

IEC62841_1A - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

<b>ATTACHMENT TO TEST REPORT IEC 62841-1</b> <b>EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES</b> <b>Electric Motor-Operated Hand-Held, Transportable Tools and Lawn and Garden Machinery - Safety -</b> <b>Part 1: General requirements</b>			
Differences according to.....: EN 62841-1:2015			
Attachment Form No.....: EU_GD_IEC62841_1A			
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	CENELEC COMMON MODIFICATIONS (EN)		
			-
<b>8</b>	<b>MARKINGS AND INSTRUCTIONS</b>		-
8.4	Replace the 2nd paragraph with the following:		-
	Markings specified in 8.2 and 8.3 are clearly discernible from the outside of the tool.		P
	Other markings on the tool may be visible after removal of a cover, provided that the location of the markings is readily accessible.		P
8.14	The words "Original instructions" appear on the language version(s) verified by the manufacturer or his authorised representative.		P
	Where no "Original instructions" exist in the official language(s) of the country where the tool is to be used, a translation into that/those language(s) is provided by the manufacturer or his authorised representative or by the person bringing the tool into the language area in question.		P
	The translations bear the words "Translation of the original instructions", and they are accompanied by a copy of the "Original instructions".		P
8.14.2	The noise emission, which is measured in accordance with I.2		P
	Where L <sub>pA</sub> does not exceed 70 dB(A), this fact is indicated; L <sub>pA</sub> [dB(A)] ..... : K <sub>pA</sub> [dB(A)] ..... :		N/A
	A-weighted sound pressure level L <sub>pA</sub> and its uncertainty K <sub>pA</sub> , where L <sub>pA</sub> exceeds 70 dB(A).	Refer to 6018734.50A	P

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	peak C-weighted instantaneous sound pressure value $L_{pCpeak}$ , where this exceeds 63 Pa (130 dB in relation to 20 $\mu$ Pa) $L_{pCpeak}$ (dB) ..... : $K_{pCpeak}$ (dB) ..... :		N/A
	A-weighted sound power level LWA and its uncertainty KWA, where the A-weighted sound pressure level $L_{pA}$ exceeds 80 dB(A); $L_{WA}$ [dB(A)] ..... : $K_{WA}$ [dB(A)] ..... :	Refer to 6018734.50A	P
	The vibration total value and its uncertainty which is measured in accordance with I.3.		P
	When the vibration total value does not exceed 2,5 $m/s^2$ , this is stated. Work mode - vibration emission value a ( $m/s^2$ )..... : Uncertainty K ( $m/s^2$ )..... :	-	N/A
	When the vibration total value exceeds 2,5 $m/s^2$ , its value is given in the instructions.		P
	Information 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
	Information that the declared vibration total value may also be used in a preliminary assessment of exposure.		P
	A warning 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		P
	A warning 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

<b>18</b>	<b>ABNORMAL OPERATION</b>		
18.8.1	In Table 4, replace the table footnote by the following: * Performance levels are to be specified in the relevant part of EN 62841-2, EN 62841-3 or EN 62841-4.		P
	Delete the 5th paragraph and the subsequent NOTE 3.		P

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<b>21</b>	<b>CONSTRUCTION</b>		<b>-</b>
21.18.1	delete the 2nd paragraph.		
21.18.1.Z1	Unless hand-held tools are equipped with a momentary power switch without lock-on device, voltage recovery following an interruption of the supply do not give rise to a hazard.		P
	The relevant part of EN 62841-2 specifies if this subclause applies and gives specific requirements.		P
21.18.2.1	Unless transportable tools are equipped with a momentary power switch without lock-on device, voltage recovery following an interruption of the supply do not give rise to a hazard.		N/A
	The relevant part of EN 62841-3 specifies if this subclause applies and gives specific requirements.		N/A

<b>ANNEX E</b>	<b>METHODS OF APPLYING ISO 13849-1 TO POWER TOOLS</b>		<b>-</b>
	(Void)		

<b>ANNEX I</b>	<b>MEASUREMENT OF NOISE AND VIBRATION EMISSIONS</b>		<b>-</b>
	Replace the title of Annex I by the following <b>ANNEX I – (NORMATIVE)</b>		
I.2	Noise test code (grade 2)		P
I.2.Z1	Noise reduction		-
	Add the following before I.2.1:		P
	Noise reduction at tools is an integral part of the design process and is achieved by particularly applying measures at source to control noise, see for example EN ISO 11688-1.		P
	The success of the applied noise reduction measures is assessed on the basis of the actual noise emission values in relation to other machines of the same type with comparable non acoustical technical data.		P
	The major sound sources of tools are: motor, fan, gear.		P
I.2.1	General		-
	The noise emission determined by using a machine which has design and technical specifications replicating the machine concerned.		P
	The overall noise can be divided into the pure machine noise and the noise generated from the processed workpiece.		P

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	The load conditions for particular tools are therefore specified in the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4.		P
I.2.2	Sound power level measured according to ISO 3744		P
I.2.2.2	Hand-held power tools		P
	For all hand-held power tools, the sound power level is determined by using a hemispherical / cylindrical measurement surface according to Figure I.2.		P
I.2.2.3	For all transportable power tools, the sound power level is determined by using a cubic measurement surface according to Figure I.3.		N/A
I.2.2.4	The sound power level of lawn and garden machinery is determined as specified in the relevant part of IEC 62841-4.		N/A
I.2.3	Emission sound pressure level determination		–
I.2.3.1	The A-weighted emission sound pressure level of hand-held tools at the work station LpA according to ISO 11203		P
	If required, LpCpeak is measured at each of the five measurement positions specified in I.2.2		N/A
I.2.3.2	The A-weighted emission sound pressure level of transportable tools at the work station, LpA, is determined according to ISO 11201, grade 2.		P
	If required, the C-weighted peak emission sound pressure level LpCpeak is measured at the same operator's position as the A-weighted sound pressure level LpA.		N/A
I.2.3.3	The emission sound pressure level of lawn and garden machinery is determined as specified in the relevant part of IEC 62841-4.		P
I.2.4	Installation and mounting conditions of the power tools during noise tests		–
	The power tool under test is new and equipped with accessories which affect the acoustic properties, as recommended by the manufacturer.		P
	Prior to commencing testing, the power tool (including any required ancillary equipment) is set up in a stable condition in accordance with the manufacturer's instructions for safe use.		P
	A hand-held tool is held by the operator or suspended in such a way as to correspond to normal use, as specified in the relevant part of IEC 62841-2		P
	A transportable tool is so positioned, either placed on the test bench of Figure I.1		N/A

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	Lawn and garden machinery is used and positioned as specified in the relevant part of IEC 62841-4.		N/A
I.2.5	Operating conditions		–
	Tools are tested under the two operating conditions “no-load” or “load” as appropriate for the type of tool and specified in the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4.		P
I.2.6	Measurement uncertainties		–
	Uncertainties according to standard determined, recorded and reported		P
I.2.7	Information and deviations are recorded.		P
I.2.8	Information to be reported		P
	- reference to this noise test code / basic standard		P
	- description of the power tool;		P
	- description of mounting and operating conditions		P
	Sound power level $L_{WA}$ (dB(A)).....:	Refer to 6018734.50A	P
	Sound pressure level $L_{PA}$ (dB(A)).....:	Refer to 6018734.50A	P
	C-weighted peak emission sound pressure level $L_{pCpeak}$ (dB).....:	-	P
I.2.9	Declaration and verification of noise emission values		P
	Sound power level $L_{WA}$ (dB(A)).....:	Refer to 6018734.50A	P
	Sound pressure level $L_{PA}$ (dB(A)).....:	Refer to 6018734.50A	P
	C-weighted peak emission sound pressure level $L_{pCpeak}$ (dB).....:	-	P
I.3	Vibration		P
I.3.Z1	Vibration reduction		P
	Add the following before I.3.1:		P
	The vibration at the handles is kept as low as possible without unduly affecting the performance and the ergonomics (weight, handling, etc.) of the tool.		P
	In particular vibration is reduced by the application of engineering measures as given in CR 1030-1.		P
	The success of the applied vibration measures is assessed by comparing the vibration levels for the tool with those for other tools of the same type and with a comparable specification and performance.		P
I.3.1	Vibration measurement – General		P
	Details for particular types of tools are given in the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4.		P

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	The vibration total value may be determined by using the measurements from a machine which has design and technical specifications replicating the machine concerned.		P
I.3.2	Symbols		P
I.3.3	Characterization of vibration		P
I.3.3.1	Direction of measurement		P
	Directions may be defined in the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4.		P
	If not defined the three orthogonal directions X, Y and Z as shown in Figure I.4. are related		P
I.3.3.2	Location of measurement		P
	The measurement positions for particular types of tools are specified in the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4.		P
I.3.3.3	Magnitude of vibration		P
I.3.3.4	Combination of vibration directions		P
I.3.4	Instrumentation requirements		P
	The vibration measurement equipment is in accordance with ISO 8041.		P
	Instrumentation for measuring other parameters whose characteristics are not covered by ISO 8041, is specified in the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4.		P
I.3.4.2	Transducers		P
I.3.5	Testing and operating conditions of the tool		P
I.3.5.1	Replace the 4th paragraph with the following:		P
	When the test procedure is not provided in a relevant part of EN 62841-2, EN 62841-3 or EN 62841-4, an operating condition is specified that is reproducible and representative of the noisiest operation in typical usage of the machine.		P
	The vibration test may simulate a single phase of a task or a working cycle, consisting of a set of operations where the operator is being exposed to vibration.		P
	However, the operating condition for the noise emission test is, if practicable, also used for the vibration test.		P
I.3.5.2	Attachment, workpiece and task		P
	Details for task and workpiece are given in the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4.		P
I.3.5.3	Operating conditions		P

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	The relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4 describes the modes of operation and the calculation of the declared emission value.		P
I.3.5.4	Operator		P
I.3.6	Measurement procedure and validity		P
I.3.6.1	Reported vibration values		P
	Details are specified in the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4.		P
	Work mode - vibration emission value a (m/s <sup>2</sup> ).....:	Refer to 6018734.50A	P
	Uncertainty K (m/s <sup>2</sup> ).....:	Refer to 6018734.50A	P
I.3.6.2	Declaration of the vibration total value		P
	If required by the relevant part of IEC 62841-2, IEC 62841-3 or IEC 62841-4, the work mode description corresponding to the vibration emission is stated next to each declared value.		P
	Work mode - vibration emission value a (m/s <sup>2</sup> ).....:	Refer to 6018734.50A	P
	Uncertainty K (m/s <sup>2</sup> ).....:	Refer to 6018734.50A	P
I.3.7	Measurement report		P
	The report includes the following information:		P
	a) reference to this standard		P
	b) specification of the machine		P
	c) attachments or accessories;		P
	d) operating and testing conditions		P
	e) measuring institution		P
	f) date of measurement		P
	g) instrumentation		P
	h) position and fastening of transducers, measuring directions and individual vibration values when relevant		P
	i) the arithmetic mean total vibration ah, for each operator the total vibration value ahv and the three single axes weighted acceleration values ahw. It is good practice to report all the measured values		P
	j) the uncertainty K of the vibration total value ah.		P
	Any deviations from the vibration test code in this standard is reported together with the technical justification for such deviations.		P

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<b>ANNEX K</b>	<b>BATTERY TOOLS AND BATTERY PACKS</b>		
K8.14.2 Z1	For battery tools with integral battery: instruction, how the integral battery can be removed safely from the tool after the tool's end of life, and information about the type of battery such as Li-Ion, NiCd and NiMH.		N/A

<b>ANNEX L</b>	<b>BATTERY TOOLS AND BATTERY PACKS PROVIDED WITH MAINS CONNECTION OR NON-ISOLATED SOURCES</b>		
K8.14.2 Z1	For battery tools with integral battery: instruction, how the integral battery can be removed safely from the tool after the tool's end of life, and information about the type of battery such as Li-Ion, NiCd and NiMH.		N/A

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