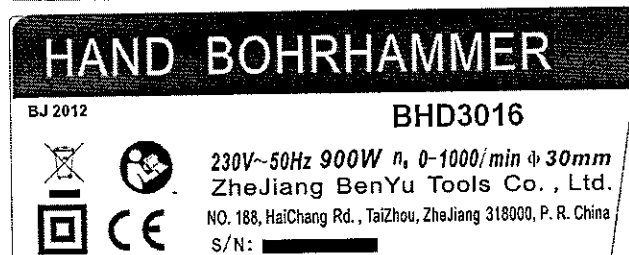
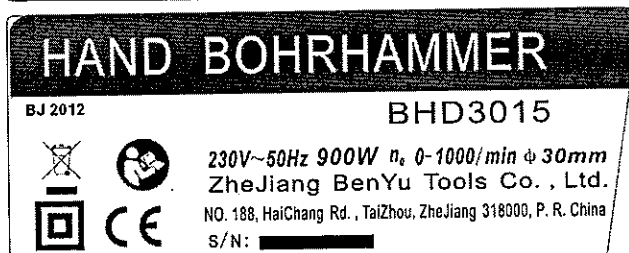
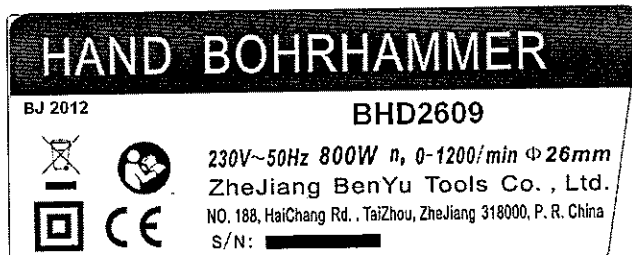
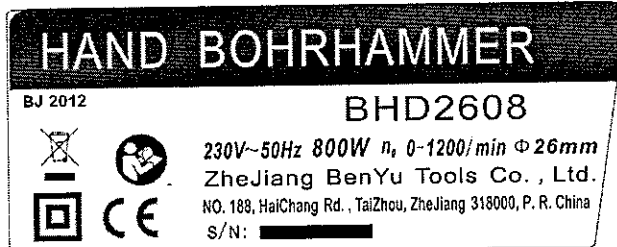


Produkte
Products

Prüfbericht - Nr.: 15048112 001 <i>Test Report No.:</i>		Seite 1 von 87 Page 1 of 87
Auftraggeber: <i>Client:</i>	Zhejiang Benyu Tools Co., Ltd. No. 188, Haichang Rd., Taizhou, Zhejiang 318000, P.R. China	
Gegenstand der Prüfung: <i>Test item:</i>	Electric Hammer	
Bezeichnung: <i>Identification:</i>	BHD2608, BHD2609, BHD3015, BHD3016	Serien-Nr.: <i>Serial No.:</i> Engineering Samples
Wareneingangs-Nr.: <i>Receipt No.:</i>	153171152	Eingangsdatum: <i>Date of receipt:</i> 22.06.2011
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of test item at delivery:</i>	The sample is OK for testing	
Prüfört: <i>Testing location:</i>	TÜV Rheinland (Shanghai) Co., Ltd. B1-13F No. 177, Lane 777, West Guangzhong Road, Zhabei District, Shanghai, CHINA	
Prüfgrundlage: <i>Test specification:</i>	EN 60745-1:2009+A11 EN 60745-2-6:2010 ZEK 01.4-08/11.11	
Prüfresultat: <i>Test Result:</i>	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). The test item passed the test specification(s).	
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland (Shanghai) Co., Ltd.	
geprüft/ tested by:	kontrolliert/ reviewed by:	
27.07.2012	Edward Liu / PE	13.08.2012
<i>Datum</i> Date	<i>Name/Stellung</i> Name/Position	<i>Unterschrift</i> Signature
		Li Yonggang / TC
		<i>Unterschrift</i> Signature
Sonstiges/ Other Aspects:		
<p>The product is in compliance with Annex 1 of 2006/42/EC. The PAHs test has been performed and passed. Foreseeable use was considered. Currently neither a safeguard clause procedure has been invoked nor is an increase in accidents known for these products. The risk assessment has been performed in accordance with above mentioned standards and the standards covered all relevant essential requirements as given in EC directive 2006/42/EC. Construction check and relevant tests have been performed and passed. The instruction manual and labels have been checked according to the harmonized standard. No EK decision is applicable for the product. Attachment 1: PAHs Risk Assessment Report (2 Pages) Attachment 2: Test Equipment List (2 Pages)</p>		
Abkürzungen:	P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet	Abbreviations: P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</p>		

Copy of marking plate:



General product information:

Hand-held Electric Hammer is intended for drilling and chiseling for household use.

These hammers have three functions: drill mode only, hammer mode only and hammer drill mode.

All models have the similar structure and enclosure shape.

The only difference between BHD2608 and BHD2609 is the mechanical structure of mode selecting device.

The only difference between BHD3015 and BHD3016 is the mechanical structure of mode selecting device.

Differences between BHD2608 and BHD3015 are motors, enclosure shapes, rated inputs and other technical ratings.

Tests have been performed on BHD2608 and BHD3016 respectively.

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
5	GENERAL CONDITIONS FOR THE TESTS		P
5.2	A single tool subjected to all tests, except as specified, and it withstood all relevant tests	Considered.	P
	A separate sample subjected to tests requiring tool modifications or disassembly after test performed	Meet the requirement.	P
	Additional samples of tools designed for different supply voltages subjected to tests	Meet the requirement.	P
	Testing of components necessitated subjecting additional samples of these components to tests		P
	Cumulative stress resulting from successive tests on electronic circuits avoided	Meet the requirement	P
	Components replaced or additional samples used as necessary		P
5.3	Tests conducted in order of clauses	Meet the requirement.	P
	Tests specified not deemed applicable based on construction of the tool..... :	Refer to the following report.	P
5.4	The tool and its movable parts tested in most unfavourable position in normal use	Meet the requirement	P
5.5	User adjustable controls and switching devices tested in their most unfavourable settings	Meet the requirement.	P
	Electronic speed control devices set at their highest speed..... :	Electronic speed-adjusting switch used, which is approved according EN 61058.	N/A
5.6	Tests conducted in a draught-free location, and unless otherwise specified, in (20 ± 5) °C		P
	Tests conducted at (23 ± 2) °C due to temperature limited temperature sensitive device	Considered.	P
5.7.2	Tool rated for more than one rated voltage tested at the most unfavourable voltage (V)..... :	Rated voltage: 230V~, 50Hz	N/A
5.8	Tool tested with attachments resulting in most unfavourable conditions		P
5.9	Tool tested with appropriate flexible cord, except as specified	H07RN-F, 2x1.0 mm ²	P
5.10	Accessible metal parts of class I tools not connected to an earthing terminal checked for compliance with the appropriate requirements for class II construction	Class II	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Accessible non-metallic parts of class I tools checked for compliance with appropriate requirements specified for class II construction	Class II	N/A
5.11	Parts of tools class I or class II tools operating at safety extra-low voltage checked for compliance with requirements specified for class III tools	No such parts.	N/A
5.12	When testing electronic circuits, the supply is to be free from those perturbations from external sources that can influence the results of the tests	Meet the requirement.	P
5.13	Heating element tested with the motor running	No such device.	N/A
	Heating elements incorporated in the tool connected to a separate supply, unless otherwise specified		N/A
5.14	Attachments performing a function within the scope of a relevant parts 2, tested according to that part 2		N/A
	Other attachments tested in accordance with manufacturer's instructions		N/A
	In the absence of manufacturer's instructions, tool operated continuously using a load resulting in rated input or rated current (VA, A)..... :		N/A
5.15	Tool loaded avoiding additional stresses such as side thrust when torque was to be applied	Meet the requirement	P
5.16	Tools operating at safety extra-low voltage and sold with their supply transformer tested using the supply transformer		N/A

6	ENVIRONMENTAL REQUIREMENTS		P
6.1	Noise	See below.	P
6.1.1	Noise reduction	The major noise is coming from motor and transmission parts.	P
6.1.2	Noise test code	See below.	P
6.1.2.1	Noise emission values to be quoted in the user instructions as required by 7.8.1 shall be measured by the test procedure described in 6.1.2.1 to 6.1.2.6	Noise emission values are mentioned in the user manual.	P
6.1.2.2	The test methods described are engineering methods in accordance with EN ISO 3744.	In accordance with EN ISO 3744.	P
	Instrumentation for the measurement of acoustic values shall be in accordance with EN ISO 3744.	In accordance with EN ISO 3744.	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	The sound power level shall be determined by using a hemispherical/cylinder measurement surface	Meet the requirement.	P
	A-weighted sound power level shall be calculated in accordance with EN ISO 3744.	In accordance with EN ISO 3744.	P
6.1.2.3	A-weighted sound pressure level at the workstation shall be determined in accordance with EN ISO 11203.	Meet the requirement.	P
6.1.2.4	The installation and mounting conditions shall be the same for the determination of both sound power level and sound pressure level at the work station	The same condition is used.	P
	The tool is held by the operator or suspended in such a way corresponding to normal use.	Held by the operator.	P
6.1.2.5	Measurements shall be carried out on a new tool, additional to that required by other tests.	Measurements are carried out on a new tool.	P
	Tools are tested under the two operating conditions "no load" or "load" as the appropriate for the type of tool and specified in the relevant part 2.	<p>For BHD2608, tested under load in figure Z106: $L_{PA}=89.86\text{dB(A)}$ (Hammer drilling) Uncertainty: $K=3\text{ dB(A)}$</p> <p>Tested under load applying loading device in figure Z105: $L_{PA}=92.96\text{dB(A)}$ (Chiselling) Uncertainty: $K=3\text{ dB(A)}$</p> <p>For BHD3016, tested under load in figure Z106: $L_{PA}=89.70\text{dB(A)}$ (Hammer drilling) Uncertainty: $K=3\text{ dB(A)}$</p> <p>Tested under load applying loading device in figure Z105: $L_{PA}=92.54\text{dB(A)}$ (Chiselling) Uncertainty: $K=3\text{ dB(A)}$</p>	P
	Tools shall be run in for a period of at least 1 minute before starting test.	Tools are run for 2 minutes before starting test.	P
	The measurement time under stable condition shall be at least 15 s.	30s is used.	P
6.1.2.6	Measurement uncertainties	Meet the requirement.	P
6.1.2.7	Information to be recorded	Meet the requirement.	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
6.1.2.8	Information to be reported	Meet the requirement.	P
6.1.2.9	Declaration and verification of noise emission values	Meet the requirement.	P
	L_{pA} [dB(A)] : K_{pA} [dB(A)] :	For BHD2608, tested under load in figure Z106: L_{pA} =89.86dB(A) (Hammer drilling) Uncertainty: K=3 dB(A) Tested under load applying loading device in figure Z105: L_{pA} =92.96dB(A) (Chiselling) Uncertainty: K=3 dB(A) For BHD3016, tested under load in figure Z106: L_{pA} =89.70dB(A) (Hammer drilling) Uncertainty: K=3 dB(A) Tested under load applying loading device in figure Z105: L_{pA} =92.54dB(A) (Chiselling) Uncertainty: K=3 dB(A)	P
	L_{pCpeak} (dB) : K_{pCpeak} (dB) :		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	L _{WA} [dB(A)] : K _{WA} [dB(A)] :	For BHD2608, tested under load in figure Z106: L _{WA} =100.86dB(A) (Hammer drilling) Uncertainty: K=3 dB(A) Tested under load applying loading device in figure Z105: L _{WA} =103.96dB(A) (Chiselling) Uncertainty: K=3 dB(A) For BHD3016, tested under load in figure Z106: L _{WA} =100.70dB(A) (Hammer drilling) Uncertainty: K=3 dB(A) Tested under load applying loading device in figure Z105: L _{WA} =103.54dB(A) (Chiselling) Uncertainty: K=3 dB(A)	P
6.2	Vibration	See below.	P
6.2.1	Vibration reduction	Considered.	P
6.2.2	The vibration levels for hand-arm vibration to be quoted in the user instructions as required by 8.12.2Za	Vibration emission values are mentioned in the user manual.	P
6.2.3	Symbols	Meet the requirement.	P
6.2.4.1	Direction of measurement	Related to the three orthogonal directions X, Y and Z.	P
6.2.4.2	Location of measurement	At hand-held position.	P
6.2.4.3	Magnitude of vibration	Meet the requirement.	P



EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
6.2.4.4	Combination of vibration direction	<p>For BHD2608, hammer drill into concrete:</p> <p>$a_{h,HD}$: 14.971m/s²(main handle)</p> <p>$a_{h,HD}$: 12.676m/s²(auxiliary handle)</p> <p>Chiseling:</p> <p>$a_{h,Cheq}$: 13.650m/s²(main handle)</p> <p>$a_{h,Cheq}$: 10.010m/s²(auxiliary handle)</p> <p>$K=1.5 \text{ m/s}^2$</p> <p>For BHD3016, hammer drill into concrete:</p> <p>$a_{h,HD}$: 17.453m/s²(main handle)</p> <p>$a_{h,HD}$: 13.453m/s²(auxiliary handle)</p> <p>Chiseling:</p> <p>$a_{h,Cheq}$: 17.210m/s²(main handle)</p> <p>$a_{h,Cheq}$: 14.910m/s²(auxiliary handle)</p> <p>$K=1.5 \text{ m/s}^2$</p>	P
6.2.5	Instrumentation requirements	Meet the requirement.	P
6.2.6	<p>Measurement shall be carried out on a new tool that is only used for the noise and vibration tests required by this standard.</p> <p>When the test procedure is not provided in a relevant Part 2 or there is no relevant Part 2, the operating conditions and working procedure shall be specified in sufficient detail as to achieve appropriate reproducibility.</p>	Measurement is carried out on a new tool that is only used for the noise and vibration test.	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
6.2.7	Measurement procedure and validity	<p>For BHD2608, hammer drill into concrete:</p> <p>$a_{h,HD}$: 14.971m/s²(main handle)</p> <p>$a_{h,HD}$: 12.676m/s²(auxiliary handle)</p> <p>Chiseling:</p> <p>$a_{h,Cheq}$: 13.650m/s²(main handle)</p> <p>$a_{h,Cheq}$: 10.010m/s²(auxiliary handle)</p> <p>$K=1.5 \text{ m/s}^2$</p> <p>For BHD3016, hammer drill into concrete:</p> <p>$a_{h,HD}$: 17.453m/s²(main handle)</p> <p>$a_{h,HD}$: 13.453m/s²(auxiliary handle)</p> <p>Chiseling:</p> <p>$a_{h,Cheq}$: 17.210m/s²(main handle)</p> <p>$a_{h,Cheq}$: 14.910m/s²(auxiliary handle)</p> <p>$K=1.5 \text{ m/s}^2$</p>	P
6.2.7.1	Reported vibration value		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Work mode - vibration emission value a (m/s^2)....:	For BHD2608, hammer drill into concrete: $a_{h,HD}$: 14.971 m/s^2 (main handle) $a_{h,HD}$: 12.676 m/s^2 (auxiliary handle) Chiseling: $a_{h,Cheq}$: 13.650 m/s^2 (main handle) $a_{h,Cheq}$: 10.010 m/s^2 (auxiliary handle) $K=1.5 m/s^2$ For BHD3016, hammer drill into concrete: $a_{h,HD}$: 17.453 m/s^2 (main handle) $a_{h,HD}$: 13.453 m/s^2 (auxiliary handle) Chiseling: $a_{h,Cheq}$: 17.210 m/s^2 (main handle) $a_{h,Cheq}$: 14.910 m/s^2 (auxiliary handle) $K=1.5 m/s^2$	P
	Uncertainty K (m/s^2).....:	$K=1.5m/s^2$	P
6.2.7.2	Declaration of the vibration emission value (instruction manual)		P
	Work mode - vibration emission value a (m/s^2)....:	Only the max. value was declared: For BHD2608, hammer drill into concrete: $a_{h,HD}$: 14.971 m/s^2 Chiseling: $a_{h,Cheq}$: 13.650 m/s^2 For BHD3016, hammer drill into concrete: $a_{h,HD}$: 17.453 m/s^2 Chiseling: $a_{h,Cheq}$: 17.210 m/s^2	P
	Uncertainty K (m/s^2).....:	$K=1.5m/s^2$	P
6.2.8	Measurement report	See above.	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

7	CLASSIFICATION		P
7.1	Tool is Class I, II, or III with respect to protection against electric shock	Class II	P
7.2	Degree of protection against harmful ingress of water per IEC 60529	IPX0	P
	Required degree of protection other than IPX0 specified by manufacturer or in relevant part 2..... :		N/A

8	MARKINGS AND INSTRUCTIONS		P
8.1	Tool marked with rated voltage(s) or rated voltage range(s) (V)	230V~	P
	Tool for star-delta connection clearly marked with the two rated voltages (e.g. 230 Δ / 400 Y V)	Single phase	N/A
	Nature of supply/frequency with symbol for nature of supply placed next to rated voltage (Hz)	~, 50Hz	P
	Rated input or current marked (W or A)..... :	800W for BHD2608, BHD2609 900W for BHD3015, BHD3016	P
	Rated input or rated current corresponds to highest loading possible for a tool with alternative components selectable by a control device		N/A
	Manufacturer's name, or trade mark, or identification mark and address of manufacturer or an agent responsible for marketing the tool	Zhejiang Benyu Tools Co., Ltd. No. 188, Haichang Rd., Taizhou, Zhejiang 318000, P.R. China	P
	Model or type reference	BHD2608, BHD2609, BHD3015, BHD3016	P
	Class II symbol for class II tools		P
	IP number other than IPX0	IPX0	P
	Tool provided with "WARNING – To reduce the risk of injury, user must read instruction manual" or the sign M002 of ISO 7010 ⁸⁾	The sign M002 of ISO 7010 was marked on the label. 	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Additional markings not leading to misunderstanding permitted	n ₀ : 0-1200/min for BHD2608, BHD2609 n ₀ : 0-1000/min for BHD3015, BHD3016	P
	Business name and address of the manufacturer and, where applicable, his authorised representative.....	Zhejiang Benyu Tools Co., Ltd. No. 188, Haichang Rd., Taizhou, Zhejiang 318000, P.R. China	P
	Designation of the tool	Hand Bohrhammer	P
	Designation of series or type		N/A
	Year of manufacture	2012	P
8.2	Rated operating time, or rated operating time and rated resting time, respectively, marked on a short-time or intermittent operation tool, except when operating time limited by construction of tool		N/A
	Rated operating time precedes rated resting time, and they are separated by an oblique stroke		N/A
8.3	Correct use of symbol for voltage ranges and different voltage levels	230V~	P
8.4	Change in voltage clearly discernible		N/A
	Correct Wiring diagram fixed to tool		N/A
8.5	Rated power input.....	Single rated input power	N/A
8.6	Use of correct symbols		P
	Correct dimensions and use for Class II symbol.....	5mmx5mm, 2.5mmx2.5mm	P
	Other units and their symbols same as international standardised system	Meet the requirement.	P
	No misunderstanding with use of additional symbols		P
8.7	A connection diagram affixed to a tool with more than two supply conductors, except when correct mode of operation is obvious as specified		N/A
	The earthing conductor not a supply conductor		N/A
	Wiring diagram indicates how the windings are to be connected for tools for star-delta connection		N/A
8.8	Terminals, except for type Z attachments, marked on non-removable part with specified symbols		N/A
	Terminal exclusively for neutral connection marked with "N"	Class II tool	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Earthing terminal marked with specified symbol	Class II tool	N/A
8.9	Switches, which may result in a hazard, marked accordingly using universally comprehensible symbol, or located to indicate which part of tool they control.....	Push button switch, the off position is obvious to the user.	P
8.10	"Off" position indicated by figure O of IEC 60417-5008 (DB:2002-10) when a hazard could result by unexpected start up	See above.	N/A
	Figure O not used for any other indication		P
	Position of moving contacts of mains switch correspond to indications for different positions of its operating means		N/A
8.11	Regulating devices and the like provided with markings as specified	The tool is provided with a switch to control three working modes: "hammer drill mode", "drilling only mode" and "chiselling hammer only mode". The switch also controls an adjusting mode which can adjust the direction of the shovel bit. "L" and "R" are used besides the air-intake opening for indicating the rotation direction of the tool.	P
	Figures used for different positions with O for "off" position, and figures reflecting greater output for other positions.....		N/A
8.12	Instruction manual and safety instructions provided together with an explanation of the symbols		P
	Instructions legible and contrasting in the official language(s) of the country where tool is sold, and include name and address of manufacturer, or supplier, or agent marketing the tool	In German.	P
	Additional: The translations must be bear the words "Translation of the original instructions", and they must be accompanied by a copy of the "Original instructions".		P
	Replacement: They include the business name and address of the manufacturer and, where applicable, his authorised representative. Any address is sufficient to ensure contact.		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Additional: They include the designation of the tool and series or type as required by 8.1, including, description of machine such as "drill", "planer" etc.		P
8.12.1	Safety instructions in English are verbatim and in any other official language are equivalent		P
	Format of all Safety Warnings differentiate the context of all clauses by font or similar means and as illustrated in 8.12.1.1		P
8.12.1.1	General Power Tool Safety Warnings		P
8.12.1.2	Order of the Safety Instructions are in accordance with this clause..... :		P
8.12.2	Warnings required by this clause included in Instruction Manual when Safety Instructions are separate from instruction Manual		P
	Warnings in English are verbatim and in any other official language are equivalent..... :		P
	Instruction Manual provided with the required information in a) to d) of this clause as appropriate		P
8.12.2 (Za)	Emissions		P
	1) The noise emission according to 6.1.2.		P
	2) Recommendation for the operator to wear hearing protection.		P
	3) The vibration emission according to 6.2.		P
	Vibration emission < 2.5 m/s ² , stated in the instruction		P
	Vibration emission > 2.5 m/s ² value given in the instruction		P
	4) The following information:		P
	- that the declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another.		P
	- that the declared vibration total value may also be used in a preliminary assessment of exposure.		P
	5) A warning:		P
	- that the vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	- of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).		P
8.13	Markings easily legible and withstood durability test		P
	Signs are in contrast to their background, clearly legible from a distance of not less than 500 mm		P
	Label material, grade designation, ink and printing process..... :		P
	Signs complied with blue colour requirements of ISO 3864-2		N/A
8.14	Markings in 8.1 to 8.5 on a main part of the tool	On the main part of tool.	P
	Markings in 8.1, 8.2, 8.3, and 8.5 placed together		P
	Markings clearly discernible from outside of the tool, but if necessary, after removal of a cover without aid of a tool		P
	Indications for switches and controls placed on or in vicinity of components		P
8.15	Thermal link or fuse-link marked appropriately	None.	N/A

9	PROTECTION AGAINST ACCESS TO LIVE PARTS		P
9.1	Accessible part not considered live	No such parts.	N/A
	- extra-low a.c. voltage: peak values not exceeding 42.4 V		N/A
	- extra-low d.c. voltage: not exceeding 42.4 V		N/A
	- or separated from live parts by protective impedance, d.c. current not exceeding 2 mA	See appended Table 9.1	N/A
	- or separated from live parts by protective impedance, a.c. peak value not exceeding 0.7 mA	See appended Table 9.1	N/A
	- for peak value 42.4 V up to and including 450 V capacitance not exceeding 0.1 µF	See appended Table 9.1	N/A
	- for peak value 450 V up to and including 15 kV capacitance not exceeding 0.1 µF	See appended Table 9.1	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

9.2	Probe of Fig 1 did not contact live parts with detachable parts removed	When detachable parts were removed, the test probe cannot touch live parts or basic insulation.	P
	Probe of Fig 1 did not contact live parts of the lamp with detachable parts removed	No lamp used.	N/A
	Screw type fuses or screw-type miniature circuit breakers accessible without aid of a tool excluded from this requirement	No such device.	N/A
	Probe of Fig 1 did not contact live parts or live parts protected only by lacquer, enamel, ordinary paper, cotton, oxide film, beads, or sealing compound applied through an opening with 20 N force	Through an opening with 20N force, the probe of Fig 1 cannot touch live parts or winding.	P
9.3	Test pin of Fig 2 did not contact live parts, through openings in class II tools or class II constructions	Through openings, the test pin cannot touch live parts.	P
9.4	Probe of Fig 1 did not contact basic insulation through openings in Class II tools or Class II constructions with all detachable parts removed	The probe of Fig 1 cannot touch live parts or basic insulation.	P

10	STARTING		P
10.1	Motors start under normal voltage conditions	See below.	P
	Starting ten times at 0.85 times rated voltage without load (V)..... :	Tool was tested 10 times under the conditions of: 0.85×230V=195.5V	P
10.2	Centrifugal and other automatic starting switches operated reliably 10 times at 1.1 of the rated voltage (V)..... :	Not applicable.	N/A
10.3	Overload protection devices did not operate under normal starting conditions as confirmed by 10.1 and 10.2	No such device.	N/A

11	INPUT AND CURRENT		P
11.1	Marked power input or current is at least 110% of measured no-load input or current..... :	See appended Table 11.1	P

12	HEATING		P
12.1	Excessive temperatures not attained under normal load..... :	See appended Table 12.1	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

	Measurements for heating elements repeated as specified	No heating element.	N/A
12.2	Loading conditions during temperature test..... :	See appended Table 12.1	P
	Heating elements tested to IEC 60335-1 at 1.06 times rated voltage		N/A
12.3	When possible, temperature rises of uniform windings determined by resistance method..... :	See appended Table 12.3	P
	Temperature rise of electrical insulation, other than windings, measured on surface of insulation		P
12.4	Tool operating time..... :	See appended Table 12.1	P
12.5	Temperature rises did not exceed values in Table 1, except as allowed by 12.6		P
	Protective devices did not operate		N/A
	Sealing compounds did not flow	No sealing compound used.	N/A
12.6	When winding temperatures exceeded values in Table 1, three additional samples successfully subjected to following tests:	The winding temperatures did not exceed the permitted value.	N/A
	a) Heat treatment for 240 h at the specified cabinet temperature (°C):..... :		N/A
	b) No inter-turn short circuit after oven treatment		N/A
	c) Humidity treatment in accordance with 14.3		N/A
	d) No excessive leakage current after humidity treatment..... :	See appended Table 13.1C	N/A
	No flashover or breakdown occurred during electric strength after humidity treatment..... :	See appended Table 15.2A	N/A

13	LEAKAGE CURRENT		P
13.1	Leakage current was not excessive..... :	See Tables 13.1A-13.1E	P
	Protective impedance disconnected	No protective impedance used.	N/A
13.2	Leakage current measured using circuit of Fig. 10		P

14	MOISTURE RESISTANCE		P
14.1	Degree of protection for tool enclosure according to tool classification (IP Code)..... :	IPX0	N/A
14.1.1	Tool not connected to the supply and turned continuously through most unfavourable positions		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Lightest permissible flexible cord with smallest cross-sectional area specified on Table 8 used on the tool with type X attachment (A, mm ²)		N/A
	Other tools tested as delivered		N/A
14.1.2	Tool rated IPX1 through IPX7 subjected to applicable tests of IEC 60529		N/A
	For IPX7 test, tool immersed in water containing 1.0 % NaCl		N/A
	Tool withstood electric strength test of 15 after moisture treatment	See appended Table 15.2B	N/A
	No trace of water on insulation causing reduction of creepage and clearance below values in 28.1		N/A
14.2	No trace of water on insulation causing reduction of creepage and clearance below those in 28.1 after spillage of liquid test		N/A
	Tool withstood electric strength test of 15 after spillage treatment	See appended Table 15.2B	N/A
	Tool subjected to test of 14.3 after standing in normal test –room atmosphere for 24 h		N/A
14.3	Tool subjected to humidity treatment test for 48 h		P
	Relative humidity (93 ± 2) %	93%	P
	Temperature (20 - 30 °C ± 1K)	25°C	P
	No excessive leakage after humidity treatment	See appended Table 13.1D	P
	No flashover or breakdown occurred during electric strength after humidity treatment.....	See appended Table 15.2A	P
14.4	User not subject to an increased risk of electrical shock by liquid system during foreseeable use	No liquid system	N/A
	Tool operated for 1 min in each mode and did not exceed maximum allowed leakage current	See appended Table 13.1E	N/A
	Tool did not exceed maximum allowable leakage current after drying for 24 h at ambient temperature	See appended Table 13.1E	N/A
14.5	Liquid system withstood the pressure in normal use without leaking	No liquid system.	N/A
	Tool did not exceed maximum allowable leakage current during pressure application	See appended Table 13.1E	N/A
	Tool did not exceed maximum allowable leakage current after drying for 24 h at ambient temperature	See appended Table 13.1E	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
14.6	Residual current devices complied with IEC 61540 and met requirements a) to c)	No RCD used.	N/A
	a) RCD disconnected only both mains conductors when leakage exceeded 10 mA with a maximum response of 300 ms		N/A
	Test conducted according to 9.9.2 of IEC 61540, and earthing conductor stayed connected		N/A
	b) RCD operated correctly for all 50 cycles		N/A
	c) RCD cannot be removed during use or routine normal maintenance (i.e., residual current device fixed to tool or power supply cord connected to tool)		N/A
	RCD fitted in supply cord provided with Type Y or Z attachment for connection to supply cord and interconnecting cord		N/A

15	ELECTRIC STRENGTH		P
15.1	Protective impedance disconnected	No protective impedance used.	P
15.2	No flashover or breakdown occurred during the test with the output current at least than 200 mA and the applied measured voltage +/- 3%.....:	See Tables 15.2	P
	The insulation coating withstood the applied potential with the 5 kPa force applied		P
	For the tool with integral heating elements, test voltages specified in IEC 60335-1 applied to the heating elements only and not to other parts of tool	No heating element.	N/A

16	OVERLOAD PROTECTION OF TRANSFORMERS AND ASSOCIATED CIRCUITS		N/A
16.1	No excessive temperatures occurred during short circuit in transformer or circuits associated with it for a tool supplied from a transformer.....:		N/A
	Power limited by (short-circuit protective device).....:		—
	Insulation on conductors was within 15 K of Table 1		N/A
	Transformer windings complied with Clause 18.9		N/A
	Transformer complies with IEC 61558-1		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

17	ENDURANCE		P
17.1	No hazards due to extended normal use		P
17.2	No load intermittent operation (2 x 24 h)	See Part 2 requirement.	N/A
	Number of operations		—
	Number of hours for each operation.....		—
	Test voltage at each operation (V)		—
	Rate of operation (100s "on", 20s "off")		—
	Test positions selected		—
	Operation time for each position.....		—
	Servicing of carbon brushes and lubricant	Not necessary	N/A
	Forced cooling or rest periods if temperature exceeded values in Table 1		N/A
	No electrical or mechanical failure		P
	No insulation damage		P
	No loose contacts or connections		P
	No flashover or breakdown occurred after spillage treatment	See Table 15.2C	P
	No operation of overload protection devices		N/A
17.3	Tools with Centrifugal switches operated for 10,000 cycles		N/A
	Number of operations under normal load.....		N/A
	Rate of operations (s "on", s "off")		N/A
	Test voltage 0.9 x rated Voltage (V)		N/A
	No electrical or mechanical failure		N/A
	No insulation damage		N/A
	No loose contact or connections		N/A
	No flashover or breakdown occurred	See Table 15.2D	N/A
	No opening of overload protection devices		N/A

18	ABNORMAL OPERATION		P
18.1	No hazard due to abnormal operation		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Fuses, thermal cut-outs, over current protection devices used to provide the necessary protection	No such device	N/A
18.2	Tool with heating elements	No heating element	N/A
	Tool with a control device limiting temperature		N/A
	Only one abnormal condition simulated each time		N/A
	Tests of Clauses 18.2-18.6 conducted consecutively when more than one test applicable to the same tool		N/A
	Tool tested until a non-self-resetting thermal cut-out operated, or until steady conditions		N/A
	Test repeated on a second sample when a heating element permanently open-circuited		N/A
	Only one abnormal condition simulated each time		N/A
18.3	Tool with heating elements tested under the conditions of heating test, except with restricted heat dissipation	No heating element	N/A
	Test voltage provided a power 0.85 times rated power input (V)		—
18.4	Tool cooled down to room temperature and test of 18.3 repeated		N/A
	Test voltage provided a power input of 1.24 times rated power input (V)		—
18.5	Tested as in heating test, under normal operation with control limiting the temperature short-circuited		N/A
	Test voltage provided a power input of 1.15 times rated power input (V)		—
	Multiple controls short-circuited one at a time		N/A
18.6	Test on class I tool with tubular sheathed and embedded heating elements		N/A
	Test repeated with the supply polarity reversed and other end of element connected to earth		N/A
18.7	No load test for 1 min on cutting tools incorporating a commutator motor		P
	Test voltage 1.3 times rated voltage, or upper limit of voltage range (V)	299V	—
	After the tests of 18.2 to 18.7, safety of tool not impaired, and windings and connections not loose		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
18.8	Test on tools with induction motor and with moving parts locked	Series motor	N/A
	a) Tool with a starting torque less than full-load torque		N/A
	Duration of locked conditions (s)		—
	b) Tool started by hand		N/A
	Duration of locked condition (s)		—
	c) tool with moving parts liable to be jammed, or moving parts that can be stopped by hand with the motor switched on		N/A
	Duration of locked condition (s)		—
	After the test, or at the instant of operation of fuses, thermal cut-outs, motor operated devices, and the like, the temperature of the windings complied with the values in Table 3		N/A
	Max winding temperature recorded (°C)		—
18.9	Test on tools with 3-phase motors with one phase disconnected	Single phase motor	N/A
	30 s tests for tool switched on by hand or continuously loaded by hand; cold started		N/A
	5 min test for other tools		N/A
	After the test, or at the instant of operation of fuses, thermal cut-outs, motor protection devices, and the like, the temperature of the windings complied with the limits in Table 3		N/A
	Max winding temperature recorded (°C)		—
18.10	No hazards occurred under fault conditions of 18.10.2	Tested on electronic components are used in the speed-adjusting switch which is approved according to EN 61058.	P
	Circuits complied with 18.10.1 and not subjected to fault conditions of 18.10.2	See above	N/A
	Test of 18.10.3 conducted when safety of tool under a fault condition depended on operation of a miniature fuse-link complying with IEC 60127-3	No fuse used	N/A
	Tool withstood the particular test as a conductor of a PCB open-circuited, and		P
	– base material of PCB withstood test of Annex F,	Approved by UL	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	- creepage or clearances between live parts and accessible metal parts not reduced below values in 28 due to loosened conductors, and		N/A
	- tool withstood tests of 18.10.2 with the open-circuited conductor bridged	Electronic components are used in the speed-adjusting switch which is approved according to EN 61058.	P
18.10.2	Fault conditions a) to f) conducted as applicable	See above	N/A
18.10.3	Tests repeated with fuse-link replaced by an ammeter when during fault conditions of 18.10.2, safety of the tool depended on operation of a miniature fuse-link complying with IEC 60127-3,	No fuse used	N/A
	- Circuit not considered to be adequately protected when current measured was 2.1 times the rated current of fuse-link, and test conducted with fuse-link short-circuited (A)..... :		N/A
	- Circuit considered adequately protected when current measured was 2.75 times the rated current of fuse-link (A)..... :		N/A
	- Fuse-link short-circuited when current measured was 2.1-2.75 times the rated current of fuse-link, and test conducted as follows (A)..... :		N/A
18.10.4	Tools incorporating electronic devices are so designed that no hazard results in the event of a failure in the electronic equipment	Tested on electronic components are used in the speed-adjusting switch which is approved according to EN 61058.	P
	Tool operated for 1 min, at a voltage equal to the rated voltage or the mean value of the voltage range, at no-load with the electronic device short-circuited.	For BHD2608, when short-circuited, the tool operates at 1219/min. For BHD3016, when short-circuited, the tool operates at 1022/min.	P
	No hazard resulted when test repeated with electronic device open-circuited	When open-circuited, the tools cannot work.	P
	No damage due to fire and mechanical damage impairing safety and protection against electric shock following the tests of 18.10.1 to 18.10.4, and		P
	- Current through protective impedance was less than limits of Clause 9.1 (A)..... :	No protective impedance	N/A
	Tool considered to have withstood the test when speed-limiting device operated		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
18.11	Switches and devices for motor reversal withstood stresses occurring when rotation reversed 25 times under running conditions at rated voltage or upper limit of rated voltage range at no-load (V)	The rotation can not be reversed when the switch is activated.	P
18.12	Class I tool with class II construction and class II tool operated under extreme overload conditions without impairing protection against electric shock	Class II tools	P
	A separate sample operated for 15 min, until the tool open-circuited, or flame appeared.....	For BHD2608, the tool open-circuited after 4min 49sec. For BHD3016, the tool open-circuited after 6min 23sec.	P
	Test circuit (KVA)	>12KVA	—
	160% normal load test current (A).....	For BHD2608, 5.73A For BHD3016, 6.56A	—
	Overload condition existed for (_min, _sec).....	For BHD2608, the tool open-circuited after 4min 49sec. For BHD3016, the tool open-circuited after 6min 23sec.	—
	Condition continued until the tool open-circuited, or flame appeared or 15 minutes expired.....	See above	P
	Elements that opened in case an open circuit occurred		N/A
	When flames appeared, immediately extinguished by CO ₂ extinguisher		N/A
	Maximum leakage current measured throughout the abnormal test (mA)	See Table 13.1E	P
	Tool that did not operate after 15 min, cooled to room temperature and subjected to a 1500 V Electric Strength test (live parts and accessible parts)	For BHD2608, L/N-enclosure: 1500V, 1min and met the requirement. For BHD3016, L/N-enclosure: 1500V, 1min and met the requirement.	P
	Tool that operated after 15 min, cooled to room temperature and subjected to a 2500 V Electric Strength test (live parts and accessible parts)		N/A
19	MECHANICAL HAZARDS		P
19.1	Adequate protection against injury provided against moving and dangerous parts	Meet the requirement. The enclosure is used as protection against moving and dangerous part.	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Protective enclosures, covers, and the like have adequate mechanical strength and cannot be removed without the aid of a tool	Cannot be removed without the aid of the tool.	P
	For fixed guards that are to be removed at the place of use as part of the routine maintenance procedure, as described in the instruction manual, the fastening shall remain attached to the guard or to the tool. Replacement of brushes is not considered as part of the routine maintenance.	No such fixed guard.	N/A
	No dangers from adjusting the guards	No such guard	N/A
	No dangers due to movement or release of working elements during normal use	Meet the requirement	P
	No contact with dangerous moving parts using standard test finger (Fig 1)	The test finger cannot touch blade and other moving parts	P
19.2	No sharp edges, burrs, flashes and the like	No such parts	P
19.3	No contact of moving parts with test finger (Fig 1) with removal of dust collection system	No dust collection system	N/A
19.4	Adequate grasping surfaces		P
19.5	Provision for visual checking of the contact of cutting tool with work piece		P
19.6	The no-load speed of the spindle did not exceed 110 % of the rated no-load speed	For BHD2608, when drill only mode, the measure max. no-load speed is 1220/min, less than 110% of rated no-load speed (1200X1.1=1320/min) For BHD3016, when drill only mode, the measure max. no-load speed is 1022/min, less than 110% of rated no-load speed (1000X1.1=1100/min)	P
20	MECHANICAL STRENGTH		P
20.1	Adequate mechanical strength in normal use		P
	No flashover or breakdown occurred after tests of 20.2-20.4 and 15	See Table 15.2E	P
	No damage impairing compliance with this standard, and no live parts became accessible		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
20.2	Three blows applied to every weak point of enclosure by spring-operated impact test apparatus in Clause 5 of IEC 60068-2-75	Blows are performed on ventilating opening of the enclosure and the actuator of the switch, handle, adjuster button with 1J, 3times	P
	Brush cap impact energy (Nm)..... :	No brush cap	—
	Other part impact energy (Nm)..... :	1 Nm for other parts	—
	Blows applied to protective devices, handles, levers, and knobs when necessary		P
	No damage impairing compliance with standard		P
	No accessibility of live parts		P
	No cracks visible to naked eye		P
	Inner cover withstood test		N/A
20.3	Hand-held tool withstood impact of 3 varied drops on a concrete surface from 1 m	3 drops from 1m to concrete surface	P
	No damage impairing compliance with standard	Meet the requirement	P
	No accessibility of live parts	Meet the requirement	P
	No cracks visible to naked eye		P
	Inner cover withstood test		N/A
20.4	Adequate mechanical strength of brush holder and their caps	Tested on brush holder	P
	Brush cap removed and replace 10 times applying specified tightening torque	No brush cap, changing carbon brush for 10 times.	P
	Tightening torque (Nm)..... :		—
	No damage impairing compliance with standard		P
	No accessibility of live parts		P
	No cracks visible to naked eye		P
	No damage to threads		N/A
20.5	Handles and grasping surfaces have adequate mechanical strength to provide insulation between grasping area and output shaft	Meet the requirement	P
	A separate sample subjected to a single impact from 1m onto a concrete surface on each handle and each recommended grasping surface followed by an electric strength test of 1250 V a.c.	Tested, 1250V, 1min	P
	No damage impairing compliance with standard	Meet the requirement	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	No accessibility of live parts	Meet the requirement	P
	No cracks visible to naked eye	Meet the requirement	P
	No flashover or breakdown of insulation	See Table 15.2E	P

21	CONSTRUCTION		P
21.1	Accidental changing of setting did not occur in tools with different voltages or different speed settings		P
21.2	Accidental changing of settings of control devices did not occur		P
21.3	Removal of parts ensuring required degree of protection against moisture not possible without aid of a tool	IPX0, no requirement for degree of protection against moisture	N/A
21.4	Fixing of handles, knobs and the like, used to indicate position of switches or similar components in a wrong position, was not possible	No such parts	N/A
21.5	Replacement of a flexible cable or cord requiring displacement of a switch was possible without subjecting internal wiring to undue stress	Meet the requirement	P
	After repositioning of the switch and before reassembling the tool, verification of correct positioning of internal wiring was possible	Meet the requirement	P
21.6	Wood, cotton, silk, paper and similar fibrous or hygroscopic material not used as insulation, unless impregnated or chemically rendered non-fibrous	No such material used as insulation	P
21.7	Asbestos not used	Not used	P
21.8	Ordinary driving belts not relied upon to ensure electrical insulation	No driving belt used	N/A
	Special belt design employed to allow use as electrical insulation		N/A
21.9	Insulating barriers of Class II tools, and parts of Class II tools serving as supplementary or reinforced insulation are:		P
	- fixed such that they cannot be removed without being seriously damaged		P
	- so designed that they cannot be replaced in an incorrect position, and when omitted, the tool will be inoperable or manifestly incomplete		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
21.10	Use of the sheath (jacket) of a flexible cable or cord as supplementary insulation inside the tool is independent of mechanical and thermal stresses		N/A
21.11	No assembly gap with a width greater than 0.3 mm in supplementary insulation giving access to live parts	No such assembly gap	P
21.12	No hazards from parts of Class I tool such as wire, screw, nut, washer or spring becoming loose or falling out of position, and accessible metal not made live	Class II	N/A
	Clearance and creepage distances of Class II tool or class II construction not reduced to less than 50% of values shown in Table 10	When the internal wires loose from the terminal, 4mm cr. and cl. can be fulfilled over s.i. or r.i.	P
	Class II tool or Class II construction, other than those of the all-insulated type, provided with an insulating barrier between accessible metal and motor parts and other live parts	Meet the requirement	P
	Class I tool with adequately fixed parts, barriers, and sufficiently large creepage and clearances	Class II	N/A
	All wires secured in place independent of terminal connection or solder	Meet the requirement	P
21.13	Supplementary and reinforced insulation not impaired by deposition of dirt, or dust resulting from wear of parts within the tool to the extent that creepage and clearances would be reduced		P
	Ceramic material not tightly sintered and similar materials, and beads alone, not used as supplementary or reinforced insulation	No ceramic material used	N/A
	Parts of natural or synthetic rubber used as supplementary insulation are resistant to aging	No rubber part used as insulation	N/A
	Rubber parts so arranged and dimensioned that creepage distances not reduced below values in 28.1, even when cracks occurred		N/A
	Insulated material for embedded heating conductors serves only as basic insulation		N/A
	Aging test for rubber parts for 70 h at 100±2°C		N/A
	Rubber parts tested		—
21.14	Internal wiring, windings, and the like including insulation in general not exposed to oil, grease, and similar substances	Meet the requirement	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Adequate insulation properties of oil, grease, and similar substances used for lubrication of gears and the like with no effect on insulation	No wire exposed to oil	N/A
21.15	No access to brushes without aid of a tool	The brush cannot be touched without the aid of the tool	P
	When tightening screw-type brush-caps, two surfaces clamped together	No screw-type-brush cap	N/A
	Locking device retaining brushes in position do not depend upon brush spring tension	Meet the requirement	P
	Screw-type brush-caps accessible from the outside of the tool made of or covered with insulating material of adequate strength, and not projecting beyond surrounding surface of the tool	No screw-type-brush cap	N/A
	Properties of insulating materials		P
	– tested according to Cl. 20.2 and 20.4 for screw-type brush-caps accessible from outside of tool		P
	– tested as specified for supplementary insulation for class I and class III tools		N/A
	– tested as specified for reinforced insulation for class II tools		P
21.16	Tool employing a liquid system protects the user against increased risk of shock due to presence of liquid under normal use and faults of liquid system	No liquid system	N/A
	Tools employing liquid system constructed as Class III tools, or		N/A
	- class I or II and provided with a residual current device, and complying with 14.4-14.6, or		N/A
	- class I or class II and designed for use in combination with an isolating transformer and complying with 14.4 and 14.5		N/A
21.17	Accidental operation of switches and reset buttons on non-self-resetting controls did not occur when tool dragged across a horizontal surface	For the switch, accidental operation cannot occurred	P
21.18	Tools, other than those provided with a flexible shaft, fitted with a mains switch which can be switched off by the user without releasing the grasp on the tool	Switch locates on the handle. Switched off without releasing grasp tool	P
	A switch locking in "on" position considered to meet the requirement of 21.18, provided it unlocks automatically when the trigger or actuating member is activated	The switch can be locked in "on" position, when press the switch button again, switch off	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
21.18.1	Switch could not be locked in "on" position and did not remain in "on" position after trigger released when a risk with continued operation existed	The switch can be locked in "on" position	N/A
21.18.2	Switch was locked in "off" position when a risk associated with inadvertent starting existed	No risk of inadvertent start , refer to EN 60745-2-6	P
21.19	Protection against electrical shock not affected when screws accessible from the outside replaced by longer screws simulating routine servicing	Tested with longer screws, not reduce any creepage distances and clearances	P
	Creepage and clearances not reduced below values in 28.1	Meet the requirement	P
21.20	Tool marked with the first numeral of IP system complies with IEC 60529	IPX0	N/A
21.21	No risk of electrical shock from charged capacitors when touching pins of the plug	Single pole disconnected switch	P
	Max. voltage measured between pins of the plug after one second after each disconnection (V)	For BHD2608, measured max. 4.3V. For BHD3016, measured max. 5.0V.	P
	Line capacitors rated 0.1 μ F		N/A
21.22	Non-detachable parts secured reliably and withstood mechanical stress under normal use	Handle	P
	Snap-in devices have an obvious locked position and have fixing properties that do not deteriorate	No such device	N/A
	Parts disassembled and assembled 10 times prior to test showed no signs of deterioration	Handle	P
	Parts affected by temperature tested immediately after conditions of Clause 12	No such parts	N/A
	All weak parts of the tool subjected to the 10s push force of 50 N		P
	50 N pull force applied to cover or weak part when shaped prevented easy slippage of fingertips		P
	30 N pull force applied to cover or weak parts when projection of the gripped part was less than 10 mm in the direction of removal	No such parts	N/A
	Test fingernail of Fig. 7 inserted in apertures and joints with a force of 10 N to enable a force of 30 N for 10 s by means of a loop while applying push/pull forces		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	A torque of 2 Nm applied at the same time as pull or push force on parts 50 mm or smaller and likely to be subjected to twisting,		P
	A torque of 4 Nm applied at the same time as pull or push force on parts larger than 50 mm and likely to be subjected to twisting,	No such parts	N/A
	Projection was less than 10 mm and required a torque of (Nm).....:		P
	Parts not detached, and remained in locked position	Meet the requirement	P
21.23	Handles, knobs, etc., withstood axial force of 30 N for 1 minute	Meet the requirement	P
21.24	Storage hooks and similar devices for flexible cords are smooth and well rounded	No such device	N/A
21.25	Current-carrying parts and other parts resistant to corrosion under normal use	Meet the requirement	P
	After tests of Clause 30, no sign of corrosion on relevant parts		P
21.27	Insulation between SELV and other parts of non-class II tool meets requirements for double or reinforced insulation	Class II and no SELV	N/A
21.28	Parts separated by protective impedance comply with requirements for double or reinforced insulation	No such device	N/A
21.30	Shafts of operating knobs, handles, levers, and the like not live, except when removal of such parts does not make the shaft accessible to test finger	Meet the requirement	P
21.31	Handles, levers, and knobs of non-class III tool held or actuated in normal use do not become live during an insulation fault	Class II tool and the grasp area was protected by supplementary	P
	Metallic handles, levers, and knobs with shaft and securing means likely to become live due to basic insulation fault, adequately covered by insulating material or their accessible parts separated from their shafts or securing means by insulation	Plastic material used	N/A
	Covering or insulating material complies with Electric Strength test in Clause 15, Table 2, item 4	Meet the requirement	P
21.32	Tool likely to cut into concealed wiring or cord, has handles and grasping surfaces made of insulating material, or metal covered by insulating material, or their accessible parts are separated by insulating barrier(s) from accessible metal parts that may become live by the output shaft	For the grasp handles, insulating material used	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Insulated, stick type, auxiliary handle is provided with a flange 12 mm high above grasping surface between grasping area and accessible parts that may become live by the output shaft	Insulated stick type handle is provided with a flange 13.1mm	P
21.33	Capacitors in class II tools not connected to accessible metal parts, and their metallic casings are separated from accessible metal parts by supplementary insulation	Meet the requirement	P
	Capacitors tied to accessible metal parts comply with Clauses 9.1 and 21.36		N/A
21.34	Capacitors not connected between contacts of the thermal cut-outs		P
21.35	Lamp holders used only for connection of lamps	No lamp holder used	N/A
21.36	Protective impedance consists of at least two separate components with impedance unlikely to change significantly during lifetime of tool	No protective impedance used	N/A
	When a component short or open-circuited, values in Clause 9.1 were not exceeded		N/A
	Resistors comply with 14.1 of IEC 60065 and capacitors comply with 14.2 of IEC 60065		N/A
21.37	Air-intake ventilation openings not excessively large		P
	It was not possible to insert a steel ball 6 mm in diameter through air-intake openings other than those adjacent to fan	Φ6mm ball cannot enter through air-intake opening	P
21.Z1	Additional: In normal use a dust hazard to health is expected following point must be fulfilled:	Not applicable.	N/A
	a) Integral dust collection devices, or		N/A
	b) Devices, which allow the connection of external dust collection equipment, or		N/A
	if not reasonably protected practicable, no dust is thrown in the direction of the operator.		P

22	INTERNAL WIRING		P
22.1	Wireways smooth and free from sharp edges, burrs, etc.	Meet the requirement	P
	Holes in metal through which insulated wires pass provided with bushings or, except as required by relevant part 2, have smooth, well-rounded edges with a radius of 1,5 mm	No such parts	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Wiring prevented from coming into contact with moving parts	1. Internal wire was well fixed. 2. It's impossible that the internal wire touch moving parts.	P
22.2	Internal wiring and electrical connections adequately protected or enclosed		P
22.3	Internal wiring adequately rigid, fixed or insulated such that, in normal use, creepage and clearances cannot be reduced below values in 28.1	Meet the requirement	P
	The insulation not damaged in normal use		P
	Insulation of internal wiring electrically equivalent to insulation of cords complying with IEC 60227 or IEC 60245		P
	No breakdown resulted upon application of a 2000 V electric voltage for 15 min between conductor and metal foil wrapped around insulation	Tested on internal wire and insulated tube, 2000V, 15min, passed	P
	Sleeves used as supplementary insulation on internal wiring remain in position by clamps at both ends requiring its removal by breaking or cutting	Not use	N/A
22.4	Use of green/yellow conductors for earthing terminals only	Class II	N/A
22.5	Aluminium wires not used for internal wiring	Copper wire used	P
22.6	Stranded conductors with lead-tin soldering are only used with spring terminals with constant contact pressure, except when clamping means pose no risk of bad contact	No soldering of conductor	N/A

23	COMPONENTS		P
23.1	Components comply with relevant IEC standards	See appended Table 23.1	P
	Components used in accordance with their markings		P
	Applied exceptions..... :		N/A
23.1.1	Capacitors in auxiliary windings of motors marked with their rated voltage and rated capacitance..... :	No such capacitor used	N/A
23.1.2	Fixed capacitors for radio interference suppression comply with IEC 60384-14		P
23.1.3	Small lamp holders similar to E10 lamp holders meet requirements for E10 lamp holders	No lamp holder used	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
23.1.4	Insulating and safety insulating transformers comply with IEC 61558-1	No transformer used	N/A
23.1.5	Appliance couplers other than those used for IPX0 tools comply with IEC 60309, and those used for IPX0 comply with IEC 60320	No appliance coupler used	N/A
	Instructions provided to inform user to connect the tool with non-IEC appliance couplers		N/A
23.1.6	Automatic controls not complying with IEC 60730-1 tested according to this standard, and additionally according to 11.3.5 – 11.3.8 and 17 of IEC 60730-1		N/A
	IEC 60730-1 tests conducted under conditions occurring in the tool		N/A
	Type of controls used and number of operations completed per Cl. 17 of IEC 60730-1 (cycles)		N/A
	Correct markings used on automatic controls.....		N/A
	Tests of Clause 17 of IEC 60730-1 were not conducted on automatic controls because tool complies with this standard when protective device short-circuited		N/A
	Thermostats and temperature limiters tested in accordance with a specific exception in footnote b) of Table 1 of Clause 12		N/A
23.1.7	Unless otherwise specified, tests on components per other standards conducted separately according to the relevant standard		P
	Component, marked and used per its markings		P
	Components not mentioned in Table 1 of Clause 12 tested as part of the tool		P
23.1.8	If no IEC standard, or when component not marked or used not as marked, component tested under conditions occurring in the tool, and number of samples as required by similar specifications		P
23.1.9	Capacitor voltage did not exceed 1.1 times its rated voltage (V)	No such capacitor used	N/A
23.1.10	Adequate breaking capacity of mains switches with no electrical mechanical failure	6(6)A, more than current measured under rated input power.	P
	Mains switches rated for min. 50K cycles of operations.....	50 000	P
	Switch operated 50 times with motor stalled	Tested and met the requirement	P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	For electronic control device switching off before opening the main contacts, switch operated five times with the electronic device short-circuited	No such device	N/A
23.1.11	Switches, not separately tested and found to comply with IEC 61058-1 under the conditions occurring in the tool, comply with Annex I	Approved switch, , the mains switch fulfilled the requirement of EN 61058-1.	N/A
	Test of 17.2.4.4 of IEC 61058-1 conducted for a min. of 50000 cycles of operation..... :		N/A
	Switches operated only with the aid of a tool and intended for no load operation were not subjected to tests of Clause 17 of IEC 61058-1		N/A
	The above also applied to switches operated by hand and interlocked not to be operated under load		N/A
	Switches without interlock tested per IEC 61058-1, 17.2.4.4 for a min. of 100 cycles of operation		N/A
	Tests of 17.2.4.4 of IEC 61058-1 not conducted on a switch when tool met the requirements of this standard when the switch short-circuited		N/A
23.2	Tool not fitted with switches or automatic controls in flexible cords		P
	Tool not fitted with devices causing the protection device in the fixed wiring to operate	No such device	P
	Tool not fitted with thermal cut-outs which can be reset by a soldering operation	No such thermal cut-out fitted	P
23.3	Overload protection devices are non-self-resetting		N/A
23.4	Plugs and socket-outlets used as terminal devices for heating elements and plugs and socket-outlets for ELV circuits not interchangeable with plugs and socket-outlets in IEC 60884, and with connectors and tool inlets complying with IEC 60320	No such plug and socket-outlet used	N/A
23.5	Motors connected to the supply mains with insulation inadequate for the rated voltage comply with Annex B	No such motor used	N/A

24	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		P
24.1	Tool rated in voltage or frequency for connection to public supplies provided with a supply cord with a plug	Approved power cord with a plug	P
	Tool intended to be connection to non-public power supplies provided with a supply cord without a plug		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Tool provided with appliance inlet for connection to a supply having at least same degree of protection against moisture as required for the tool, and with locking device preventing accidental disconnection		N/A
	Tool provided with a supply cord for connection to a supply ≤ 0.5 m and fixed with an in-line connector (cable coupler) and its mating counterpart		N/A
	The in-line connector provided with at least the same degree of protection against moisture as required for the tool		N/A
	Locking devices complied with pull test of 24.14		P
24.2	Supply cord assembled to the tool by attachment type (specify X, Y, or Z)..... :	Type X attachment	P
	Supply cord with type X and type Y attachment is ordinary flexible cord or a special cord only available from the manufacturer or its agent	Ordinary flexible cord	P
	Special cord includes part of the tool..... :		N/A
24.3	Plugs fitted with only one flexible cord	Meet the requirement	P
24.4	Supply cord not lighter than ordinary tough rubber sheathed flexible cord or ordinary PVC sheathed flexible cord	H07RN-F 2X1.0mm ²	P
	PVC cords not used if external metal parts exceed 75 K temperature rise		N/A
	Power supply cords of single-phase tool with a plug and rated current ≤ 16 A supplied with a plug complying with IEC 60884 or IEC 60309		P
	Class I tools fitted with plugs complying with IEC 60309, Sheet 2-1		N/A
	Class II tools fitted with plugs complying with IEC 60309, Sheet 2		P
	Class III tools fitted with plugs complying with IEC 60309, Sheet 2-1		N/A
	Body of plug covered with, rubber, polyvinyl chloride, or a material with equivalent mechanical strength . :		P
	Supply cords of class I, single-phase tool rated > 16 A ≤ 63 A, and multi-phase tool rated ≤ 63 A, provided with a plug complying with IEC 60309 and standard Sheet 2-III based on current		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Supply cords of class II, single-phase tool rated > 16 A ≤ 63 A, and multi-phase tool rated ≤ 63 A, provided with a plug complying with IEC 60309 and standard Sheet 2		N/A
	Supply cords of class III, single-phase tool rated > 16 A ≤ 63 A, and multi-phase tool rated ≤ 63 A, provide with a plug complying with IEC 60309 and standard Sheet 2-III		N/A
24.5	Nominal cross-section area of supply cord per Table 6 (mm ²)..... :	1.0mm ²	P
24.6	Supply cord of class I tool has green/yellow core connected to internal earthing terminal of the tool, and to earthing contact of plug	Class II tool	N/A
24.7	Lead-tin solder not used to consolidate leads under pressure, except when clamping means used prevent risk of a bad contact		P
	Clamping screws alone not used for securing soldered leads		P
24.8	Moulding supply cord to any part has no effect on the insulation of the cord	No such device	N/A
24.9	Inlet openings provided with a bushing, or no risk of damaging protective covering of supply cord		P
24.10	Inlet bushings shaped to prevent damage to supply cord		P
	Inlet bushings reliably fixed and not removable without the aid of a tool		P
24.12	Cord guards provided with adequate mechanical strength and retain these properties throughout extended normal use		P
	Flexing test performed in apparatus shown in Fig. 9		P
	Weight attached to cable or cord (kg) :	For BHD2608, attached weight: 3.20kg; mass of the tool: 3.20kg. For BHD3016, attached weight: 3.31kg; mass of the tool: 3.31kg.	—
	Oscillating member moved backwards and forwards through an angle of 90° (45° on either side of the vertical) with rate of flexings 60/minute		P
	After 10,000 flexings, sample turned through 90° about the centre of the cord guard		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	After the test, cord guard not loosened, and no damage to cord guard and flexible cable impairing compliance with this standard		P
	Number of strands versus number of broken strands of each conductor not more than 10%	0% / 0% broken for both BHD2608 and BHD3016	P
	Cord guard did not slip out from its location after completion of ten 1 sec lifts		P
24.13	Cord guard of insulating material provided to protect against excessive bending at inlet opening	All models have the same cord guard	P
	Guard fixed reliably and projects outside tool a distance beyond inlet opening of at least 5 times the overall diameter of cable or cord	Cord diameter: 8.0mm Measured value: 54mm>5D=40mm	P
	Cord guard integral to tool minimum 100 mm longer than guard	Meet the requirement	P
	Mass attached to the free end of cable or cord (g) . :	10D ² =640g	—
	Temperature sensitive cord guard tested at 23±2°C		P
	Curvature of cable or cord is nowhere less than 1.5 of external diameter of cable	R14 gauge passed.	P
24.14	Conductors relieved from strain, twisting and protected from abrasion	Tested on both BHD2608 and BHD3016, and met the requirement	P
	It is not possible to push the cord into the tool		P
	Pull force was applied 25 times at the force prescribed in Table 7 (N)	60N, 25 times	—
	After pull test, cord, other than automatic cord reel, subjected to torque in Table 7 for 1 min (Nm)..... :	0.25Nm, 1min	P
	The cord was not damaged during the tests	No damage	P
	Cord longitudinal displacement (mm)..... :	For BHD2608, 0.3mm<2mm For BHD3016, 0.4mm<2mm	P
	Conductors movement in the terminals (mm)..... :	No movement for both BHD2608 and BHD3016	P
	No appreciable strain at the connection	Meet the requirement	P
	Creepage and clearances not reduced below values in Cl. 28.1		P
24.15	Cord anchorage either accessible only with the aid of a tool, or the cord can only be fitted using a tool	The cord can only be fitted with a tool.	P
24.16	Cord anchorage for type X attachment	Cord anchorage provided	P
	Cord anchorage allows easy replacement of cord		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	It is evident how strain relief and prevention of twisting are accomplished by the cord anchorage		P
	Anchorage is suitable for different types of cord, or tool designed to be fitted with only one type of cord	Anchorage is suitable for H07RN-F, 2x1.0mm ²	P
	Cord anchorage screws separated by supplementary insulation		P
	Cord is not clamped by metal screw bearing directly on the cord		P
	At least one part of cord anchorage securely fixed to the tool, unless it is part of the specially prepared cord		P
	Screws intended to fix the cord in place are not used to secure any other part, or it is clear the tool is inoperative		P
	Parts fastened to the cord anchorage by the same screw could not be removed without the aid of a tool	No such part	N/A
	Cord anchorage is such that in case of labyrinths, the labyrinths cannot be bypassed in a way that the requirement of Clause 24.14 is not met	No such construction	N/A
	For type X attachment, gland not used as cord anchorage for power supply cord	No gland used	N/A
	Cord anchorage in class I tool is of insulating material or provided with an insulating lining	Class II	N/A
	Cord anchorage in class II tool is of insulating material, and when metallic, meet requirements for supplementary insulation	Insulation material	P
	Type X has one or more nuts to secure cord anchorage to tool	No such construction	N/A
	Clamping member complies with Figure 6		P
	Tests of Cl. 24.14 conducted with lightest type of cord of smallest cross-section and next heavier type as in Cl. 25.2 (sizes, mm ²)..... :	1.0mm ²	P
	Specially prepared cord tested with the cord as delivered		N/A
	Conductors inserted into terminals, terminal screws tightened sufficiently to prevent conductors from easily changing their position, torque set at :		P
24.17	Adequate cord anchorages are provided for type Y and Z attachments and complied with 24.14	Type X attachment	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
24.18	Knots and tying strings for type X attachment are not used		P
24.19	The insulated conductors of the supply cord are insulated from accessible metal parts by basic insulation for class I tool, and supplementary insulation for class II tools	Class II, met the requirement	P
	- insulation consists of a separate insulating lining fixed to cord anchorage		P
	- a sleeve or grommet is fixed to the cord		P
	- for class I tools, insulation consists of sheath of the sheathed cord		N/A
24.20	For type X attachment space for supply cables or supply cord provided inside or as a part of tool		P
	- space permits verification of correct connection and positioning of conductors		P
	- space permits covers to be fitted without risk of damage to supply conductors or their insulation		P
	- uninsulated end of conductor, when detached from a terminal, cannot come into contact with accessible metal parts		P
	Installation test conducted with cables or flexible cords of the largest cross-sectional area as per Clause 25.2 (mm ²)..... :	1.0 mm ²	P
	For pillar terminals (with conductors that are not separately clamped 30 mm or less from terminal), and for other terminals with screw clamping, a force of 2 N applied to the wire in any direction and adjacent to the terminal, screw or stud		P
	The uninsulated end of the conductor did not come into contact with accessible metal parts		P
24.21	Appliance inlet has no accessible live parts	No such construction	N/A
	- appliance inlet allows easy insertion of connector		N/A
	- after insertion of connector, tool not supported by the connector during any position of normal use on a flat surface		N/A
	Standard test finger applied for tool inlet other than appliance inlet per IEC 60320		N/A
	Appliance inlet complies with IEC 60320		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
25	TERMINALS FOR EXTERNAL CONDUCTORS		P
25.1	Type X attachment, other than specially prepared cord, provided with terminal connections made by screws, nuts, or equally effective devices	Type X attachment with terminal connections made by screws on the switch terminal	P
	Use of screw-type terminals per IEC 60998-2-1		P
	Use of screwless-type terminals per IEC 60998-2-2		N/A
	Use of clamping units according to IEC 60999-1 considered equally effective devices		N/A
	Screws and nuts do not fix other components		P
	Screws and nuts allowed to also clamp internal conductors when they are unlikely to be displaced when fitting supply conductors	No internal conductor clamped together	N/A
	For tool with type X attachment, soldered connections allowed to be used for connection of external conductors, when soldering alone is not used to maintain conductor in position	No such soldering connection used	N/A
	When provided, barriers prevent creepages and clearances between live parts and other metal parts from being reduced to < 50% of values in 28.1, the conductor can be fixed by soldering alone		N/A
	For type Y and Z attachments, soldered, welded, crimped and similar connections allowed for the connection of external conductors	Type X attachment	N/A
	Class II tools, conductor so positioned or fixed that soldering, crimping, or welding alone not relied upon to maintain the conductor in the position		N/A
	Barriers prevent creepages and clearances between live parts and other metal parts from being reduced to < 50% of values in 28.1 for the Class of tool using Type Y or Z attachments		N/A
	Conductors connected by soldering are held in place near termination independent of solder		N/A
	Conductor is "hooked in" before soldering and the hole through which it passes is not too large	No such construction	N/A
	Terminals of a component built into the tool used to secure external conductors		P
	Leads additionally fixed near terminations		P
	Stranded conductors secured at insulation and conductor		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
25.2	Terminals for type X attachment fitted with special connection or accommodate nominal cross-sectional areas as in Table 8		P
	Cables or cords of the specified smallest and largest cross-sectional areas can be fitted (mm ²)..... :	1.0mm ²	P
	Supply cord terminals withstood pull force of 5 N		P
25.3	For type X attachment, when clamping means tightened or loosened, terminal did not loosen up, no stress on internal wiring, and creepage and clearances not reduced	Meet the requirement	P
	Torque applied per IEC 60999-1, Clause 9.6 at 2/3 torque of that in Table 4 of IEC 60999-1 (Nm)..... :	Refer to clause 27.1, tested and met the requirement	P
	Terminals secured by two screws to prevent loosening		N/A
	Correct position of supply terminals maintained by switches and similar devices with recesses and verified after connection of supply cable and repositioning of device	Switch terminal used	P
	Sealing compound without other means of locking not used	No sealing compound used	N/A
	Self-hardening resins used only on terminals that are not subject to torsion in normal use		P
25.4	Type X attachment using terminals to clamp the conductor between metal surfaces do so without damage to conductor after torque test per Cl. 25.3		P
25.5	Type X attachments which require no special preparation of conductor for correct connection, and conductor does not slip out when clamping screws or nuts tightened		P
	Type X specially prepared cord used :		N/A
	There were no deep or sharp indentations on the conductors after torque test per Clause 25.3		P
25.6	End of conductor inserted in the hole of pillar type terminals is visible, or can pass beyond threaded hole for a distance of half nominal diameter of screw, or 2.5 mm, the greater of the two (mm)..... :	2.7mm>2.5mm	P
25.7	For type X attachment, terminals clearly recognizable and accessible after opening the tool		P
	All terminals located behind one cover, or one part of the enclosure		P

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
25.8	Terminal devices not accessible without the aid of a tool		P
25.9	For tool with type X attachment, terminal devices located or shielded to prevent a strand of wire from escaping		P
	In case of class II tool, live parts and metal parts separated from accessible metal parts by supplementary insulation		P
	8 mm long free wire of the stranded supply conductor did not touch any accessible metal part		P
	8 mm long free wire of stranded conductor connected to an earthing terminal did not touch any live part		N/A

26	PROVISION FOR EARTHING		P
26.1	Accessible metal parts of class I tool permanently connected to an earthing terminal or termination within the tool		N/A
	Accessible metal parts of class I tool permanently connected to the earthing contact of the tool inlet		N/A
	Printed circuit boards are not used to provide continuity of protective earthing circuit		N/A
	No electrical connection between earthing terminals or contacts and neutral terminal		N/A
	No provisions for earthing in Class II and III tools	Class II	P
	Metal parts behind a decorative cover that do not withstand test of Clause 20 considered accessible metal parts		N/A
26.2	Clamping means of earthing terminals adequately locked against accidental loosening		N/A
	Earthing connections not possible to loosen without the aid of a tool		N/A
	Terminals with screw clamping comply with the relevant requirements of Clause 25, and screwless terminals comply with IEC 60998-2-2		N/A
	For specially prepared cords, terminals comply with IEC 60760		N/A
	Screwless terminals tested per IEC 60998-2-2		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
26.3	Earth connection of detachable parts was made before the current-carrying connections established when placing the part in position, and the current carrying connections separated before earth connection was broken when removing the part		N/A
	If cord slips out of cord anchorage, current-carrying conductors become taut before earthing conductor		N/A
26.4	No risk of corrosion between metal parts of earthing terminals and copper of earthing conductor		N/A
	Parts transmitting current in case of an insulation fault, other than parts of metal frame or enclosure, are coated or uncoated metal with adequate resistance to corrosion		N/A
	Thickness of electroplated coating (µm)		N/A
	Parts of coated or uncoated metal providing or transmitting contact pressure only, adequately protected against rusting		N/A
	Protection provided against risk of corrosion resulting from contact between copper and aluminium (or aluminium alloy)		N/A
	Parts subjected to a treatment such as chromate conversion coating are used only to provide or transmit contact pressure		N/A
	Thickness of coating of steel measured in accordance with ISO 2178 or ISO 1463 (µm)		N/A
	Resistance to rusting test.....	See also Clause 30.	N/A
26.5	Resistance of earthing circuit (max. 0.1 Ω)		N/A
	Test current (A)		—
	Voltage drop between the earthing terminal and accessible metal part (V)		—

27	SCREWS AND CONNECTIONS		P
27.1	Fixings and electrical connections (includes earthing connections) withstood mechanical stresses occurring in normal use		P
	Screws not made of soft metal such as zinc or aluminium		P
	Diameter of screws of insulation material (mm).....	No insulation screw used	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Screws transmitting electrical contact pressure screw into metal		P
	Screws made from insulating material are not used if their replacement by a metal screw could impair supplementary or reinforced insulation	No insulation screw used	N/A
	Screws removed when replacing the supply cord with type X attachment, or during maintenance, are not of insulating material where their replacement by a metal screw could impair basic insulation	No insulation screw used	N/A
	Screws and nuts tightened and loosened 10 times for screw engaged with a thread of insulating material		P
	Nuts and other screws tightened and loosened five times		P
	Screws engaging with a thread of insulating material completely removed and reinserted each time		P
	When testing terminal screws and nuts, a flexible conductor of the largest cross-sectional area per Clause 25.2 placed in the terminal (mm ²)	1.0mm ²	P
	Torque per column I of Table 9 applied to metal screw without head (Nm)		N/A
	Torque per column II of Table 9 applied to other metal screws and nuts (Nm)	Tested on both BHD2608 and BHD3016. Screw for handle & enclosure: ST3.86; 1.2Nm; 10 times ST4.83; 2.0Nm; 10 times Screw for cord anchorage: ST3.86; 1.2Nm; 10 times Screws for switch terminals: M2.93; 0.5Nm; 5 times	P
	Torque per column II of Table 9 applied to screws of insulating material, having a hexagonal head with dimension across flats exceeding the overall thread diameter (Nm)		N/A
	Torque (column II, Table 9) applied to screws of insulating material, with cylindrical head and a socket for a key, having cross-corner dimension exceeding overall thread diameter (Nm)		N/A
	Torque per column II of Table 9 applied to screws of insulating material, with a head having a slot or cross slots, the length of which exceeds 1.5 times the overall thread diameter (Nm)		N/A
	Torque per column III of Table 9 applied to other screws of insulating material (Nm)		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Conductor moved each time the screw or nut was loosened		P
	No damage impairing further use of fixing or electrical connections		P
27.2	Contact pressure not transmitted through insulating material other than ceramic, unless compensated for shrinkage or distortion		P
27.3	Space-threaded screws not used for connection of current-carrying parts	No such construction	N/A
	No thread-cutting screws used for connection of current-carrying parts	No such construction	N/A
	Use of two space-threaded or thread-cutting screws in earthing circuits	No such construction	N/A
27.4	Screws making both mechanical and electrical connections are locked against loosening	No such construction	N/A
	Rivets for current-carrying connections subjected to torsion in normal use locked against loosening	No rivet used	N/A

28	CREEPAGE DISTANCES, CLEARANCES AND DISTANCES THROUGH INSULATION		P
28.1	Creepage and clearances not less than the values in Table 10, except for cross-over points of motor windings	See appended Table 28.1	P
	When a resonance voltage occurs, creepage and clearance are not less than specified for the voltage imposed by the resonance; these values increased by 4 mm in case of reinforced insulation		N/A
	Creepage and clearances for a tool with an appliance inlet measured with an appropriate connector inserted		N/A
	Creepage and clearances on tools with Type X attachment measured with supply conductor of largest cross-section per Clause 25.2 (mm ²)	1.0mm ²	P
	Measurements repeated without the conductors		P
	Creepage and clearances on a tool with other attachment measured on the "as delivered" tool		P
	Measurements on tool with belt made with the belt in place and belt tension adjusted to the most unfavourable position within its adjustment range		N/A
	Measurements repeated with the belt removed		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Movable parts placed in the most unfavourable position; nuts and screws with non-circular heads tightened in the most unfavourable position		P
	Clearances between terminals and accessible metal parts also measured with screws and nuts unscrewed as far as possible and they were not less than 50% of Table 10	See Table appended 28.1	P
	Distances through slots or openings in external parts of insulating material measured to metal foil in contact with accessible surface with the foil pushed into corners using standard test finger	See appended Table 28.1	P
	2 N force applied by test finger to bare conductors and uninsulated capillary tubes of thermostats and similar devices while measurement made		P
	30 N force applied by test finger to enclosure		P
	Measurements made according to Annex A	See appended Table 28.1	P
	Creepage on an interposed barrier consisting of two parts not cemented together also measured through the joint		P
	Clearances on an interposed barrier measured over the barrier or, when barrier consisted of two parts with mating surfaces not cemented together, through the joint.	See appended Table 28.1	P
	Creepage and clearances on a tool having parts with double insulation and no metal between basic insulation and supplementary insulation		P
	PWB with peak voltage stresses ≤ 150 V per mm between parts of different potential provided with a min. distance of 0.2 mm, when protected against deposition of dirt	PCB used on speed-adjusting switch, which is approved according to EN 61058-1:2002.	N/A
	-PWB with 100 V per mm provided with a min. distance of 0.5 mm, when not protected against deposition of dirt		N/A
	Values of the table applied when limits mentioned above resulted in higher values than in the table		N/A
	Reduced creepage distances applied for peak voltages ≥ 50 V if Proof Tracking Index (PTI) of PWB, per Annex G, greater than 175 (PTI)		N/A
	Distances reduced further since the tool complied with the requirements of Clause 18 distances short-circuited one at a time.....		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Creepage and clearances within optocouplers not measured when individual insulation adequately sealed, with air excluded between material layers	No optocoupler	N/A
	For live parts of different polarity separated by basic insulation only, creepage and clearances reduced as tool complied with Clause 18 when creepage and clearances short-circuited..... :	PCB used on speed-adjusting switch, which is approved according to EN 61058-1:2002.	N/A
28.2	Distance through insulation between metal parts was 1.0 mm for working voltages 130 V when separated by supplementary insulation	230V~	N/A
	Distance through insulation between metal parts was 1.5 mm for working voltages 130 V when separated by reinforced insulation N		N/A
	Distance through the insulation was 1.0 mm for reinforced insulation used between windings and accessible metal		N/A
	Distance through insulation between metal parts was 1.0 mm for working voltages > 130V 250V when separated by supplementary insulation, and 2.0 mm when separated by reinforced insulation	See appended Table 28.2	P
	– requirement waived as insulation applied was in thin sheet form, other than mica or similar, and for supplementary insulation consisting of at least two layers, one layer having withstood electrical strength test for supplementary insulation		N/A
	– requirement waived as insulation applied was of at least three layers and for reinforced insulation, two layers in contact having withstood the electric strength test for reinforced insulation		N/A
	– requirement waived as max. temperature rise determined during test of Cl. 12 did not exceed values in 12.5 for inaccessible supplementary or reinforced insulation		N/A
	–requirement waived as inaccessible reinforced or supplementary insulation, after conditioning for 168h at temperature 50 K greater than max rise determined per Cl. 12, withstood an electric strength test per Cl. 15 at the oven temperature and room temperature (°C)..... :		N/A
	For optocouplers, 168 h of conditioning at 50 K higher than the max. temperature rise measured on optocouplers during tests of Clauses 12 and 18, while operating under most difficult conditions		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
29	RESISTANCE TO HEAT, FIRE AND TRACKING		P
29.1	External parts of non-metallic material, insulating material supporting live parts, connections and thermoplastics providing supplementary or reinforced insulation sufficiently resistant to heat		P
	Relevant parts subjected to ball-pressure test subsequent to a 24 h exposure to 15 °C-35 °C, and a relative humidity between 45 % and 75 %	See Table 29.1	P
	For coil formers, parts supporting or retaining terminals in position subjected to test..... :	See Table 29.1	P
29.2	Part of non-metallic material, except for decorative trims, knobs, and other parts not likely to be ignited or propagate flames originating from inside the tool, are resistant to ignition and spread of fire		P
	Parts of non-metallic material other than material classified at least HB40 per IEC 60695-11-10, provided test sample not thicker than relevant part, comply with glow-wire test of IEC 60695-2-11:	See Table 29.2	P
	Soft, foamy, and similar materials which cannot be subjected to glow wire test complied with ISO 9772 for category HBF material with test sample not thicker than relevant part		N/A
29.3	Insulating materials resistant to tracking	Normal duty conditions.	P
	Proof tracking test of Annex G conducted on insulating materials used under severe or extra-severe duty conditions:	See Table 29.3A	P
	For parts of insulating material used under severe duty conditions, test voltage was 175 V		P
	When specimens did not withstand above test and there was no hazard other than fire, surrounding parts subjected to needle-flame test of Annex F..... :	See Table 29.3B	N/A
	For parts of insulating material used under extra-severe duty conditions, test voltage was 250 V		N/A
	When specimens did not withstand above test, but withstood test conducted at 175 V, and there was no hazard other than fire, surrounding parts subjected to needle-flame test of Annex F..... :	See Table 29.3B	N/A
	Needle-flame test on all parts of non-metallic material positioned within a distance of 50 mm from any place where a tracking path may occur		N/A
	A separate barrier or enclosure shielding parts from the tracking path, subjected to needle-flame test		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

30	RESISTANCE TO RUSTING		P
30.1	Ferrous parts adequately protected against rusting		P
	Parts subjected to test		—
	All grease removed from the parts to be tested by immersing them in a degreasing agent for 10 min		N/A
	Parts were immersed for 10 min in a 10 % solution of ammonium chloride in water at (20 ± 5) °C		N/A
	Without drying, all drops shook off, and parts placed for 10 min in a box containing air saturated with moisture at (20 ± 5) °C		N/A
	After parts dried for 10 min in a heating cabinet at (100 ± 5) °C, no evidence of rust on surfaces		N/A
	Small helical springs and the like and parts exposed to abrasion covered by a layer of grease		N/A

31	RADIATION, TOXICITY, AND SIMILAR HAZARDS		P
31.1	Tool did not emit harmful radiation, present a toxic or similar hazard		P
31.2	Tool fitted with a laser of category II or lower, according to IEC 60825-1		N/A

ANNEX B	MOTORS NOT ISOLATED FROM THE SUPPLY MAINS AND HAVING BASIC INSULATION NOT DESIGNED FOR THE RATED VOLTAGE OF THE TOOL		N/A
B.1.1	Motors with working voltage 42 V		N/A
B.9.1	Metal parts of motor considered bare live parts		N/A
B.12.3	Temperature rise of body of motor determined in place of the temperature rise of the windings		N/A
B.12.5	Temperature rise of the body of the motor in contact with insulating materials did not exceed values in Table 1 for the relevant insulating material	See Table 12.1	N/A
B.18. 201	Tool operated at rated voltage with the terminals of motor and its capacitors short circuited		N/A
	Tool operated at rated voltage with the supply to the motor open circuited		N/A
	Tool operated at rated voltage with shunt resistor open circuited during operation of motor		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

B.21.101	For class I tools with a motor supplied by a rectifier circuit, dc circuit insulated from accessible parts of the tool by double or reinforced insulation		N/A
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ANNEX F	NEEDLE-FLAME TEST		N/A
	Needle-flame test according to IEC 60695-11-5	See Table 29.3B	N/A

ANNEX G	PROOF TRACKING TEST		P
	Proof tracking test according to IEC 60112 and as modified in this Annex	See Table 29.3A	P

ANNEX I	SWITCHES		N/A
	Switches tested to comply with this standard and the following Clauses of IEC 61058-1, as modified		N/A
	Prior to test with tool, switch operated 20 times with no load		N/A
8	Incorporated switch marked with manufacturer's name or trade mark and the type reference..... :		N/A
15	The dielectric strength of mechanical and electronic switches was adequate..... :		N/A
17.1.1	Switches are for declared specific loads :		N/A
17.1.2	Sequence of tests for all switches except electronic switches as indicated in this Annex		N/A
17.2.1.1	Switches loaded at rated voltage under the conditions occurring in the tool		N/A
	Circuits and contacts not intended for external loads operated with the designated loads		N/A
	Switches for 20 mA load as classified in 7.1.2.6 not subjected to electrical endurance tests		N/A
17.2.4.4			N/A
	For all switches except electronic switches, the electrical conditions were as specified in 17.2.1		N/A
	For electronic switches, electrical conditions were as specified in Table 15		N/A
	Thermal conditions were as specified in 17.2.2		N/A
	Total number of operations were 50 000		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Method of operation was as specified for accelerated speed in 17.2.3		N/A
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies		N/A
	Requirements applied to creepage and clearances for live parts of different potential, for operational insulation and across full disconnection and micro-disconnection		N/A

ANNEX K	BATTERY TOOLS AND BATTERY PACKS		N/A
K.8.1	Detachable or separable battery packs marked with the information required by the standard		N/A
	Rated voltage(s) or voltage range(s), (V)		—
	Symbol for nature of supply		—
	Name, trademark or other identification mark.....		—
	Model or type reference		—
	Manufacturer's address or country of origin.....		—
	Any mandatory marks.....		—
K.8.12.1.1	Safety Rules for battery tool use and care		N/A
K.9	No two conductive, simultaneously accessible parts where the voltage between them is hazardous		N/A
	Conductive, simultaneously accessible parts provided with protective impedance		N/A
	Short circuit current between two simultaneously accessible parts (mA)		N/A
	Capacitance between two simultaneously accessible parts (µF).....		N/A
K.12.1	No operation of thermal cut-outs and overload releases during heating test		N/A
	Temperature rises met values in Table K.1	See Table K12.1	N/A
K.15.1	Electric strength test on insulating materials for 1 min to 750 V with a substantially sinusoidal wave from having a frequency of 50 Hz or 60 Hz		N/A
K.18.1	No charring or burning of gauze or tissue paper resulted when battery tool and battery pack were subjected any abnormal operations	See Table K.18.1	N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
K.19.201	Tools marked with a direction of movement and it is not possible to connect a battery pack such that the marking is not correct		N/A
K.20.1	Battery tools and battery packs have adequate mechanical strength after tests of 20.2 and K.20.3		N/A
	Battery tools and battery packs met requirements of clauses K.9, K.19 and either K.18.1 (f) or K.28.1 after tests of 20.2 and 28.1		N/A
K.20.3	Adequate mechanical strength after drop tests on a concrete surface from a height of 1 m		N/A
	The test was repeated successfully with the battery pack removed from the tool		N/A
	The test was repeated successfully on the battery pack by itself		N/A
K.21.201	Tool will not accept general purpose batteries		N/A
K.23.1.10	Power switches have adequate breaking capacity and present no electrical or mechanical failure		N/A
K.23.1.11	Power switches withstood, without excessive wear or other harmful effect, the mechanical, electrical, and thermal stresses occurring in normal use		N/A
	Cycle rate and voltage applied		—
K.24.201	External flexible cable or cord have anchorages such that the conductors are relieved from strain, including twisting, where they are connected within the tool, and protected from abrasion		N/A
K.28.1	Creepage distances and clearances not less than the values in millimetres shown in Table K.2		N/A
	For part having a hazardous voltage between them, the sum total of the measured distances between each of these parts and their nearest accessible surface is not less than 1,5 mm clearance and 2,0 mm creepage (Fig. K.1)		N/A
K.29.1	External parts of tools and battery pack made of non-metallic materials subject to ball pressure test	See Table 29.1	N/A
K.29.2	The distance between parts of opposite polarity on external enclosure (Figure K.1)		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
ANNEX L	BATTERY TOOLS AND BATTERY PACKS PROVIDED WITH MAINS CONNECTION OR NON-ISOLATED SOURCES		N/A
L.8.1	Non-isolated sources that can supply a tool, or tool that can be supplied directly from the mains, marked with as required by the standard:		N/A
	Rated voltage(s) or voltage range(s), (V)		—
	Symbol for nature of supply		—
	Rated input, (W) or rated current (A).....		—
	Name, trademark or other identification mark.....		—
	Model or type reference		—
	Symbol for class II.....		—
	Manufacturer's address or country of origin		—
	Any mandatory marks.....		—
L.8.1.201	Tools, other than those that can be supplied directly from the mains, detachable battery packs marked with required information		N/A
	Rated voltage(s) or rated voltage range(s), (V).....		—
	Symbol for nature of supply		—
	Name, trademark or other identification mark.....		—
	Model or type reference		—
	Manufacturer's address or trade mark		—
	Additional markings that do not give rise to misunderstanding.....		—
L.8.12.1.1	Safety Rules for battery tool use and care		N/A
L.9	Battery tool and/or battery pack constructed and enclosed with adequate protection against electric shock		N/A
L.9.201	No two conductive, simultaneously accessible parts where the voltage between them is hazardous		N/A
	Conductive, simultaneously accessible parts provided with protective impedance		N/A
	Short circuit current between two simultaneously accessible parts (mA)		N/A
	Capacitance between two simultaneously accessible parts (µF).....		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Test finger, figure 1, applied without force		N/A
	Test finger, figure 1, applied with 20 N force		N/A
L.10	Applies only to directly connected mains	See Clause 10	N/A
	Temperatures were not exceeded with charger operating and tool operating at no load		N/A
L.11	Applies only to directly connected mains	See Clause 11	N/A
L.12	Applies only to directly connected mains.	See Clause 12	N/A
L.13	Applies only to directly connected mains	See Clause 13	N/A
L.14	Applies only to directly connected mains	See Clause 14	N/A
L.15	Applies only to directly connected mains. Electric strength test with electronic devices bypassed	See Clause 15	N/A
L.16	Applies only to directly connected mains	See Clause 16	N/A
L.17	Applies only to directly connected mains	See Clause 17	N/A
	Tools not capable of continuous operation operated under battery power for the duration of the test and met the requirements of L.15 w/ charger connected		N/A
L.18	Applies only to directly connected mains	See Clause 18	N/A
L.18.201	No charring or burning of gauze or tissue paper resulted when battery tool and battery pack were subjected any abnormal operations	See Table L.18.201	N/A
L.19	Applies only to directly connected mains		N/A
L.19.201	Tool is marked with a direction of movement and it is not possible to connect a battery pack such that the marking is not correct		N/A
L.20	Applies only to directly connected mains	See Clause 20	N/A
L.20.201	Battery tool with its battery pack attached withstood drop tests on a concrete surface from 1 m		N/A
	The test was repeated successfully with the battery pack removed from the tool		N/A
	The test was repeated successfully on the battery pack by itself		N/A
	Battery tool and battery pack met requirements of L.9, L.19 and either L.18.201(f) or L.28.201		N/A
L.23.1.10.2 01	Switches had adequate breaking capacity and presented no electrical or mechanical failure		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
L.23.1.11.2 01	Switches withstood, without excessive wear or other harmful effect, the mechanical, electrical and thermal stresses occurring in normal use.		N/A
L.24.21	Appliance inlet will not allow direct connection to mains		N/A
L.24.201	External flexible cable or cord have anchorages such that the conductors are relieved from strain, including twisting, where they are connected within the tool, and protected from abrasion		N/A
L.26	Applies only to directly connected mains	See Clause 26	N/A
L.27	Screws and connections comply with Clause 27	See Clause 27	N/A
L.28	Applies only to directly connected mains	See Clause 28	N/A
L.28.201	Creepage distances and clearances not less than the values in millimetres shown in Table L.1		N/A
	For parts having a hazardous voltage between them, the sum of the measured distances between each of these parts and their nearest accessible surface is not less than 1.5 mm clearance and 2.0 mm creepage (Fig. L.1)		N/A
L.29.1	Applies only to directly connected mains	See Table 29.1	N/A

ANNEX M	SAFETY OF WORKING STANDS FOR OPERATION WITH HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS		N/A
M.5.201	The test results for the working stand are dependent on the tool used on the working stand and the tool/working stand combination which lead to the most unfavourable results was tested		N/A
	The working stand does not adversely affect the safety of the tool when used in combination		N/A
M.7.1	Working stand designed for tool of Class.....:		N/A
M.8.1	The working stand is marked with capacities, such as power, weight, dimensions, as specified in part 2		N/A
M.8.12.1.1	All required General Working Stand Safety Warnings are provided		N/A
M.8.12.2a)	Information, instructions and warnings provided as stated in 201) and 202)		N/A
M.17.2	The test was performed in the normal operating position of the working stand		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
M.19.201	The working stand can be used without fixing to the floor or to the tool and it has adequate stability		N/A
	The working stand did not overturn after testing		N/A
M.19.202	Screws which make a mechanical connection between different parts of the working stand did not become loose in normal use		N/A
M.19.203	All required protective devices are delivered with the working stand as stated in the relevant part 2		N/A
M.19.204	The use of the tool with the stand does not impair the safety of the hand-held tool when removed from the stand and used as a stand-alone product		N/A
M.21.17	Switches are located so that accidental operation is unlikely to occur		N/A
	It was not possible to start the electric tool by means of the sphere		N/A
M.21.18	The mains switch of the working stand or the tool is located so that it can be switched on and off by the user from the operator's position		N/A
	The relevant part 2 states whether the working stand needs to be fitted with a switch to start and stop the installed electric tool		N/A
M.21.201	There is no risk of injury to the operator and it is not necessary to traverse an area that may involve a risk of injury when reaching for a control		N/A
	The area involves a risk of injury, but is guarded or so located that it cannot be entered unintentionally		N/A
M.21.202	The working stand is equipped with facilities needed to fix the hand-held electric tools which are intended to be installed		N/A
M.21.203	The reactivation of the electric tool/working stand does not cause a hazard after a voltage recovery		N/A
M.21.204	The working stand is designed such that in normal use the dust-collection device on the tool can be used without any restriction		N/A
M.23.1.10	Main switches are rated for at least the tool with the highest rated input or rated current recommended by the manufacturer and are rated for 10 000 cycles of operation		N/A
	The mains switches did not have electrical or mechanical failure after the test.....		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict
	Mains switches marked with individual ratings were also tested in accordance with IEC 61058-1		N/A
M.23.1.11	IEC 61058-1 compliance switches were not separately tested, but comply with Annex I		N/A
	Test of 17.2.4.4 of IEC 61058-1 was carried out for 10 000 cycles of operation		N/A
M.25.201	Terminals for external conductors comply with IEC 60204-1		N/A

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

9.1	TABLE: Protection against access to live parts			N/A	
	Measurement between relevant parts and poles of supply source	Rated voltage U (V)	Measured voltage (V)	Measured current (A)	Measured capacitance (µF)
Supplementary information: None					

11.1	TABLE: Input data under no-load conditions					P			
	Rated voltage U(V)			Rated input (W)	Measured no-load input (W)	Measured no-load current (A)	Deviation	Load condition / Remarks	
	Single Voltage (V)	Lower Voltage Limit (V)	Upper Voltage Limit (V)						Mean Value of Range
	230.3	--	--	--	800	428	1.904	--	No load
Supplementary information: Tested on BHD2608.									

12	TABLE: Input data under normal-load conditions						P		
	Rated voltage U(V)			Rated input (W)	Measured normal load input (W)	Measured normal load current (A)	Torque (N.m)	Load condition / Remarks	
	Single Voltage (V)	Lower Voltage Limit (V)	Upper Voltage Limit (V)						Mean Value of Range
	230.0	--	--	--	800	800	3.578	4.04	No load
Supplementary information: Tested on BHD2608.									

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

12.1	TABLE: Temperature Rise Measurements			P
Test voltage (V)	216.4	243.9		—
Ambient temperature (t1°C)	19.3	19.3		—
Ambient temperature (t2°C)	20.2	21.1		—
Input current (A)	3.586	3.680		—
Input Wattage (W)	752	872		—
Load speed (/min)	804	938		—
Torque (Nm) (maintained).....	4.04			—
Operating time (min)	30 cycles; each cycle comprising a period of continuous operation of 30 s and a rest period of 90			
Measurement at:	Temperature rise in K		Allowed Limit	
Stator winding	52.4	52.8	85	
Stator of core	34.4	33.1	--	
Internal wiring	2.0	2.4	50	
Capacitor surface	7.3	5.1	T85-25=60	
Enclosure	18.7	18.6	60	
Handle	17.9	17.0	50	
Power cord	2.1	2.0	50	
Switch ambient	1.9	2.0	30	
Brush holder	9.8	7.3	--	
Switch button	2.3	2.2	50	
Supplementary Information: Tested on BHD2608.				
Note: See Table 13.1A for Leakage Current Test after Temperature Test				

12.3	TABLE: Temperature Rise of Windings					P
Part under test (windings and core laminations)	R ₁ (Ω)	R ₂ (Ω)	dT (K) by resistance	dT (K) by thermocouples	Allowed dT (K)	Insulation Class
216.4V, winding of stator	4.174	5.291	67.0	52.4	95	130
216.4V, winding of rotor (diagonal)	3.034	3.818	64.7	--	95	130
243.9V, winding of stator	4.174	5.528	80.6	52.8	95	130
243.9V, winding of rotor (diagonal)	3.034	4.004	79.3	--	95	130
Supplementary Information: Tested on BHD2608, armature winding: 4.174Ω, diagonal , 19.3°C						
Note: See Table 13.1A for Leakage Current Test after Temperature Test						

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

11.1	TABLE: Input data under no-load conditions						P	
Rated voltage U(V)				Rated input (W)	Measured no load input (W)	Measured no load current (A)	Deviation	Load condition / Remarks
Single Voltage (V)	Lower Voltage Limit (V)	Upper Voltage Limit (V)	Mean Value of Range					
229.8	--	--	--	900	436	1.932	--	No load
Supplementary information: Tested on BHD3016.								

12	TABLE: Input data under normal-load conditions						P	
Rated voltage U(V)				Rated input (W)	Measured normal load input (W)	Measured normal load current (A)	Torque (N.m)	Load condition / Remarks
Single Voltage (V)	Lower Voltage Limit (V)	Upper Voltage Limit (V)	Mean Value of Range					
229.8	--	--	--	900	900	4.100	5.61	No load
Supplementary information: Tested on BHD3016.								

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

12.1	TABLE: Temperature Rise Measurements			P
Test voltage (V)	216.1	244.0	—	—
Ambient temperature (t1°C)	22.0	22.0	—	—
Ambient temperature (t2°C)	21.5	23.1	—	—
Input current (A)	4.040	4.200	—	—
Input Wattage (W)	836	958	—	—
Load speed (/min)	680	938	—	—
Torque (Nm) (maintained).....	5.61		—	—
Operating time (min).....	30 cycles; each cycle comprising a period of continuous operation of 30 s and a rest period of 90			—
Measurement at:	Temperature rise in K		Allowed Limit	
Stator winding	42.0	42.1	85	
Stator of core	40.5	40.2	--	
Internal wiring	5.0	5.4	50	
Capacitor surface	1.7	1.4	T85-25=60	
Enclosure	21.5	21.6	60	
Handle	1.5	1.4	50	
Power cord	2.4	2.0	50	
Switch ambient	1.4	1.5	30	
Brush holder	6.2	6.3	--	
Switch button	1.6	1.6	50	
Supplementary Information: Tested on BHD3016.				
Note: See Table 13.1A for Leakage Current Test after Temperature Test				

12.3	TABLE: Temperature Rise of Windings					P
Part under test (windings and core laminations)	R ₁ (Ω)	R ₂ (Ω)	dT (K) by resistance	dT (K) by thermocouples	Allowed dT (K)	Insulation Class
216.1V, winding of stator	2.889	3.627	66.1	42.0	95	130
216.1V, winding of rotor (diagonal)	2.269	2.708	50.2	--	95	130
244.0V, winding of stator	2.889	3.765	76.7	42.1	95	130
244.0V, winding of rotor (diagonal)	2.269	2.785	57.3	--	95	130
Supplementary Information: Tested on BHD3016, armature winding: 2.889Ω, diagonal, 22.0°C						
Note: See Table 13.1A for Leakage Current Test after Temperature Test						

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

13.1A	TABLE: Leakage Current – Clause 12.1				P
Points of application	Test voltage (1.06 X-rated V)	Freq. (Hz)	Selector Switch Position (ON/ OFF ¹)	Allowed leakage current (mA)	Measured leakage (mA)
L/N-accessible enclosure	243.8	50	ON	0.25	0.005/0.002
L/N-accessible enclosure	243.8	50	OFF	0.25	0.003/0.001
Supplementary Information: Tested on BHD2608, single-pole disconnected switch. Note ⁽¹⁾ – Testing with tool in the “OFF” position is required when tool employs a single pole switch and a capacitor					

13.1A	TABLE: Leakage Current – Clause 12.1				P
Points of application	Test voltage (1.06 X-rated V)	Freq. (Hz)	Selector Switch Position (ON/ OFF ¹)	Allowed leakage current (mA)	Measured leakage (mA)
L/N-accessible enclosure	243.8	50	ON	0.25	0.005/0.001
L/N-accessible enclosure	243.8	50	OFF	0.25	0.004/0.001
Supplementary Information: Tested on BHD3016, single-pole disconnected switch. Note ⁽¹⁾ – Testing with tool in the “OFF” position is required when tool employs a single pole switch and a capacitor					

13.1B	TABLE: Leakage Current – Clause 12.6 d)				N/A
Points of application	Test voltage (1.06 X-rated V)	Freq. (Hz)	Selector Switch Position (ON/ OFF ¹)	Allowed leakage current (mA)	Measured leakage (mA)
Supplementary Information: Note ⁽¹⁾ – Testing with tool in the “OFF” position is required when tool employs a single pole switch and a capacitor					

13.1C	TABLE: Leakage Current – Clause 12.6 f)				N/A
Points of application	Test voltage (1.06 X-rated V)	Freq. (Hz)	Selector Switch Position (ON/ OFF ¹)	Allowed leakage current (mA)	Measured leakage (mA)
Supplementary Information: Note ⁽¹⁾ – Testing with tool in the “OFF” position is required when tool employs a single pole switch and a capacitor					

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

13.1D	TABLE: Leakage Current – Clause 14.3				P
Points of application	Test voltage (mean voltage)	Freq. (Hz)	Selector Switch Position (ON / OFF ¹)	Allowed leakage current (mA)	Measured leakage (mA)
L/N-accessible enclosure	230	50	ON	0.25	0.009/0.003
Supplementary Information: Tested on BHD2608. Note (1) – Testing with tool in the "OFF" position is required when tool employs a single pole switch and a capacitor					

13.1D	TABLE: Leakage Current – Clause 14.3				P
Points of application	Test voltage (mean voltage)	Freq. (Hz)	Selector Switch Position (ON / OFF ¹)	Allowed leakage current (mA)	Measured leakage (mA)
L/N-accessible enclosure	230	50	ON	0.25	0.008/0.003
Supplementary Information: Tested on BHD3016. Note (1) – Testing with tool in the "OFF" position is required when tool employs a single pole switch and a capacitor					

13.1E	TABLE: Leakage Current – Clauses 14.4, 14.5 and 18.12					P
Points of application	Test voltage (V)	Freq. (Hz)	Selector Switch Position (ON/OFF ¹)	Allowed leakage current ² (mA)	Measured leakage current (mA)	Mode ³ , test condition ⁴ and/or additional Comments
L/N-accessible enclosure	243.8	50	ON	2.0	0.007/0.003	NO
Supplementary Information: Tested on BHD2608, after test of clause 18.12. Note (1) – Testing with tool in the "OFF" position is required when tool employs a single pole switch and a capacitor Note (2) – 2 mA for a class II tool, 5 mA for a class I tool Note (3) – Applicable mode, see Clause 14.4 Note (4) – Test condition such as 1.0 % NaCl solution at specified pressure for 1 h (Clause 14.5), disable residual current device (Cause 14.5), measurement after tool allowed to dry for 24 h at room temperature, etc.						

13.1E	TABLE: Leakage Current – Clauses 14.4, 14.5 and 18.12					P
Points of application	Test voltage (V)	Freq. (Hz)	Selector Switch Position (ON/OFF ¹)	Allowed leakage current ² (mA)	Measured leakage current (mA)	Mode ³ , test condition ⁴ and/or additional Comments
L/N-accessible enclosure	243.8	50	ON	2.0	0.008/0.003	NO
Supplementary Information: Tested on BHD3016, after test of clause 18.12. Note (1) – Testing with tool in the "OFF" position is required when tool employs a single pole switch and a capacitor Note (2) – 2 mA for a class II tool, 5 mA for a class I tool Note (3) – Applicable mode, see Clause 14.4 Note (4) – Test condition such as 1.0 % NaCl solution at specified pressure for 1 h (Clause 14.5), disable residual current device (Cause 14.5), measurement after tool allowed to dry for 24 h at room temperature, etc.						

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

15.2A	TABLE: Electric Strength Test – Applied after Clause 12.6 d)			P
Test voltage applied between:	Class of tool	Test voltage (V)	Results after Clause 12.6 d)	
Between live parts and accessible parts separated from live parts by basic insulation only	Class III	500	N/A	
	Other tools	1250	N/A	
Between live parts and accessible parts separated from live parts by reinforced insulation	Class II and II Builds	3750	N/A	
	Other tools	3750	N/A	
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and live parts	Class II and II Builds	1250	N/A	
	Other tools	1250	N/A	
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and accessible parts	Class II and II Builds	2500	N/A	
	Other tools	2500	N/A	
Between metal enclosures or covers lined with insulating material and metal foil in contact with the inner surface of the lining	Class II and II Builds	2500	N/A	
	Other tools	1250	N/A	
Between metal foil in contact with handles and the like and their shafts	Class II and II Builds	2500	N/A	
	Other tools	2500	N/A	
Between accessible parts and internal diameter of cord guard wrapped with metal foil	Class II and II Builds	2500	N/A	
	Other tools	1250	N/A	
Between winding/capacitor connection and accessible parts	Class II and II Builds	2U + 1000	N/A	
Between winding/capacitor connection and metal parts separated from live parts by basic insulation only	Other tools	2U + 1000	N/A	

Supplementary Information: Tested on BHD2608 and BHD3016.

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

15.2B	TABLE: Electric Strength Test – Applied after Clause 14.1.2 and 14.2 and 14.3	P			
Test voltage applied between:	Class of tool	Test voltage (V)	Results after Clause 14.1.2	Results after Clause 14.2	Results after Clause 14.3
Between live parts and accessible parts separated from live parts by basic insulation only	Class III	500	N/A	N/A	N/A
	Other tools	1250	N/A	N/A	N/A
Between live parts and accessible parts separated from live parts by reinforced insulation	Class II and II Builds	3750	N/A	N/A	P
	Other tools	3750	N/A	N/A	N/A
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and live parts	Class II and II Builds	1250	N/A	N/A	P
	Other tools	1250	N/A	N/A	N/A
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and accessible parts	Class II and II Builds	2500	N/A	N/A	P
	Other tools	2500	N/A	N/A	N/A
Between metal enclosures or covers lined with insulating material and metal foil in contact with the inner surface of the lining	Class II and II Builds	2500	N/A	N/A	N/A
	Other tools	1250	N/A	N/A	N/A
Between metal foil in contact with handles and the like and their shafts	Class II and II Builds	2500	N/A	N/A	P
	Other tools	2500	N/A	N/A	N/A
Between accessible parts and internal diameter of cord guard wrapped with metal foil	Class II and II Builds	2500	N/A	N/A	P
	Other tools	1250	N/A	N/A	N/A
Between winding/capacitor connection and accessible parts	Class II and II Builds	2U + 1000	N/A	N/A	N/A
Between winding/capacitor connection and metal parts separated from live parts by basic insulation only	Other tools	2U + 1000	N/A	N/A	N/A

Supplementary Information: Tested on BHD2608 and BHD3016.

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

15.2C	TABLE: Electric Strength Test – Applied after Clause 17.2			P
Test voltage applied between:	Class of tool	Test voltage (V)	Results	
Between live parts and accessible parts separated from live parts by basic insulation only	Class III	375	N/A	
	Other tools	937,5	N/A	
Between live parts and accessible parts separated from live parts by reinforced insulation	Class II and II Builds	2812,5	P	
	Other tools	2812,5	N/A	
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and live parts	Class II and II Builds	937,5	P	
	Other tools	937,5	N/A	
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and accessible parts	Class II and II Builds	1875	P	
	Other tools	1875	N/A	
Between metal enclosures or covers lined with insulating material and metal foil in contact with the inner surface of the lining	Class II and II Builds	1875	N/A	
	Other tools	937,5	N/A	
Between metal foil in contact with handles and the like and their shafts	Class II and II Builds	1875	P	
	Other tools	1875	N/A	
Between accessible parts and internal diameter of cord guard wrapped with metal foil	Class II and II Builds	1875	P	
	Other tools	937,5	N/A	
Between winding/capacitor connection and accessible parts	Class II and II Builds	$(2U+1000) * 0,75$	N/A	
Between winding/capacitor connection and metal parts separated from live parts by basic insulation only	Other tools	$(2U+1000) * 0,75$	N/A	

Supplementary Information: Tested on BHD2608 and BHD3016.

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

15.2D	TABLE: Electric Strength Test – Applied after Clause 17.3		N/A
Test voltage applied between:		Class of tool	Test voltage (V)
Between live parts and accessible parts separated from live parts by basic insulation only		Class III	500
		Other tools	1250
Between live parts and accessible parts separated from live parts by reinforced insulation		Class II and II Builds	3750
		Other tools	3750
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and live parts		Class II and II Builds	1250
		Other tools	1250
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and accessible parts		Class II and II Builds	2500
		Other tools	2500
Between metal enclosures or covers lined with insulating material and metal foil in contact with the inner surface of the lining		Class II and II Builds	2500
		Other tools	1250
Between metal foil in contact with handles and the like and their shafts		Class II and II Builds	2500
		Other tools	2500
Between accessible parts and internal diameter of cord guard wrapped with metal foil		Class II and II Builds	2500
		Other tools	1250
Between winding/capacitor connection and accessible parts		Class II and II Builds	2U + 1000
Between winding/capacitor connection and metal parts separated from live parts by basic insulation only		Other tools	2U + 1000
Supplementary Information: None.			

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

15.2E	TABLE: Electric Strength Test – Applied after Clause 20.2, 20.3, 20.4 and 20.5						P
Test voltage applied between:	Class of tool	Test voltage (V)	Results after 20.2	Results after 20.3	Results after 20.4	Results after 20.5	
Between live parts and accessible parts separated from live parts by basic insulation only	Class III	500	N/A	N/A	N/A	N/A	
	Other tools	1250	N/A	N/A	N/A	N/A	
Between live parts and accessible parts separated from live parts by reinforced insulation	Class II and II Builds	3750	P	P	P	N/A	
	Other tools	3750	N/A	N/A	N/A	N/A	
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and live parts	Class II and II Builds	1250	P	P	P	N/A	
	Other tools	1250	N/A	N/A	N/A	N/A	
For parts with double insulation, between metal parts separated from live parts by basic insulation only, and accessible parts	Class II and II Builds	2500	P	P	P	N/A	
	Other tools	2500	N/A	N/A	N/A	N/A	
Between metal enclosures or covers lined with insulating material and metal foil in contact with the inner surface of the lining	Class II and II Builds	2500	N/A	N/A	N/A	N/A	
	Other tools	1250	N/A	N/A	N/A	N/A	
Between metal foil in contact with handles and the like and their shafts	Class II and II Builds	2500	P	P	P	N/A	
	Other tools	1250	N/A	N/A	N/A	P	
Between accessible parts and internal diameter of cord guard wrapped with metal foil	Class II and II Builds	2500	P	P	P	N/A	
	Other tools	1250	N/A	N/A	N/A	N/A	
Between winding/capacitor connection and accessible parts	Class II and II Builds	2U + 1000	N/A	N/A	N/A	N/A	
Between winding/capacitor connection and metal parts separated from live parts by basic insulation only	Other tools	2U + 1000	N/A	N/A	N/A	N/A	

Supplementary Information: Tested on BHD2608 and BHD3016.

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

16.1	TABLE: Overload Protection of Transformers and Associated Circuits		N/A
Test voltage.....			—
Ambient temperature (°C)			—
Input current (A) / Input Wattage (W)			—
Applied short-circuit or overload			—
Measurement at:	Temperature rise, (°C)	Allowed Limit	
Transformer winding (thermocouple)			
Transformer winding (T ₁)R-R			
Transformer winding (T ₂)R-R			
Transformer Lamination			
Internal wiring			
Capacitor			
Printed circuit board			
SELV circuits			
Supplementary Information:			

18.10.2	TABLE: Fault Condition Tests				N/A
	Ambient temperature (°C)	22			—
Component	Fault Condition	Test Voltage (V)	Test Duration	Fuse-link Current (A)	Comment/Result
Supplementary Information: None.					

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

23.1	TABLE: List of Critical Components (See the detail in CDF)	P
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Object/Part No.	Manufacturer/ Trademark	Type/Model	Technical Data	Standard	Mark(s) of Conformity ¹⁾

¹⁾ An asterisk indicates a mark which assures the agreed level of surveillance

28.1	TABLE: Clearance and Creepage Distance Measurements	P
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Clearance cl and Creepage Distance (dcr) Between:	Up (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required dcr (mm)	Dcr (mm)
Two polarity of switch	--	AC 230	2.5	8.1	3	8.1
Internal wire to accessible screw	--	AC 230	4	21.0	4	21.0
Brush holder to accessible screw	--	AC 230	8	13.6	8	13.6
Internal wire to enclosure	--	AC 230	4	5.1	4	5.1
Switch terminal to enclosure	--	AC 230	8	9.1	8	9.1
Internal wire to enclosure through hole for rubber	--	AC 230	4	4.2	4	4.2
Brush holder to enclosure	--	AC 230	8	10.2	8	10.2
Commutator to output shaft	--	AC 230	8	10.2	8	10.2
Capacitor surface to enclosure	--	AC 230	4	5.1	4	5.1
Stator coil to stator core	--	AC 230	2	2.6	2	2.6
Rotor coil to rotor	--	AC 230	2	2.7	2	2.7

Supplementary information: Measured on BHD2608.

- Creepage and clearance values of Table 10 do not apply to crossover points of motor windings.

28.2	TABLE: Distance Through Insulation Measurements	P
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Distance Through Insulation di Between:	U r.m.s. (V)	Test Voltage (V)	Required di (mm)	Di (mm)
Armature core to output shaft	--	AC 230	1.0	1.7
Armature coil to output shaft	--	AC 230	2.0	2.35

Supplementary information: Measured on the motor of BHD2608.

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

28.1	TABLE: Clearance and Creepage Distance Measurements						P
Clearance cl and Creepage Distance (dcr) Between:	Up (V)	U r.m.s. (V)	Required cl (mm)	cl (mm)	Required dcr (mm)	Dcr (mm)	
Two polarity of switch	--	AC 230	2.5	8.3	3	8.3	
Internal wire to accessible screw	--	AC 230	4	21.0	4	21.0	
Brush holder to accessible screw	--	AC 230	8	13.7	8	13.7	
Internal wire to enclosure	--	AC 230	4	5.1	4	5.1	
Switch terminal to enclosure	--	AC 230	8	10.3	8	10.3	
Internal wire to enclosure through hole for rubber	--	AC 230	4	4.2	4	4.2	
Brush holder to enclosure	--	AC 230	8	10.2	8	10.2	
Commutator to output shaft	--	AC 230	8	8.8	8	8.8	
Capacitor surface to enclosure	--	AC 230	4	5.1	4	5.1	
Stator coil to stator core	--	AC 230	2	2.5	2	2.5	
Rotor coil to rotor	--	AC 230	2	2.1	2	2.1	

Supplementary information: Measured on BHD3016.
- Creepage and clearance values of Table 10 do not apply to crossover points of motor windings.

28.2	TABLE: Distance Through Insulation Measurements				P
Distance Through Insulation di Between:	U r.m.s. (V)	Test Voltage (V)	Required di (mm)	Di (mm)	
Armature core to output shaft	--	AC 230	1.0	1.5	
Armature coil to output shaft	--	AC 230	2.0	2.05	

Supplementary information: Measured on the motor of BHD3016.

29.1	TABLE: Ball Pressure Test			P
Part under test	Plastic material type	Test Temperature (°C)	Impression Diameter (mm)	
Enclosure	PA6	75	1.2	
Stator bobbin	PPS	125	0.8	
Brush holder	PA6-GF35	125	1.1	

Supplementary information: None.

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

29.2	TABLE: Glow Wire Test				P
Test Conditions	Test according to IEC 60695-2-11				—
Test temperature (°C)	550°C				—
Test Specimen	Material type	Specified Layer placed underneath Test Specimen	Material ignited, Yes/No	Specified Layer under Test Specimen ignited, Yes/No	Other remarks
Enclosure	PA6	Yes	No	No	None
Stator bobbin	PPS	Yes	No	No	None
Brush holder	PA6-GF35	Yes	No	No	None
Supplementary information: None.					

29.3A	TABLE: Proof Tracking Test, Annex G				P
Test Conditions	Test according to IEC 60112				—
Test solution	400Ωcm at 25°C				—
Test Voltage (V)	175V				—
Specimen under test	Material type	Tracking occurred, Yes/No	Rate of Tracking	Other remarks	
Enclosure	PA6	No	30s one drop	No	
Stator bobbin	PPS	No	30s one drop	No	
Brush holder	PA6-GF35	No	30s one drop	No	
Supplementary information: None.					

29.3B	TABLE: Needle-flame Test, Annex F				N/A
Test Conditions	Test according to IEC 60695-2-2				—
Duration of flame application (s)					—
Test temperature (°C)					—
Specimen under test	Material type	Material ignited, Yes/No	Tissue Paper Ignited, Yes/No	Pine-wood Scorched, Yes/No	Other remarks
Supplementary information:					

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

K12.1	TABLE: Normal Temperature Test for Battery Tool			N/A
Test voltage.....				—
Ambient temperature (°C)				—
Input current (A) / Input Wattage (W)				—
Speed control setting:				—
Measurement at:		Temperature rise, (°C)	Allowed Limit	
Enclosure, outside, gripping surface				
Enclosure, outside, near motor				
Enclosure outside, gear housing				
Enclosure, inside, near motor				
Enclosure, inside, near heat sink				
Internal wiring				
Switch body				
External, metal gear case				
Battery terminal support				
Battery pack				
Supplementary Information: Status of overload protector at end of test [] No change [] Opened during the Test [] N/A				

K.18.1	TABLE: Battery Tool Abnormal Operation					N/A
Abnormal conditions	Resistance (max. 10 mΩ)	Protector Operated?	Test repeated 3 more times	Charring or burning of test materials?	Other remarks	
a) Terminals of detachable battery pack with exposed terminals shorted						
b) Motor terminals shorted						
c) Motor rotor locked						
d) Cord between battery tool and separable battery pack shorted						
e) Cord provided the tool and the charger shorted						
f) Any two uninsulated parts of opposite polarity in battery tools shorted						
Supplementary Information:						

EN 60745-1:2009+A11			
Clause	Requirement + Test	Result - Remark	Verdict

L.18.201	TABLE: Battery Tool Abnormal Operation				N/A
Abnormal conditions	Resistance (max. 10 mΩ)	Protector Operated?	Test repeated 3 more times	Charring or burning of test materials?	Other remarks
a) Terminals of detachable battery pack with exposed terminals shorted					
b) Motor terminals shorted					
c) Motor rotor locked					
d) Cord between battery tool and separable battery pack shorted					
e) Cord provided the tool and the charger shorted					
f) Any two uninsulated parts of opposite polarity in battery tools shorted					
Supplementary Information:					

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict
6	Environmental requirements This clause of Part 1 is applicable except as follows:		P
6.1.2.2	Sound power level determination		P
6.1.2.2.101	For concrete breakers and picks		N/A
	The sound power level shall be measured according to EN ISO 3744, where the acoustic environment, instrumentation, quantities to be measured, and the measurement procedure are specified.		N/A
6.1.2.2.102	For chiselling hammers, 6.1.2.2 of Part 1 applies.		P
6.1.2.2.103	For rotary hammers, 6.1.2.2 of Part 1 applies		P
6.1.2.4	Installation and mounting conditions of the power tools during noise tests		P
6.1.2.5	Operating conditions		P
	Concrete breakers and picks		N/A
	The hammer shall be coupled during the test run to a tool embedded in a cube-shaped concrete block placed in a concrete pit, sunk into the ground.		N/A
	The support tool shall be sealed into the block and shall consist of a rammer of no less than 178 mm or no more than 220 mm diameter and a tool chuck component identical to that normally used with the appliance being tested. Its upper end protruding above the screening slab shall be sufficiently long to enable the practical test to be carried out, but, as indicated in Figure Z103, it shall not exceed 100 mm.		N/A
	The opening in the screening slab through which the tool chuck component passes shall be as small as possible and sealed by a flexible sound-proof joint.		N/A
	All speed setting devices shall be adjusted to the highest value.		N/A

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict
	The hammer is tested under load, connected to the support tool. The feed force applied to the hammer by an appropriate fixture in addition to its weight shall be just sufficient to ensure stable operation.		N/A
6.1.2.5.101	Chiselling hammers		P
	All speed setting devices shall be adjusted to the highest value.		P
	Chiselling hammers shall be tested under load applying the loading device shown in Figure Z104, which is mounted on a concrete block having the minimum dimensions specified in Table Z104.		P
	When using the loading device shown in Figure Z104, the force to be applied to the tool in addition to its weight shall be just sufficient to ensure stable operation.		P
6.1.2.5.103	For hammers with rotary action the speed setting shall be that recommended by the manufacturer for the drill bit size defined for the test for drilling in concrete.		P
	Rotary hammers are tested under load as shown in Figure Z106 and in accordance with the conditions shown in Tables Z102, Z103 and Z104.		P
6.2.4.2	Location of measurement		P
	Figure Z107 and Z108 show the transducer positions for different types of hammers		P
6.2.6.3	Operation conditions		P
	If rotary hammers have a chiselling (non rotary) function, they shall be tested in the chiselling and rotary hammer function according to 6.2.6.3.101 and 6.2.6.3.102		P
	During the test, an auxiliary handle (front handle) shall be mounted in a 90° angle to the machine (Figures Z107 and Z108 show the handle in 0° position)		P
6.2.6.3.101	Percussion hammers without rotary action (concrete breakers and picks, chiselling hammers)		P

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict
	For hammers without rotary action all speed setting device shall be adjusted to the highest value.		N/A
	Hammers without rotary action are tested under load in the loading device shown in Figure Z104 and described in 6.1.2.5.102, which is mounted on a concrete block having the minimum dimensions specified in Table Z104.		P
	When using the loading device shown in figure Z104, the force to be applied to the tool in addition to its weight shall be just sufficient to ensure stable operation. Excessive feed force shall be avoided. Vibration reducing mechanisms shall not be overloaded to allow them proper operation.		P
	To avoid negative effects on the measurement result, the inserted tool shall be aligned in the middle of the bushing without contact to the bushing.		P
	In addition, hammers without rotary action are tested under "no load", by lifting the hammer up so that its weight is totally supported by the hands of the operator whilst the inserted tool is still located in the loading device and the hammer. During the measurement, the loading device shall not exert any force to the inserted tool which could influence the measurement.		P
6.2.6.3.102	Rotary hammers		P
	For rotary hammers the speed setting shall be that recommended by the manufacturer for the drill bit size defined for the test for drilling in concrete.		P
	Hammers with rotary action are tested under load as shown in Figure Z106 and in accordance with the conditions shown in Tables Z102, Z103 and Z105.		P
6.2.7.1	Reported vibration value		P

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict

	<p>If more than one operating mode was measured, the result α_h for each operating mode applicable shall be reported.</p> <p>$\alpha_{h,HD}$ = mean vibration "hammer drilling" in accordance with 6.2.6.3.102</p> <p>$\alpha_{h,CH}$ = mean vibration "chiselling" on loading device in accordance with 6.2.6.3.101</p> <p>$\alpha_{h,NL}$ = mean vibration "no load" with lifted hammer on loading device in accordance with 6.2.6.3.101</p> <p>$\alpha_{h,CHeq} = [0.2 (\alpha_{h,NL})^2 + 0.8(\alpha_{h,CH})^2]^{0.5}$</p> <p>= Equivalent chiselling value (representing time contents of 20% with no load and 80% with full load)</p>		
6.2.7.2	Declaration of the vibration emission value		P
	<p>The vibration emission values of the handle with the highest emission and the uncertainty K shall be declared:</p> <ul style="list-style-type: none"> for rotary hammers without chiselling (non rotary) function the value of $\alpha_{h,HD}$, with the work mode description "hammer drilling into concrete"; for rotary hammers with separate chiselling function the value of $\alpha_{h,HD}$, with the work mode description "hammer drilling into concrete" and the value of $\alpha_{h,CHeq}$; with the work mode description "chiselling"; for chiselling hammers and concrete breakers the value of $\alpha_{h,CHeq}$, with the work mode description "chiselling". 	<p>For BHD2608, hammer drill into concrete:</p> <p>$a_{h,HD}$: 14.971m/s²(main handle)</p> <p>$a_{h,HD}$: 12.676m/s²(auxiliary handle)</p> <p>Chiseling:</p> <p>$a_{h,CHeq}$: 13.650m/s²(main handle)</p> <p>$a_{h,CHeq}$: 10.010m/s²(auxiliary handle)</p> <p>K=1.5 m/s²</p> <p>For BHD3016, hammer drill into concrete:</p> <p>$a_{h,HD}$: 17.453m/s²(main handle)</p> <p>$a_{h,HD}$: 13.453m/s²(auxiliary handle)</p> <p>Chiseling:</p> <p>$a_{h,CHeq}$: 17.210m/s²(main handle)</p> <p>$a_{h,CHeq}$: 14.910m/s²(auxiliary handle)</p> <p>K=1.5 m/s²</p>	P

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict
7	Classification This clause of Part 1 is applicable.		P
8	Marking and instructions This clause of Part 1 is applicable, except as follows:		P
8.12.1.1	Addition: "Wear ear protectors. Exposure to noise can cause hearing loss." - "Use auxiliary handles supplied with the tool. Loss of control can cause personal injury." - Hold Power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock		P
8.12.2	a) Addition: Z101) Information on the correct use of the dust collection system, if any		P
	Z102) Advice to wear a dust mask		P
9	Protection against access to live parts This clause of Part 1 is applicable.		P
10	Starting This clause of Part 1 is applicable.		P
11	Input and current This clause of Part 1 is applicable.		P
12	Heating This clause of Part 1 is applicable, except as follows:		P

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict
12.4	Replacement: The tool is operated intermittently until the temperature stabilises or for 30 cycles, whichever is achieved first, each cycle comprising a period of operation of 30 s and a rest period of 90 s with the tool switched off.	Operated 30cycles, 30s open and 90s rest.	
	During the periods of operation the tool is loaded by means of a brake adjusted so as to attain rated input or rated current, the hammer mechanism being disengaged or removed.		P
	At the manufacturer's option, the tool may also be operated continuously until thermal stabilization.	30 cycle used	P
	The temperature-rise limit specified for the external enclosure does not apply to the enclosure of the hammer mechanism.		P
13	Leakage current This clause of Part 1 is applicable.		P
14	Moisture resistance This clause of Part 1 is applicable.		P
15	Electric strength This clause of Part 1 is applicable.		P
16	Overload protection of transformers and associated circuits This clause of Part 1 is applicable.		P
17	Endurance This clause of Part 1 is applicable, except as follows:		P

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict
17.2	<p>Replacement:</p> <p>Rotary hammers with "drill only mode" are operated at no-load with the impact mechanism disengaged for 12 h at a voltage equal to 1,1 times the rated voltage, and then for 12 h at a voltage equal to 0,9 times rated voltage.</p> <p>Each cycle of operation comprises an "on" period of 100 s and an "off" period of 20 s, the "off" periods being included in the specified operating time.</p>	<p>253V, 12h; 207V, 12h</p> <p>100/20</p>	P
	During the test, the tool is placed in three different positions, the operating time, at each voltage, being approximately 4 h for each position.		P
	All hammers, including hammers with drill only mode, are mounted vertically in a test apparatus as shown in Figure 103 and are operated at rated voltage or at the mean value of the rated voltage range, for four periods of 6 h each, the interval between these periods being at least 30 min.	230V	P
	During these tests, hammers are operated intermittently, each cycle comprising a period of operation of 30 s and a rest period of 90 s during which the tool remains switched off.		P
	<p>During the tests, an axial force to ensure steady operation of the impact mechanism is applied to the hammer through a resilient medium.</p> <p>If the temperature rise of any part of the tool exceeds the temperature rise determined during the test of 12.1, forced cooling or rest periods are applied, the rest periods being excluded from the specified operating time.</p>		P
	During these tests, overload protection devices shall not operate.	None	N/A
	The tool may be switched on and off by means of a switch other than that incorporated in the tool.		P
	During these tests, replacement of the carbon brushes is allowed, and the tool is oiled and greased as in normal use.		P

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict

	If the impact mechanism fails mechanically during the test without causing an accessible part to become live it may be replaced by a new one.		P
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18	Abnormal operation This clause of Part 1 is applicable.		P
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19	Mechanical hazards This clause of Part 1 is applicable, except as follows: Additional subclauses:		P
19.101	Chuck keys shall be so designed that they drop easily out of position when released.	No chuck key used.	N/A
	This requirement does not exclude the provision of clips for holding the key in place when not in use; metal clips fixed to the flexible cable or cord are not allowed.		N/A
	Compliance is checked by inspection and manual test.		N/A
	The key is inserted in the chuck and, without tightening, the tool is turned such that the key is facing down. The key shall fall out.		N/A
19.102	The force on the hand due to static stalling torque shall not be excessive.		P
	Compliance is checked by the following test. Static stalling torque or slip torque of a clutch is measured on the locked output spindle of the tool in the cold condition (M _R).		P
	The tool is connected to rated voltage. The mechanical gears are adjusted to the lowest speed. Electronic regulators are adjusted to their maximum speed setting. The tool switch is to be in the full "on" position. The mean value of the torque measured shall not exceed the relevant maximum value in Figure 102 and Figure 103.	For BHD2608, limitation: 39.2Nm (a ₂ =0.138m) Measured: 5.7Nm For BHD3016, limitation: 39.2Nm (a ₂ =0.138m) Measured: 5.3Nm	P

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict

20	Mechanical strength This clause of Part 1 is applicable.		P
20.3	Replacement :		P
	Hammers up to 10kg shall withstand being dropped three times in total on a concrete surface from a height of 1m. For these three drops, the sample shall be tested in the three most unfavourable positions and the lowest point of the tool shall be 1m above the concrete surface. For the test, separable accessories are not mounted.	For BHD2608, 3.20kg < 10kg For BHD3016, 3.31kg < 10kg	P
	Hammers exceeding 10kg are subjected to three impacts that result from the tool being tipped over to strike a concrete surface. The tool is tipped with the longest accessory recommended by the manufacturer except when the recommended accessory is longer than 1m. In this case, the tools are tested with a 1m accessory. The tool is positioned in an upright position with the tip of the accessory resting on a concrete surface. The tool is then tipped in three different directions on to the concrete surface.		N/A
20.5	Replacement		P
	Hammers are regarded as tools that are likely to cut into concealed wiring or their own cord. Therefore, handles and grasping surfaces, as specified in the instruction manual, shall have adequate mechanical strength in order to provide insulation between the grasping area and the output shaft		P
	A separate sample, at the discretion of the manufacturer, is to be subjected to a single impact on each handle and each recommended grasping surface		P
	For hammers up to 10kg, the impacts are carried out from a height of 1m onto a concrete surface		P
	For hammers exceeding 10kg, the impacts are carried out by tipping the tool over to strike the concrete surface. The tool is tipped with the longest accessory recommended by the manufacturer except when the recommended accessory is longer than 1m. In this case, the tool is tested with a 1m accessory		N/A

EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict

21	Construction This clause of Part 1 is applicable except as follows:		P
21.18	Addition		P
	Percussion hammers and rotary hammers operating in the percussion mode may have a switch with a locking arrangement to lock it in the "on" position. For these tools, the switch shall unlock automatically with a single motion without releasing the grasp on the tool.		P
	For rotary hammers, a switch lock-on device, if any, shall be located outside the grasping area or so designed that it is not likely to be unintentionally locked on by the user's hand during intended left- or right-handed operation. This grasping area is considered to be the contact area between either hand and the tool while the index finger of that hand is resting on the switch actuator of the tool.		P
	For a switch with a lock-on button device within the grasping area, the lock-on device shall not be actuated by a straight-edged utensil when the utensil is made to pass back and forth across the device in any direction. The straight edge of the utensil must be of sufficient length to bridge the surface of the lock-on device and any surface adjacent to the lock-on device.		P
21.Z1	This clause of Part 1 is not applicable.		P

22	Internal wiring This clause of Part 1 is applicable.		P
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23	Components This clause of Part 1 is applicable.		P
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24	Supply connection and external flexible cords This clause of Part 1 is applicable except as follows:		P
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EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict
24.4	Modification		P
	Instead of the first paragraph, the following applies:		P
	Supply cords shall be not lighter than heavy polychloroprene sheathed flexible cable (60245 IEC 66) or equivalent.	H07RN-F	P
25	Terminals for external conductors This clause of Part 1 is applicable.		P
26	Provision for earthing This clause of Part 1 is applicable.		P
27	Screws and connections This clause of Part 1 is applicable.		P
28	Creepage distances, clearances and distances through insulation This clause of Part 1 is applicable.		P
29	Resistance to heat, fire and tracking This clause of Part 1 is applicable.		P
30	Resistance to rusting This clause of Part 1 is applicable.		P
31	Radiation, toxicity and similar hazards This clause of Part 1 is applicable.		P
	Annexes The annexes of Part 1 are applicable.		P
Annexes	The annexes of Part 1 are applicable except as follows.		N/A

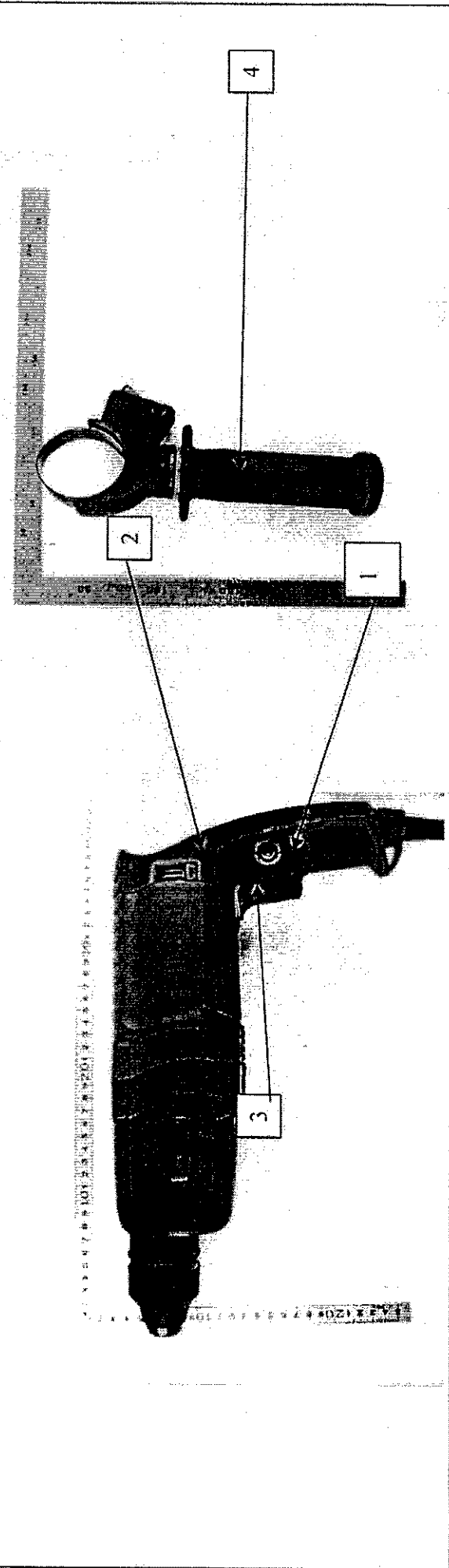
EN 60745-2-6:2010			
Clause	Requirement + Test	Result - Remark	Verdict
Annex K	(normative) Battery tools and battery packs		N/A
K.1.1	Addition: All clauses of this Part 2 apply unless otherwise specified in this annex.		N/A
K.8.12.1.1	Replacement of this subclause of Part 2		N/A
	<p>“Wear ear protectors. Exposure to noise can cause hearing loss.”</p> <p>- “Use auxiliary handles supplied with the tool. Loss of control can cause personal injury.”</p> <p>- Hold Power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock</p>		N/A
K.12.4	This subclause of Part 2 is not applicable		N/A
K.17.2	This subclause of Part 2 is not applicable		N/A
K.24.4	This subclause of Part 2 is not applicable		N/A
Annex L	(normative) Battery tools and battery packs provided with mains connection or non-isolated sources		N/A
L.1.1	Addition: All clauses of this Part 2 apply unless otherwise specified in this annex.		N/A
Annex ZZA (Informative)	Coverage of Essential Requirements of Directive 98/37/EC		P
Annex ZZB (Informative)	Coverage of Essential Requirements of Directive 2006/42/EC		P

ATTACHMENT 1 OF TEST REPORT 15048112 001

Material list for PAH risk assessment; Only materials accessible without tools

Product designation: BHD2608, BHD2609, BHD3015, BHD3016
 Certificate No.: S 50224091 0001

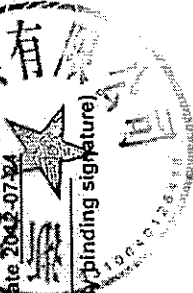
Material / Component #	Location / Function of the material	Name / Description of the material	PAH relevant 1)	Evidence attached, Institute, report no., date	Cate gory	Smell	Rigidity	Colour	Correction of data by test center? 2)	Chem. test needed?	Test result (within the given limits)	Attachment
1	Handle	Plastic(Red PA6)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	TUV Rheinland Q00163981-1 2012.07.06	<input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Soft <input type="checkbox"/> Flexible <input checked="" type="checkbox"/> Rigid	<input checked="" type="checkbox"/> Black or dark-colored <input type="checkbox"/> White or light-colored	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> passed <input type="checkbox"/> failed	/
2	Soft Grip	Plastic(Black TPE)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	TUV Rheinland Q00163981-1 2012.07.06	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Soft <input type="checkbox"/> Flexible <input type="checkbox"/> Rigid	<input type="checkbox"/> White or light-colored <input checked="" type="checkbox"/> Black or dark-colored	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> passed <input type="checkbox"/> failed	/
3	Main Switch	Plastic(Black PA6)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	TUV Rheinland Q00163981-1 2012.07.06	<input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Soft <input type="checkbox"/> Flexible <input checked="" type="checkbox"/> Rigid	<input type="checkbox"/> White or light-colored <input checked="" type="checkbox"/> Black or dark-colored	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> passed <input type="checkbox"/> failed	/
4	Auxiliary Handle	Plastic(Black TPE)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	TUV Rheinland Q00163981-1 2012.07.06	<input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Soft <input type="checkbox"/> Flexible <input checked="" type="checkbox"/> Rigid	<input type="checkbox"/> White or light-colored <input checked="" type="checkbox"/> Black or dark-colored	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> passed <input type="checkbox"/> failed	/



ATTACHMENT 1 OF TEST REPORT 15048112 001

This assessment is for below type designations: BHD2608, BHD2609, BHD3015, BHD3016 (only the parts marked are relevant to PAHs assessment, other parts are not considered to be held for more than 30s during normal operation.)

我在这里声明, 如下所列出内容为我司申请 CE 证书产品中的材料, 和随附 PAHs 测试报告中材料一致。 I herewith declare that the below listed materials are used in our product submitted to GS- certification and conform with the attached PAHs test reports.



地点/Place Guangzhou 时间/Date 2008-07-04
申请人盖章和签名 (Applicant's seal and legally binding signature)

Risk assessment for the above mentioned product indicates PAH relevance :
 Yes ¹⁾
 No

Short statement

Edward Liu / PE Edward Liu

Attachment 2:

QMA 30.041.01SHG_7.14

TÜV Rheinland (Shanghai) Co. Ltd.

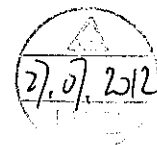
Measuring and Testing Equipment List

Used MTE

Revision: 08 Nov, 2006

Report Number: _____15048112 001_____

Description	MTE Type/model Internal ID	Next Calibration Date
<input checked="" type="checkbox"/> Tracking Tester	TI-V E020	04.06.2013
<input checked="" type="checkbox"/> Glow Wire Tester	GW-V E037	12.06.2013
<input checked="" type="checkbox"/> Ball Pressure Test Apparatus	BP-III P039, P040	04.05.2013
<input checked="" type="checkbox"/> High Speed Programmable Dynamometer Controller	DSP6001A E043	31.08.2013
<input checked="" type="checkbox"/> Single-Phase Power Analyzer	6510e E044	08.01.2013
<input checked="" type="checkbox"/> Voltage Withstand Tester	TOS5051A E084	22.09.2013
<input checked="" type="checkbox"/> Digital Multimeter	111 E087	03.05.2013
<input checked="" type="checkbox"/> Oscilloscope and probes	54622A, 10074C E161, E161-1, E161-2	05.02.2013
<input checked="" type="checkbox"/> High Voltage Probe of Oscilloscope	P5100 E161-3	05.02.2013
<input checked="" type="checkbox"/> Flexible Cord Bending-test Apparatus	WQ-4B E162	22.09.2013
<input checked="" type="checkbox"/> Power Tools No-load Durability Test System	None E186	10.07.2013
<input checked="" type="checkbox"/> Touch-current Tester	7630 E202	25.08.2013
<input checked="" type="checkbox"/> Electron-stopwatch	J9-2II H013	14.11.2013
<input checked="" type="checkbox"/> Spring-operated Impact Hammer	F22.50 I004	02.06.2013
<input checked="" type="checkbox"/> Digital Caliper	0~150mm L233	22.08.2013
<input checked="" type="checkbox"/> Φ6mm Steel Ball for EN 60745-1	None L484	07.04.2013
<input checked="" type="checkbox"/> R Gauge	None L547	04.12.2013
<input checked="" type="checkbox"/> Steel Tape	0~5m L582	12.02.2014
<input checked="" type="checkbox"/> Standard Test Finger	IEC 60745-1:2006 Figure 1 L649	30.05.2013
<input checked="" type="checkbox"/> Rigid Test Finger for IEC 60745-1: 2006	IEC 60745-1: 2006 L650	30.05.2013



Attachment: 2

QMA 30.041.01SHG_7.14

TÜV Rheinland (Shanghai) Co. Ltd.
Measuring and Testing Equipment List

Used MTE

Revision: 08 Nov, 2006

Report Number: _____15048112 001_____

Description	MTE Type/model Internal ID	Next Calibration Date
<input checked="" type="checkbox"/> <i>Appliance for cord anchorage force & torque tests</i>	None Z530	No calibration required
<input checked="" type="checkbox"/> <i>Weight</i>	F2, 1g~500g M007	27.06.2013
<input checked="" type="checkbox"/> <i>Electronic Scale</i>	ACS-30Ac M014	30.01.2013
<input checked="" type="checkbox"/> <i>Tubular Measuring Force Apparatus</i>	KL-50 P024	02.06.2013
<input checked="" type="checkbox"/> <i>Torque Driver Tester</i>	TDT600CN R015	02.05.2013
<input checked="" type="checkbox"/> <i>Digital Tachometer</i>	HY-441 R018	28.04.2013
<input checked="" type="checkbox"/> <i>Data Acquisition/Switch Unit</i>	HP34970A T018	27.05.2013
<input checked="" type="checkbox"/> <i>Temperature and Humidity Chamber</i>	C-1000/40 T071	12.04.2013
<input checked="" type="checkbox"/> <i>Sound Level Calibrator</i>	4231 R061	27.04.2013
<input checked="" type="checkbox"/> <i>Sound Level Meter</i>	2239 R083	11.10.2013
<input checked="" type="checkbox"/> <i>Human Vibration Analyzer</i>	4447 R089	08.01.2013
<input checked="" type="checkbox"/> <i>Calibration Exciter</i>	4294 R110	10.10.2013
<input checked="" type="checkbox"/> <i>Asynchronism Dynamometer</i>	AC30/16P (30N.m,1000r/min,3000W) R068	02.08.2013
<input checked="" type="checkbox"/> <i>Torque Gauge</i>	BTG36CN R008	05.12.2013
<input checked="" type="checkbox"/> <i>Milliohm Meter</i>	3540 E023	04.06.2013
<input checked="" type="checkbox"/> <i>Torque master</i>	TM312/011 R098	31.08.2013
<input checked="" type="checkbox"/> <i>Electric Heat-Air Dry Compartment</i>	CS101-2EBN T010	22.09.2013
<input checked="" type="checkbox"/> <i>Jointed Test Finger for IEC 61032 figure 2</i>	P10.14 L213	11.07.2013
<input checked="" type="checkbox"/> <i>Test Probe for IEC 61032 Figure 9</i>	None L257	07.03.2013
<input checked="" type="checkbox"/> <i>Rigid Test Finger for IEC 61032 figure7</i>	P10.38 P014	08.05.2013



 27.07.2012