.0 Wh / 45.0 Wh 46.8 Wh / 54.0 Wh 72.0 Wh / 90.0 Wh / 99.0Wh 108.0Wh / 113.4Wh / 126.0Wh / 144.0Wh 216.0Wh

This model of Lithium ion batteries have been succesfully 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	Passed
38.3.4.7 T7	Overcharge	Passed

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

Revision Date: 03.03.2023 Revision Number: 12.0

Dr. Mischa Nicklaus
Director (PT-BI/ENC)
Cordless Systems Batteries and Chargers

Dr. Patrick Roeder
Engineering (PT-BI/ENC)
Cordless Systems Batteries and Chargers

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The UN 38.3 tests were performed by one of the follwing 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	Test report date	Applicable UN Numbers acc. to UN Model Regulations	Delivered at max. 30% State of Charge
GBA 18V 1.3 Ah	Detachable slide in lithium-ion accumulator	0,328 0,336 0,323	23.4	D1HQ0003 70711 1151-11-MM-11-PP001_1	18.01.2011 06.07.2011 21.10.2011	UN3480/ UN3481	yes
GBA 18V 1.5 Ah BAT610 BAT610G BAT611	Detachable slide in lithium-ion accumulator	0,335 0,330 0,324 0,329 0,347 0,333	27.0	UN_T1-T5 und T7_MR_L_18V_L_G3_1Ah5_SDI15R_1st_PrePilot 90711 1087-12-MM-12-PP001 7191118958-EEC15 7191186692 - EEC18 7191179565 - EEC18 7191221970-EEC19	01.09.2010 06.07.2011 27.07.2012 12.08.2015 16.03.2018 23.07.2018 24.10.2019	UN3480/ UN3481	Yes
GBA 18V 2.0 Ah BAT612 B20V20	Detachable slide in lithium-ion accumulator	0,530 0,351 0,349 0,332 0,354 0,359 0,343 0,342 0,355 0,338 0,354 0,337 0,346 0,338 0,346	36.0	UN_014_19 1156-12-MM-MM-13-PP001 1157-12-MM-13-PP001 1102-13-MM-13-PP001 7191110841-EEC15-03_18V 2.0Ah (RX135) Test Report 7191129259-EEC16 7191138517-EEC16 7191195781 - EEC18 7191185676 - EEC18 CRSSFTY/00001(AD1)/20 28253332 001 CRSSFTY/00002/20 CRSSFTY/00013/20 CPSFTY/00028/22 CPSFTY/00042/22	01.09.2014 07.01.2013 08.01.2013 09.09.2013 15.04.2015 28.01.2016 22.06.2016 12.11.2018 13.07.2018 29.05.2020 25.06.2020 19.06.2020 31.07.2020 23.06.2022 29.11.2022	UN3480/ UN3481	Yes

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GBA 18V 2.5 Ah	Detachable slide in lithium-ion accumulator	0,547	45.0	7191122247-EEC15	03.11.2015	UN3480/ UN3481	Yes
GBA 18V 2.6 Ah	Detachable slide in lithium-ion accumulator	0,580 0,590	46.8	22042011 110711	20.04.2011 07.07.2011	UN3480/ UN3481	Yes
GBA 18V 3.0 Ah	Detachable slide in lithium-ion accumulator	0,542 0,596 0,598 0,590 0,591 0,360 0,570 0605	54.0	7191133214-EEC16 7191182265 - EEC18 1169-10-MM-11-PP002 UN_T1-T5 T7_MR_XL_18V_3Ah0_SDI15Q_G2_SCM 7191156955 - EEC17 7191141107-EEC16 CRSSFTY/00017/20 CPSFTY/00035/22	29.03.2016 11.10.2018 19.01.2011 31.10.2010 06.04.2017 22.06.2016 27.11.2020 09.09.2022	UN3480/ UN3481	Yes
GBA 18V 4.0 Ah GBA18V40	Detachable slide in lithium-ion accumulator	0,797 0,797 0,609 0,600 0,612 0,623 0,611 0,618 0,600 0,600 0,620 0,527 0,537 0,602 0,603 0,593 0,600 0,537 0,533 0,603 0,533 0,537 0,530 0,575 0,534 0,567	72.0	7191140894 - EEC16 7191125542-EEC15 1170-12-MM-13-PP001 7191121396-EEC15 1104-13-MM-13-PP001 7191129263-EEC16 UN_014_17 7191109813-EEC15 7191145395 - EEC16 7191145984 - EEC16 7191146196 - EEC16 7191205584 - EEC19 UN_TR 28246834 001 7191198628 - EEC18 28253238 001 CRSSFTY/00016/20 CRSSFTY/00018/20 HU21Z8L0 001 CPSFTY/00008/21 HU21U493 001 CPSFTY/00018/21 HU21Z8L0 002 2021-40451-BESS-1-Rev.1 HU21Z8L0 003 HU22MVDB 001 CPSFTY/00021/22	12.07.2016 30.09.2015 14.01.2013 28.09.2015 11.09.2013 28.01.2016 29.07.2014 15.04.2015 19.08.2016 05.10.2016 14.10.2016 28.01.2019 10.10.2018 19.10.2018 25.06.2020 09.10.2020 09.12.2020 14.04.2021 19.03.2021 29.09.2021 09.09.2021 24.08.2021 30.08.2021 07.02.2022 14.11.2022 01.06.2022	UN3480/ UN3481	yes

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GBA 18V 5.0 Ah	Detachable slide in lithium-ion accumulator	0,623 0,630 0,626 0,620 0,626 0,632 0,667 0,605 0,667 0,607 0,600 0,667 0,609	90.0	7191145588-EEC16 7191145985 - EEC16 UN_014_15 UN_T1-T5 T7_MR XL 18V 5Ah0 SCM Sanyo NSX 133 PgP CW43_2013 7191133829-EEC16 7191212277 - EEC19 28253283 001 CRSSFTY/00015/20 HU21M43X 001 CPSFTY/00015/21 CRSSFTY/00005/21 HU21M43X 002 CPSFTY/00029/22	30.08.2016 06.10.2016 18.06.2014 21.11.2013 30.03.2016 24.06.2019 23.06.2020 23.09.2020 04.03.2021 26.07.2021 05.02.2021 18.02.2022 29.06.2022	UN3480/ UN3481	Yes
GBA 18V 5.5 Ah	Detachable slide in lithium-ion accumulator	0,900 0,900 0,980 1,010	99.0	28252834 001 HU21XL0Z 001 HU21XL0Z 003 HU22BNDV 001	06.05.2020 26.10.2021 25.03.2022 09.12.2022	UN3480/ UN3481	Yes
GBA 18V 6.0 Ah	Detachable slide in lithium-ion accumulator	0,830 0,628 0,634 0,638 0,629 0,633	108.0	7191145489 - EEC16 7191091638_EEC14 7191143768-EEC16 7191187518 - EEC18 7191200830 - EEC18 CPSFTY/00020/21	18.08.2016 12.08.2014 22.09.2016 04.09.2018 29.11.2019 27.09.2021	UN3480/ UN3481	Yes
GBA 18V 6.3 Ah GBA18V63	Detachable slide in lithium-ion accumulator	0,803	113.4	7191136781-EEC16	13.05.2016	UN3480/ UN3481	Yes
GBA 18V 7.0 Ah	Detachable slide in lithium-ion accumulator	0,833	126.0	TR 28238951 001	09.06.2017	UN3480/ UN3481	Yes
GBA 18V 8.0 Ah GBA18V80	Detachable slide in lithium-ion accumulator	0,990 0,986 0,986 0,962 0,990 0,986 0,986 0,980 1,010 1,003 0,979	144.0	259732-TL7-2 28247959 002 HU212FFJ 002 CPSFTY/00021/21 2021-40462-BESS-1 HU212FFJ 004 HU212FFJ 005 CPSFTY/00016/22 HU22K26C 001 CPSFTY/00051/22 CPSFTY/00037/22	14.03.2019 26.03.2019 08.11.2021 09.09.2021 26.08.2021 09.12.2021 02.06.2022 12.05.2022 09.12.2022 15.02.2023 21.10.2022	UN3480/ UN3481	Yes
GBA 18V 12.0 Ah GBA18V120	Detachable slide in lithium-ion accumulator	1,380 1,370 1,400 1,377 1,407	216.0	259043-TL7-1 CRSSFTY/00007/21 CPSFTY/00031/21 CPSFTY/00019/21 CPSFTY/00038/22	12.02.2019 08.03.2021 25.10.2021 09.09.2021 21.10.2022	UN3480/ UN3481	Yes

All lithium batteries and cells shown in before-mentioned table were designed and manufactured in accordance with Section 2.9.4 of the UN Recommendations on the Transport of Dangerous Goods.

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